

NOTHING VENTURED, NOTHING GAINED: SUSTAINING ENTREPRENEURSHIP IN JAPAN

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In a previous article (Yonekura and Lynskey, 2000), we emphasized the need for more venture firms in Japan. On that score, there is now universal agreement. Policymakers in Japan have recognized the economic benefits of fostering the creation and development of venture firms, and have applied themselves assiduously to the task of creating a supportive environment. In this paper, we outline some of the changes that have occurred, particularly with reference to the stock exchange and the provision of venture capital funding in Japan. We also outline the government's recent ambitious plans to create a large number of venture firms and to focus on strategic industries. We suggest, however, that merely creating venture firms, even in large numbers, is not enough if they are ultimately unsustainable. What is needed are more global-scale, sustainable companies, and so there is a need to ensure the growth of venture firms beyond a critical stage. To do so, however, requires professional and specialized management teams, which are difficult for venture businesses to find in Japan. This is the result of the low rate of labor mobility, the scarcity of managers who have received a leading-edge business education, and the fact that few managers are bold enough to embrace change and risk. Consequently, we suggest that an adventurous, risk-taking approach be adopted to venture development, and that now is a good time to take such risks.

BACKGROUND

In 1993, the then Japanese Ministry of International Trade and Industry (MITI) issued a report on changes that were to confront society and business in the twenty-first century.¹ Surprisingly, however, no word was made of the Internet, despite the fact that the technology was available and its impact was expected to be immense. Also, at the time, the policymakers perhaps could not have foreseen that the length of Japan's economic downturn following the bursting of the "bubble economy" in 1990 would be so prolonged. On March 8, 2002, Japan's economy entered its third and longest recession since 1993, and GDP contracted by a sharper-than-expected 1.2 percent in the last quarter of 2001. In the 1990s, Japan's manufacturing shipments fell nearly 10 percent, while one in seven Japanese manufacturers began to shift production overseas. In many respects, Japan is thought to have lost its former competitiveness and there is perceived to be a paucity of original and effective solutions to the country's economic problems. As such, people refer to the 1990s as Japan's "lost decade."

However, a number of changes have been occurring behind the scenes. Belatedly, Japanese policymakers have introduced a series of liberalizing reforms aimed at creating an environment more supportive of entrepreneurship and venture creation. These reforms entailed a series of amendments to the Commercial Code (where Japanese corporate law is found), as well as amendments to stock exchange and over-the-counter rules. A number of these changes are specifically aimed at removing

¹ "Promising Fields in 21st Century Japan" (MITI, 1993).

legal and regulatory obstacles to the formation and growth of start-ups, and providing a friendlier environment for pre- and post-IPO venture capital financing.

Even though policy for change has been enacted, however, it takes time to alter deep-rooted perceptions and behavior. Traditionally, Japanese culture has generally not been supportive of entrepreneurship, and the legal and regulatory environment for start-up ventures in Japan has been considered rigid and bureaucratic. Recently, though, young people have been more motivated to establish and work for new businesses rather than opt to work in large, established companies or in the public sector. Such changes are welcome since Japan has one of the lowest rates of entrepreneurial activity among developed nations. There is a relatively low proportion of opportunity-based entrepreneurs compared to other countries and a correspondingly higher proportion of entrepreneurs driven by necessity, such as restructuring. Consistent with this low level of entrepreneurial activity, there are few business angels in Japan (Tashiro, 1999). Only 1.4 percent of the adult population invests in new business start-ups, compared with an average of 3.1 percent in other developed countries (Reynolds et al., 2001).

Impeding the creation of an entrepreneurial culture is the precarious state of Japan's political-economic environment. The much-hyped reforms of Prime Minister Junichiro Koizumi, who was elected in April 2001 in the hope that he could come to grips with the economic malaise, have failed to live up to expectations, and his approval rating has plummeted from a high of 85 percent in 2001. Recognizing the gravity of the economic stagnation in Japan, in summer 2002, the international ratings agencies, Moody's, Standard and Poor, and Fitch, downgraded Japan's credit rating. Moody's, the biggest western ratings agency, downgraded the country's yen-denominated sovereign debt to the lowest rate among the world's leading industrialized nations—and lower even than that of Estonia and Botswana.

STRUCTURAL PROBLEMS IN FUNDING FOR VENTURE FIRMS

A striking structural characteristic of venture firms in Japan is the problem they have attracting timely and adequate financing. Indirect financing, as, for example, bank loans, provides a high proportion of the finance required by venture firms, and small firms in general. The capital to establish a new venture firm is typically assembled from the founder's own assets and investments by family, relatives and associates.² Later, when the growing company needs operating capital and additional capital for equipment, the usual sources are loans from private-sector financial institutions—first from local credit associations and co-operatives, then regional banks (of which there are about 100), and, finally, the major city banks. Official figures indicate that the most common source of funds for a new venture is the founders' own contributions (80.1 percent), followed by loans from private sector financial institutions (41.1 percent) (Small and Medium Enterprise Agency, 1999).³

The problem of attracting sufficient capital investment is compounded by the reluctance of banks to lend to smaller firms, following the profligacy of banks in the bubble economy years and the

² This was borne out in interviews conducted by one of the authors (Lynskey) with biotechnology start-up firms in Japan. For further information, see Lynskey (2003) "A Profile of Biotechnology and Information Technology Venture Firms in Japan," *International Journal of Biotechnology*.

