

Venture Capital, Initial Public Offerings, and SME Finance in the Japanese Economy

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ABSTRACT

It has been a terrible business recovery in Japan, but things appear to be improving. The last 51 months in Japan have shown favorable business conditions, and it's the second economic expansion from the period of high economic growth until the present time. Though exportation has been a driving force, the Japanese economic structure underwent a major transformation after the collapse of the bubble economy.

It is often argued that a bank-based system such as in Japan offers inadequate financing to young and innovative firms, so the venture capital industry is on the rise. There are currently 105 venture capital companies which respond to VEC (Venture Enterprise Center) on investigations for venture capital in Japan. In addition, the financing for small and medium enterprises in Japan is gradually changing to direct financing.

This article will summarize the research to date and discuss the theory of complementarities in the Japanese Economy. Recently, things have changed drastically, and the younger generation of Japanese is more willing to accept the necessary changes in economic policy in order to turn the Japanese economy around.

INTRODUCTION

DURING THE STRUCTURAL REFORMS around the turn of this century, the Japanese economy transformed to market competition: for example, privatization, deregulation, from indirect finance to direct finance, from 'keiretsu' to venture business (small business), from lifetime employment to slightly higher unemployment, from a seniority-order wage system to a merit pay system. In the wake of these structural reforms, the Japanese Economy has improved enough to raise people's business awareness.

Table 1 Buoyancy

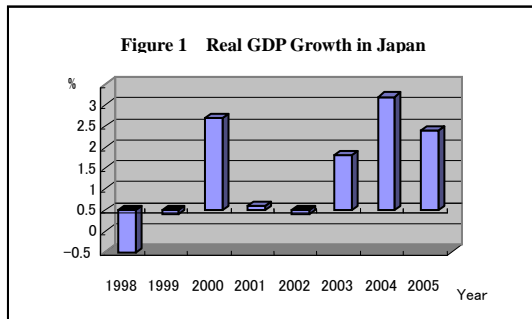
	Jan.4th 2002	Mar.31 2006	upturn
TOPIX	1053.96	1728.16	+64.0%
Nikkei 225	10871.49	17059.66	+56.9%
Nikkei 300	210.37	333.07	+58.3%
Nikkei 500	1016.26	1553.69	+52.9%
Nikkei JASDAQ Average	1145.97	2657.31	+131.9%
JASDAQ index	47.56	123.99	+160.7%
Nikkei 225 futures (3months)(Daisho)	10830	17020	+57.2%
Nikkei 225 futures (3months)(SGX)	10810	17030	+57.5%
TOPIX futures (Tosho)	1055.0	1727.5	+63.7%
USD-JPY	131.20	117.46	+11.7%

Source : Nihon Keizai Shimbun.

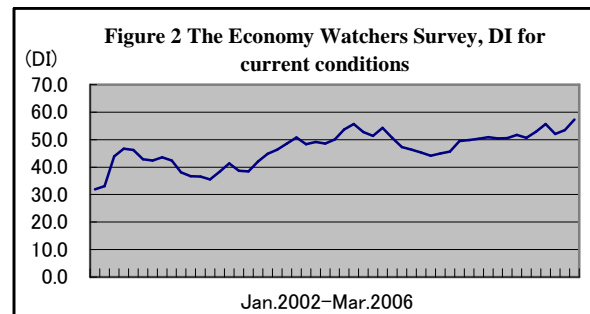
On April 14, 2006, The Monthly Economic Report (by Cabinet Office, Government of Japan) reported that there were favorable business conditions for the last 51 months in Japan, and it's the second economic expansion from the period of high economic growth until the present time. TOPIX (Nikkei 225) represents an

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increase of 64.0% (56.9%) in 51 months (Jan.2002—Mar.2006).