³ Figures derived from the Survey of Creative Business Activities of Small and Medium Companies conducted by the Small and Medium Enterprise Agency in 1999.

resulting bad debts with which they are saddled.⁴ Moreover, financial deregulation in the aftermath of the bubble economy has forced (and is forcing) banks to improve their capital adequacy ratios, while, at the same time, their assets are losing value. The result is a credit crunch to which new ventures are especially exposed.

However, more than this tightening of credit, there is a fundamental structural issue with finding finance for entrepreneurial venture firms in Japan. While indirect financing may work well for conventional companies, the venture firms on which so many have pinned their hopes in Japan are quite different. Although such ventures may have strong growth potential, they often do not have real estate or other collateral to attract banks' interest. This imposes a natural limit on how far indirect financing can meet their needs.

However, although technology-based venture firms (on which the Japanese government has directed its focus) often lack real estate and other tangible assets, they do have capital in the sense of intangible assets—ideas, expertise and services. Using intellectual property rights, such as patents, as collateral is not unheard of, and indeed, private banks have followed the lead of government finance institutions, such as the Development Bank of Japan, in accepting intellectual property as collateral for loans to entrepreneurial businesses (Tashiroy, 1996). However, valuation and liquidity (banks prefer collateral that they can sell easily) are often problematic. Moreover, intangible assets are very susceptible to value dissipation (quick amortization)—much more so than other assets. Patents that are not constantly defended against infringement will quickly lose value due to “invention around” them. Highly trained employees will defect to competitors without adequate compensation systems and attractive workplace conditions. Valuable brands may quickly deteriorate to mere “names” when the firm loses its competitive advantage. The absence of active markets for most intangibles (with certain patents and trademark exceptions) strips them of value on a stand-alone basis. This aspect, too, makes the provision of loans on such asset valuation difficult.

In addition, technology-based venture firms typically go through a long period of research and development before an idea becomes commercially viable. In the biotechnology field, for example, this phase may last several years, during which time a firm will have no sales and will be operating in the red. It will therefore be unable to make payments on principle or interest. Moreover, the risk of failure of such firms is often high. Even if the R&D effort does generate a product that appears marketable, whether the market will be actually receptive remains hard to predict.

Given the aforementioned characteristics of venture firms, and the necessarily risk-averse nature of indirect credit, it is unlikely that indirect credit will make much contribution to financing high-risk venture firms. However, another interesting structural issue pertaining to venture firms in Japan is that the founders of such firms are often very reluctant to have others invest in their companies, for fear of losing managerial control.⁵ Instead, they depend on loans, and what they want most is access to credit, as revealed by the White Paper on Small and Medium Enterprises in Japan.

Given the nature of technology ventures, the type of financing that would best meet their needs is long-term funding available without collateral or guarantors, in small lots, and at low, fixed interest rates. Bank loans and other forms of indirect financing are not the answer. The natural source of funds for high-risk venture firms is equity participation, by public or private investors.

⁴ Japanese banks' non-performing loans are estimated at between \$600 billion and \$1.3 trillion.

⁵ Again, this point was borne out in interviews conducted by Lyskey with biotechnology start-up firms in Japan.

VENTURE CAPITAL IN JAPAN

This brings us to another structural characteristic of Japan. The equity finance market in Japan is often criticized as being too underdeveloped to provide the funds an early stage high-technology firm needs in order to grow. Venture capital provides a link between initial private funding and the broader public capital markets.⁶ Venture capitalists are recognized as financial intermediaries that overcome problems of moral hazard and asymmetric information in financial markets (Gompers and Lerner, 1999). Although backing by a venture capital firm is not absolutely necessary to facilitate high technology entrepreneurship (Bhidé, 2000), the existence of well-developed venture capital networks is said to provide advantages and incentives for start up firms.⁷ This is because venture capitalists “function as both catalyst and capitalist—providing the networks, contacts, linkages, and resources necessary to launch new enterprises” (Florida and Kenney, 1988: 316).

One can identify three periods of interest in venture capital in Japan (Lynskey and Yonekura, 2001); the third and current period, started in 1994. This year marked the point where for the first time venture capital investments exceeded venture capital loans. It was also around this time that powerful government bureaucracies embraced the formation of new high-growth enterprises as a major policy goal (Kuemmerle, 2001). Traditionally, much of the financing that is termed “venture capital” in Japan has, in fact, been in the form of loans to small firms, rather than equity investment. The ratio of investment to loans was 0.7:1 in 1991; this reversed to 2:1 in 1995 and to 4.5:1 in 1997 (Lynskey and Yonekura, 2001).

Venture capital in Japan has tended to be invested later, at or just before an initial price offering (IPO), when a firm is already looking successful. The ability to find promising early stage ventures and grow them is the factor in short supply. As late as 1996, the Japanese “venture capital” market was worth 7.13 billion dollars (4.6 billion pounds), but only 5.7 percent went to “frontier technology enterprises,” compared to over 60 percent of “venture” funds in the United States.⁸

Japan’s structural problems in financing ventures contrasts with the situation in the United States, where venture capitalists and business angels provide informal risk money and equity financing in the seed-to-start-up stage. That links smoothly to the provision of public risk money and equity financing at later growth stages through an IPO and the stock market.

A Japan-U.S. comparison of the difference in scale of venture capital is illuminating (Figure 1). As of 1999, 231 private equity firms in Japan had approximately \$12.5 billion (1,413,398 million yen) under management (AVCJ, 1999). By comparison, U.S. private equity firms had \$400 billion under management. Japan’s GDP in 1999 was about 70 per cent of the U.S. GDP. Allowing for economic output, the private equity pool in Japan would need to reach 22.4 times its current size to match that of the U.S. pool (Kuemmerle, 2001). Another structural issue in Japan is the dearth of business angels. These are individual investors who develop and support the growth of early stage companies.

⁶ P. Gompers and J. Lerner, *The Venture Capital Cycle*, (Cambridge, Mass.: MIT Press, 1999). Venture capital is independently managed, dedicated pools of capital that focus on equity or equity-linked investments in privately held, high-growth companies. Many venture capital funds, however, occasionally make other types of private equity investments. Outside the United States, this phrase is often used as a synonym for private equity.

⁷ A. H. Bhidé, *The Origin and Evolution of New Businesses*, (Oxford: Oxford University Press, 2000). Research by Bhidé suggested that entrepreneurs do not necessarily need venture capital funding. In his analysis of 100 high-growth companies and their founders in the United States, Bhidé found that only 5 percent of the companies had any venture capital funding.

⁸ “Genome Valley’ – Japanese Experience in Exploiting Work in the Biosciences and the Human Genome,” The British Embassy, Tokyo (1999).

One reason for this huge disparity with the United States is that there was no prior development of markets for IPOs, which were conducive to the incentives of venture capitalists (Aoki and Ding 2000). Venture capital firms were formed, in many cases, as subsidiaries of conventional financial organizations, such as banks and securities houses. Their primary goal was not to achieve the highest return on investment, but, instead, to increase the business of their parent company. A bank, for example, would typically support companies to which it could eventually extend loans, and a securities firm would invest in those firms that might need investment banking services at a later date. Moreover, such venture capital firms lack the necessary expertise for venture capital relational financing, particularly the ability to assess new technology.

This brings us to another difference between venture capital provision in Japan and the United States. Apart from the smaller scale of venture capital funding compared with the United States, traditionally there has been a different approach to management by Japanese venture capital companies. Japan has hitherto lacked the skilled venture capitalists that have played a crucial role, stretching well beyond mere finance, in nurturing new business start-ups in America. Japan has no such tradition. Venture capital companies in the United States and Europe typically take large stakes in a portfolio of firms, sit on their boards and adopt an active, hands-on approach to developing such firms. Japanese venture capitalists generally offered no management assistance and they sought no place on company boards. They were often reluctant to sit on the boards of firms because it was not worth their time and because they had hundreds of such relatively small-scale investments. Their profits were derived from capital gains and from underwriting fees, and their skill lay in judging the market, rather than in assessing new business plans.⁹ Kuemmerle (1999) states that in 1999 the private equity industry employed about 1,800 professionals, many of whom were former commercial bankers with good knowledge on how to assess the value of collateral, but very little knowledge about how to support portfolio companies' business development. There was, and still is, a shortage of skilled venture capital professionals with technology know-how.

AMENDMENTS TO JAPANESE CORPORATE LAW

Recent changes to the Commercial Code—probably the most drastic in the last 50 years—that are designed to promote start-ups and venture financing are just a part of a comprehensive series of amendments to Japanese corporate law currently in progress. These should improve the environment for venture capital and venture firms in order to revitalize Japan's economy. The pace of reforms has increased since the start of the twenty-first century. In this section, we discuss some of the salient features of these reforms.

Prior to 1995, representatives of venture capital companies were not allowed to sit on the boards of portfolio companies, limited partnerships were not allowed, pension funds were not allowed to invest in venture capital funds, and no stock options were allowed. Since 1995-96, the government has enforced deregulatory measures and now the environment and conditions are closer to those of the United States.

On June 1, 1997, Japan implemented amendments to the Commercial Code that permitted for the first time the issuance of share options to company personnel as compensation. Such stock options have been used effectively in the United States and Europe to attract and reward key management

⁹ "In Search of the New Japanese Dream," *The Economist*, 19 February 2000.

personnel. As well as a major aspect of managerial compensation, they are an important part of the package of legal and structural incentives that facilitate an active venture capital market. In October 1997, stock options were made available to new start-up companies. Previously, stock options had to be exercised six months before an IPO, forcing employees to come up with the money to exercise those options before they had the opportunity to cash them in. In 1998, legislation was introduced to create limited partnerships for venture capital investment to attract money from institutional investors.

The introduction of stock market reforms, such as the creation of new public equity markets for venture firms, has led to easier company listings, the introduction of stock options in employee compensation plans and the passage of the Limited Partnership Act. The new equity markets for ventures are Mothers (Market of the High-growth and Emerging Stocks), which opened in 1999, and NASDAQ Japan (a partnership between NASDAQ of America and Softbank of Japan), which opened in 2000 (see Hamlin, 2000). Since such markets for start-up, high-technology companies have been established, mainstream venture capital companies are showing more interest in start-up firms to get the highest price on offer and this inevitably involves a more hands-on style. Accordingly, the venture capital industry has witnessed considerable growth. According to a study conducted by Venture Economics for the Japanese Ministry of Economy, Trade and Industry (METI), a record 48 funds raised over 164 billion yen (\$1.34 billion) in the first half of 2000, far outpacing the 30 funds that raised 113.7 billion yen in all of 1999. The *Nihon Keizai Shimbun* reported that investments by VC firms reached a record 420.1 billion yen in the fiscal year ending March 2000, breaking the previous record of 299 billion yen in fiscal 1999.

STOCK EXCHANGE RULES

In August 2001, two important amendments to the rules for the stock exchange and the over-the-counter market in Japan were passed. First, there is now no restriction on a company obtaining equity financing prior to its IPO. Before August 2001, a company was prohibited from obtaining equity financing in the period prior to the IPO, commencing from the beginning of the fiscal year in which the IPO took place. So, a company could have had up to a one-year moratorium on equity financing prior to its IPO. Second, there was a repeal of the rule that required all preferred stock, convertible bonds and bonds with warrants to be exercised, converted into common stock or cancelled prior to the end of the fiscal year preceding the year in which the IPO takes place. This rule obviously placed investors in a very precarious position, because they may have had to convert their securities into common stock well in advance of the planned IPO, and without any assurance that the IPO would even take place. With these two amendments, companies now have much more flexibility in their pre-IPO financing activities.

STOCK OPTIONS AND PREFERRED STOCK

Under Commercial Code amendments approved on November 21, 2001, and that became effective on April 1, 2002, corporations have significantly greater flexibility in the issuance of stock options and preferred stock. The most onerous of the previous restrictions on the issuance of stock options have been removed. In addition, the nature of the rights and designations of preferred stock has been significantly expanded. It is even possible for corporations and shareholders to communicate online for purposes of sending notices and voting shares if certain requirements are met.

DIRECTORS' LIABILITY

On December 5, 2001, the Diet approved amendments to limit directors' liability with respect to shareholder derivative lawsuits. The rationale for the amendments was that the decision-making process of management would suffer without reasonable restrictions on liability.

FLEXIBLE CAPITAL STRUCTURES

The formation of a standard corporation (*kabushiki kaisha*) in Japan is still a little more cumbersome than forming a corporation in some other countries, but amendments to the Commercial Code in October 2001 provide greater flexibility in determining initial capital structure. In particular, the price per newly issued share is no longer required to be at least 50,000 yen. In addition, there is no longer a rule that net asset value per share after a stock split be at least 50,000 yen.

These two changes in the law have helped solve a number of problems that arose particularly as the value of a start-up company increased. Since only a relatively small number of shares were often issued in a company's early stages owing to the high minimum issue price, one share could come to represent very significant value as the company grew. This created problems in terms of flexibility in granting stock options, as well as market liquidity issues after an IPO. Even a stock split was not always possible because of the post-split net asset requirement. Since, as mentioned previously, early start-ups and emerging technology companies do not usually have significant net assets, this requirement often prohibited them from enacting their desired split.

Prior to the Commercial Code amendments, companies employed various stopgap measures. For example, even prior to the amendments a company was permitted after initial incorporation to issue no-par stock at any price. Thus, a company could essentially split its stock by issuing a large number of shares of no-par stock at a very low price (as little as one yen). However, these new shares had to be issued to all existing shareholders on a pro rata basis. While this technique could work for a pre-IPO company, particularly if the number of shareholders was not significant, it was not a practical solution for a post-IPO company since it was not realistic to require all shareholders to pay even nominal additional consideration for the newly issued shares.

Having recognized these problems, the Ministry of Justice proposed the amendments that became effective on October 1, 2001, and removed all of the following hurdles for start-up companies:

1. There is no longer any minimum per share issue price;
2. The post-split net asset requirement was eliminated. Moreover, a stock split can now be effected by a board decision without a shareholder vote even if it requires an amendment to the company's articles of incorporation to increase the number of authorized shares; and
3. The differences between par-value stock and no-par stock have been eliminated.

FEWER OBSTACLES TO EQUITY FINANCING

Equity financing of pre-IPO companies in Japan previously faced a number of obstacles. In particular, the directors were limited in the action they could take without a shareholder vote, which was particularly inconvenient even in pre-IPO companies because shareholder action could only be taken at a meeting—not by written consent.

For example, there was a general rule that the number of authorized shares of a company could never exceed four times the number of its outstanding shares (the 4:1 Rule). This was problematic during the pre-IPO phase when there were multiple rounds of equity financing, as a two-thirds vote of shareholders was required by law each time the company needed to amend the number of authorized shares stated in its articles of incorporation. In addition, if a company's articles of incorporation provided that all share transfers were subject to the directors' approval (which was typically the case in pre-IPO companies in Japan), then all shareholders had a pre-emptive right with respect to any issuance of new capital stock. Moreover, each time a corporation issued new shares without honoring such a pre-emptive right, the law required a two-thirds shareholder vote. Accordingly, a pre-IPO company was required to obtain shareholder approval almost every time it issued new shares. Since a growing company often requires multiple infusions of equity over a relatively short period of time, holding a shareholder meeting for each such financing proved troublesome, particularly as the number of shareholders increased.

The amendments to the Commercial Code that become effective in April 2002 made two key changes. First, the 4:1 Rule no longer applies to companies whose articles of incorporation require director approval for transfers of shares. Second, while all shareholders still have pre-emptive rights in such a company, a company is able to obtain a two-thirds vote of the shareholders for essentially a sub-authorized number and amount of shares issued at the board's discretion over a one-year period without pre-emptive rights applying. Consequently, since April 1, 2002, multiple rounds of equity financing by pre-IPO companies have been streamlined.

DE-REGULATED STOCK OPTIONS

Amendments to the Corporate Code in April 2002 lifted most of the draconian restrictions that had existed with respect to the issuance of stock options. Prior to those amendments, a company was essentially prohibited from issuing any right to receive stock unless that right was incorporated in or attached to another security, such as a convertible bond or preferred stock, or a bond with a warrant. So, for example, a simple warrant could not be issued unless it was attached to a bond. In 1997, an exception to this blanket prohibition was introduced that allowed very limited grants of stock options to a company's own directors and employees.

The April 2002 amendments removed the general restriction on issuing the right to receive stock independent from some other security. This change makes it possible, for example, to issue a warrant not attached to a bond. The issuance of this independent right to receive stock (*shinkabu yoyaku-ken*) is subject to essentially the same rules that apply to the issuance of the stock itself. Owing to this significant change in the Commercial Code, the prior limited exceptions that had been provided for director and employee options are no longer relevant and have been eliminated. Thus, stock options can now be freely granted to anybody subject only to the same rules that apply to the issuance of the stock. This means that directors in principle have the right to grant stock options (within the existing level of authorized and unissued shares) without shareholder approval.

MORE SOPHISTICATED PREFERRED STOCK

Venture capital financing also benefited from the expansion of the types of rights and designations attached to preferred and other non-common stock (*shurui kabushiki*). Prior to April 2002, the "preferred" rights afforded to preferred stock were limited to dividend preference, liquidation preference and redemption rights. While companies were able to issue non-voting preferred stock

with a dividend preference, voting rights were revived by operation of law upon failure of the company to make a scheduled dividend payment.

Since April 2002, a company is entitled to issue preferred stock or non-common stock with no voting rights or with limited voting rights, and those rights are not subject to mandatory statutory revival upon specified events. More importantly for venture capital, a company's articles of incorporation are able to provide for voting by class of stock and there is significantly greater flexibility in structuring veto rights.

The reforms currently in progress represent some of the most significant changes in Japanese corporate law in the last 50 years. Certainly, more remains to be done, but Japan's "lost decade" has not been completely fruitless.

Despite the advantages of these reforms, and the fact that more entrepreneurial, start-up firms are needed in Japan (Yonekura and Lyskey, 2000), Japan's frail economic condition in the 1990s militated against large-scale venture capital investment. There was hence a decline in the number of companies funded and in the number of initial public offerings (Lyskey and Yonekura, 2001) (See Figure 2). The bursting of the Internet bubble in 2000-01 and the spectacular falls in technology stocks in the United States, Europe and Japan, have inevitably dented confidence even further in venture capital investment. According to the Japanese semi-governmental Venture Enterprise Center, venture capital firms invested a total of 230 billion yen in 2001, compared to 12.5 trillion yen in 2000. Nevertheless, venture capital is being injected at earlier stages in the development of firms, and this is a positive development (See Figure 3).

THE HIRANUMA PLAN

The Japanese government is eager to promote start-up firms and to foster the promotion of small and medium-sized enterprises. The rationale for this is that, unless Japan can create high value-added products through scientific and technical innovation, it will not be able to combat long-term economic decline. As such, the Ministry of Economy, Trade and Industry (METI) is proposing to spend 24,000 billion yen over the next five years on four sectors: information technology, environment, biotechnology, and nano-technology.

On May 25, 2001, Takeo Hiranuma, the Minister of Economy, Trade and Industry, unveiled an ambitious plan containing specific measures to encourage new markets and job creation. The so-called Hiranuma Plan states that two of the reasons for the stagnation of the Japanese economy are the "shrinkage of demand" that has resulted from anxiety about the future, and the "lack of innovation" that prevents the development of potential demand. It calls for the creation of a positive cycle of development in which "innovation begets demand and demand begets innovation."

The Hiranuma Plan comprises 15 policy proposals, the first 11 of which concern the building of innovation systems and the fostering of venture businesses to create new industries. The aforementioned focus on four sectors is central to the second proposal of the plan. This concerns concentrating investment in strategic areas and cross-disciplinary fields, and realizing technological innovation in strategic areas such as the environment, biotechnology, IT/telecommunications, nano-technology and materials, by combining the forces of industry, government and academia.

LABOR MOBILITY

A great deal of attention has been focused on the first proposal of the Hiranuma Plan, which is to prepare the infrastructure for innovation by encouraging university reform and the creation of 1,000 venture firms originating in universities through a strategy of transferring technology from academia to industry. Some have expressed skepticism as to whether the creation of 1,000 new ventures from universities is feasible. One thousand such firms require 1,000 CEOs to manage them. The question is: Where are such CEOs to come from? This brings us to the issue of labor mobility in Japan.

The relative inflexibility of the labor market in Japan was first recognized by Abegglen (1958), and affirmed subsequently by others such as Dore (1973) and Vogel (1979). However, such inflexibility was not always the case. As Sumiya (2000: 25) reminds us, “the mobility of workers was close to 100 percent until the early years of the twentieth century but fell rapidly after the 1920s.” Mobility fell to such an extent that the market for professional labor is comparatively shallow in Japan. Firms typically induct university-trained personnel only upon graduation from university, and, for all practical purposes, do not recruit such personnel later in their careers. Only in unusual circumstances do university-trained personnel later in their careers find themselves available to join another firm, nor, typically, does any Japanese firm seek to hire such personnel. However, this is changing, and there is greater mobility in Japan than at any time since the Second World War. The emergence of high-technology venture firms has coincided with the erosion of the continuous or lifetime employment system, once a hallmark of Japanese corporate culture. There is now considerable career change, particularly among younger Japanese. In 2001, 32 percent of the total workforce who had graduated from university in 1998 had changed employers at least once in the three-year period since graduation. Career mobility is such in fact that Cheng and Kallenberg (1996: 1236) note, “the notion of ‘lifetime’ employment undoubtedly overstates the stability of the Japanese employment system and understates actual job mobility.”

While career mobility is a feature of modern employment for young people in Japan, it is less so, however, for older, experienced and more qualified labor. Several factors impede the ability of Japanese high technology start-ups to recruit top managers and scientists. First, the most talented managers and technical personnel are likely to be doing well in their careers at large, established companies, and are wary of joining unproven start-ups, especially as this usually entails a reduction in salary and associated perks. Leaving such a company to join a small, unknown start-up—even one that does offer stock options and the prospect of becoming extremely wealthy—would be considered such a retrograde career step by one’s relatives and peer group that few would seriously countenance such an option. This lack of mobility has been particularly pronounced in the case of university researchers (Swinbanks, 1994). Second, private companies tend to be managed over the long term by families; this means that wholesale changes in management are rare and difficult to effect. Thirdly, such qualified and experienced professionals have most to lose if the venture firm should encounter difficulties. In the late 1990s, joining a start-up could perhaps be justified by stock options that would be worth hopefully a significant sum in a short time, sometimes regardless of the quality of the idea behind the company. Nowadays, with a longer time until growth and flotation, and less certain prospects, stock options are no longer attractive. Although such professionals are soon likely to find an alternative position, owing to their expertise and contacts, Japan’s economic fragility does not inspire confidence in people. Unemployment reached 5.5 percent in December 2001.¹⁰ This was a shock to a country that had enjoyed very low unemployment for three and half decades, with the unemployment rate remaining below 2 percent in the period 1960-74 and between

¹⁰ Source: The Japan Institute of Labor.

2 and 2.9 percent in the period 1975-94. The unofficial unemployment figure is, of course, likely to be higher than 5.5 percent.

CONCLUSION

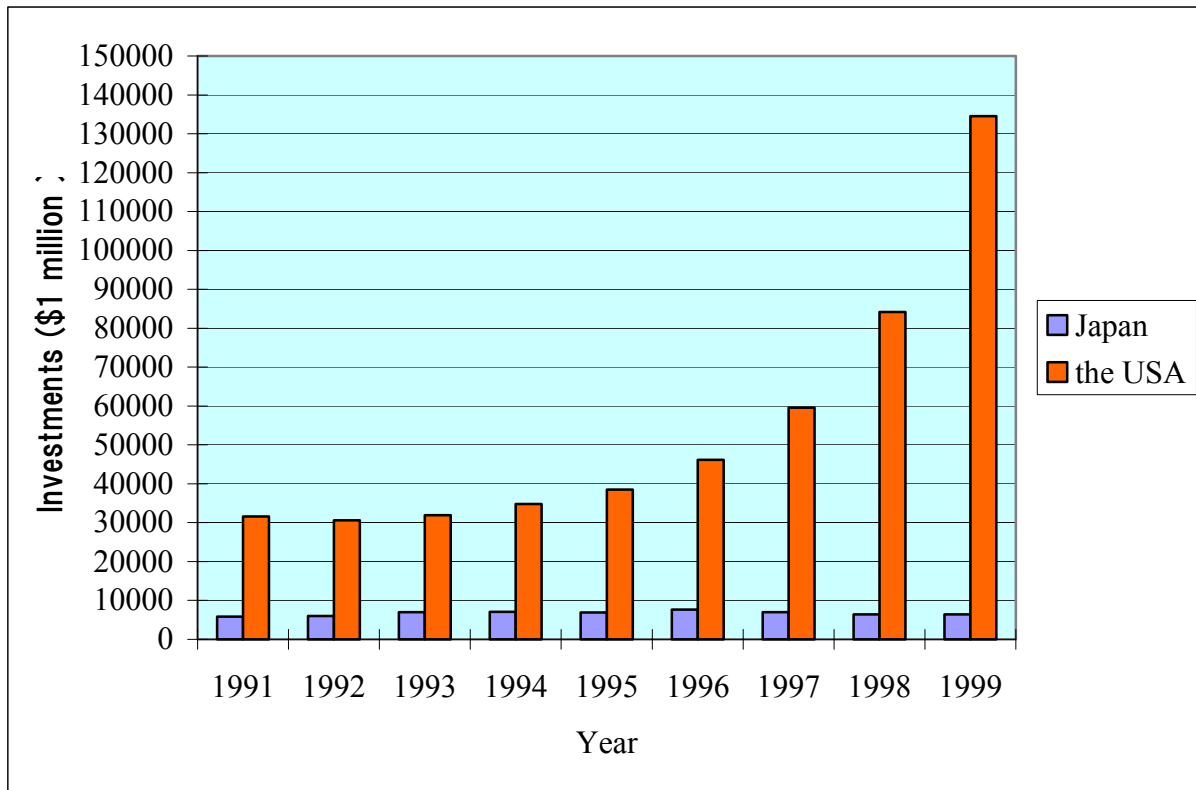
It is arguable whether the Japanese government is capable of micro-managing the economy as the Hiranuma Plan envisioned. Forty years after Japan's spectacular transformation into an industrial power, a debate is still raging as to whether Japanese industry was successful because of, or in spite of, the guiding hand of government. Several scholars have suggested that MITI, the forerunner of the current METI, may have hindered growth by cosseting industries from competition and providing subsidized loans, thereby ensuring that the inefficient survived.

Whether the market or the government picks the start-up winners, however, we contend that the current economic downturn in Japan may provide the perfect conditions for entrepreneurship. As a result of the previously mentioned reforms, Japan is becoming a more inviting place for start-ups and venture capitalists. Moreover and importantly, contrary to popular belief, entrepreneurial activity runs counter to the business cycle. During poor economic times, more people strike out on their own; each round of restructuring and redundancies generates a wave of people with little to lose by taking the plunge. According to data collected by the U.S. County Business Statistics, the number of companies with fewer than 10 employees peaks towards the end of a recession. As the economy recovers, it starts to generate new jobs inside larger corporations and those start-ups grow out of the smallest-firm category. At that moment, the window of opportunity may get smaller by the day as more entrepreneurs enter the market chasing a similar idea.

We suggest that the emphasis of venture policy should not merely be to create a large number of small businesses, but to create large, sustainable, globally competitive companies. To do so, however, requires many trials and errors, and there will necessarily be many failures. There is, as such, a need to create a "lottery infrastructure," one that supports low entry risk and high returns, similar to the approach used in Silicon Valley.

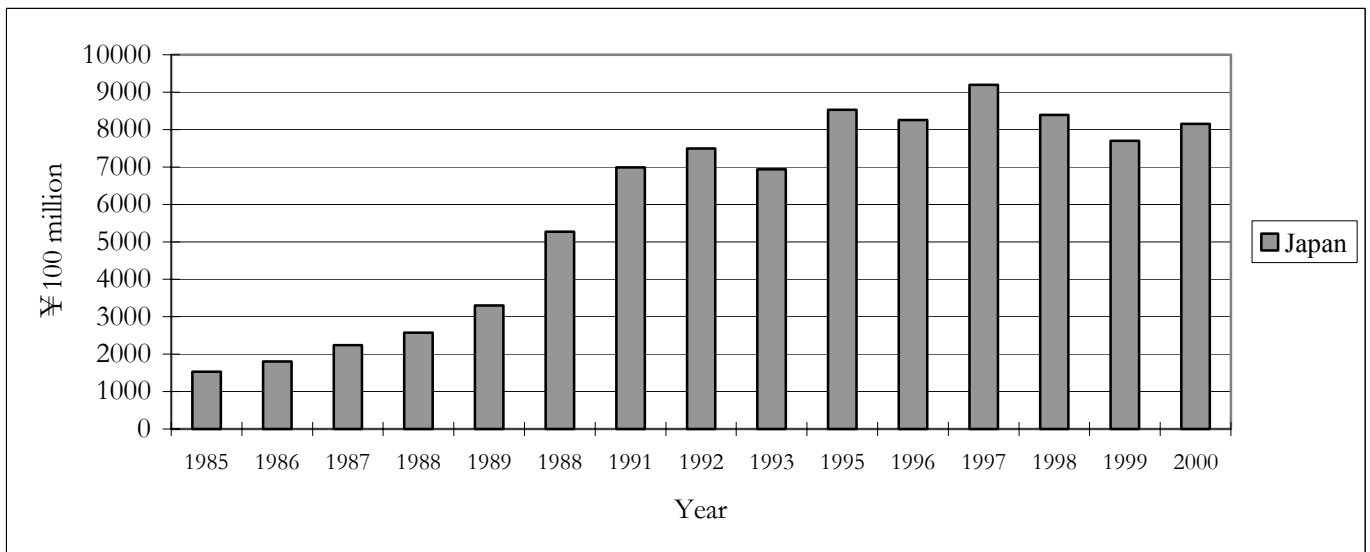
Perhaps, though, it takes something more profound than a round of restructuring and layoffs to shake Japan from its economic torpor. Maybe it takes a national crisis for radical change to be implemented in Japan. The Meiji Restoration of the late nineteenth century and the growth of the Japanese economy in the 1950s were the results of national crises. Today, in order for Japan to recover economically, it may take something as profound as financial meltdown for a long-needed overhaul of the system and its sclerotic, inward-looking institutions.

Figure 1: Venture Capital Investment in Japan and the USA



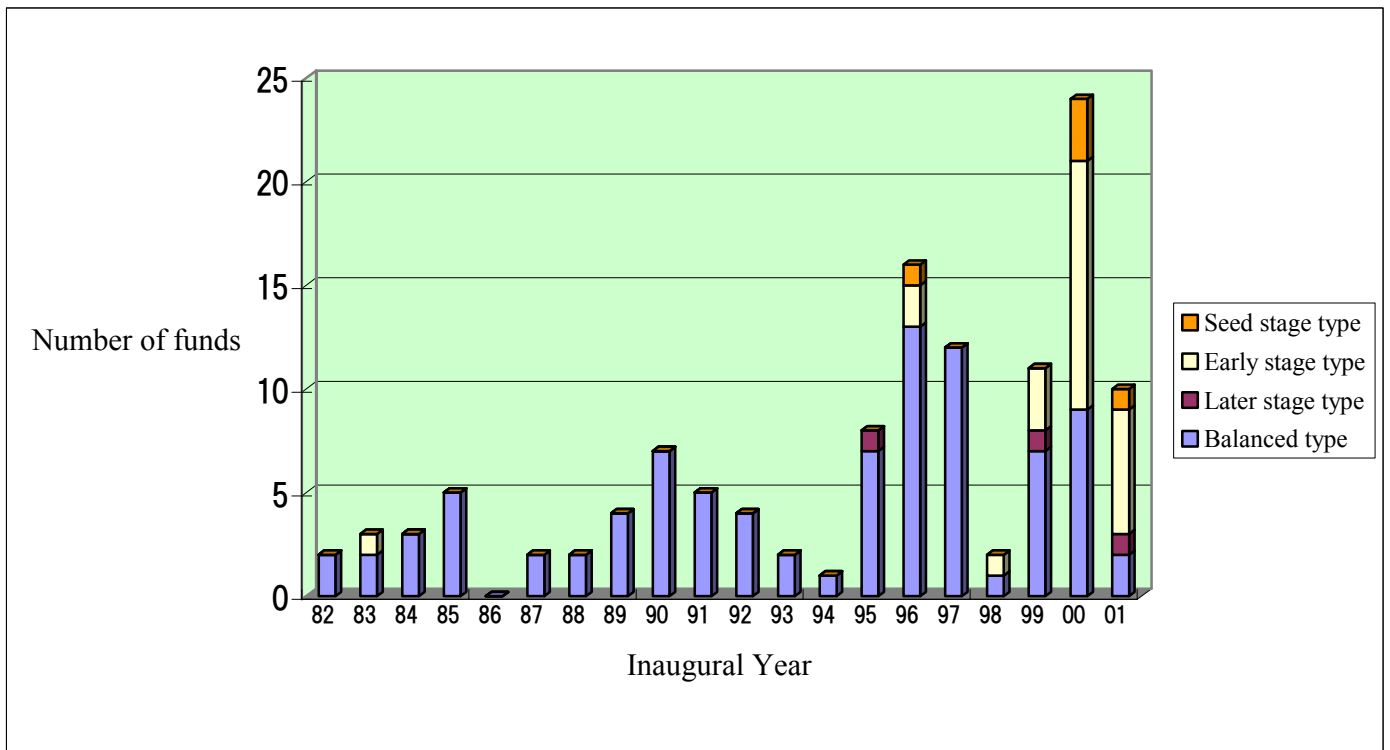
Source: Survey Report, Venture Enterprise Center.

Figure 2: Venture Capital Investment in Japan



Source: Survey Report, Venture Enterprise Center.

Figure 3: Venture Capital Investment From Later to Earlier Stages



Source: Survey Report, Venture Enterprise Center.

Note: Results for the January to September period are used for 2001. The survey sample is composed of 123 funds.

Three funds (one fund each inaugurated in 1984, 1985 and 2000) of the balanced type stage of emphasis are LBO specialization type funds.

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