Source : Thomson Datastream; Economist Intelligence Unit

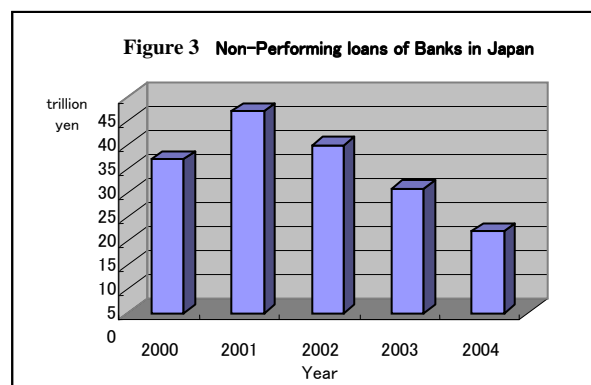


Source : Cabinet Office, Government of Japan

The growth of real GDP in Japan is gradually becoming healthier (Figure 1). The high growth in 2000 represents an IT bubble and capital formation for the Internet, cell phone, and Car Navigation System, so it is reasonable to suppose that Japanese economy experienced the turning point in its structural reform before 2002-2003.

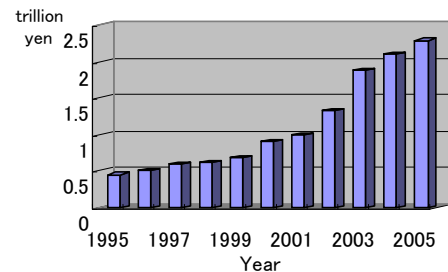
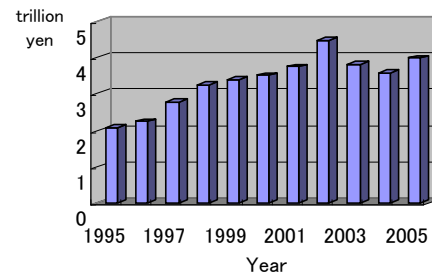
According to the Economy Watchers Survey released by the Cabinet Office, Government of Japan, Diffusion Indexes (DI) for current conditions has been increasing gradually from 31.9 in Jan. 2002 to 57.3 in Mar. 2006. This index rise represents an increase of 79.6% (Figure 2). It shows excellent prosperity at this juncture.

On the other hand, non-performing loans of Japanese private banks have been reducing by degrees (Figure 3), so it appears the Japanese financial system is getting better.



Source : HSBC ; Macquarie Research

This recovery of the Japanese Economy is in relation to the exportation of electronics to China and automobiles to the United States. Based on Figure 4, the exporting of electronics from Japan to China has increased 5.11 times from 450 billion yen in 1995 to 2300 billion yen in 2005, and based on Figure 5, the

Figure 4 The export of electronic from Japan to China**Figure 5 The export of automobile from Japan to the United States**

Source : Ministry of Finance Japan ; Trade Statistics of Japan

exporting of automobiles from Japan to the United States has increased 1.95 times from 2 trillion yen in 1995 to 3.9 trillion yen in 2005. In 2002 alone, the exporting of automobiles was 4.5 trillion yen, which was 2.5 times the amount in 1995.

What we have seen is the way things have developed until now, and this thesis extends the empirical literature on the theory of complementarities in the Japanese Economy. The objective of this paper is to explain the economic shift that has occurred in Japan in the last six years in terms of a gradual change in the style of economics employed.

1. Theory of complementarities in the Japanese Economy.

1.1 Comparative Institutional Analysis

Comparative Institutional Analysis which was suggested by Aoki (1988) chiefly, sometimes applies the game theory illustrated by Maynard-Smith (1982) that may help to explain two different styles of economies; Hawk style (H-style) and Dove style (D-style). 'H-style' is more aggressive and will escalate conflict and continue until injured or until opponent retreats. 'D-style' will display and retreat at once if opponent escalates the confrontation. If two opponents both escalate, it is assumed that, sooner or later, one is injured and forced to retreat. Thus V is the *gain* in fitness to the winner, losers do not have zero fitness, and injury reduces fitness by a cost, C .

- (i) H-style vs H-style Each contestant has a 50% chance of injuring its opponent and obtaining the resource, V , and a 50% chance of being injured. Thus this expected gain is $(V - C) / 2$. (Nash equilibrium)
- (ii) H-style vs D-style The gain of H-style is V , and the gain of D-style is zero.
- (iii) D-style vs D-style The expected gain is $V / 2$. (Pareto efficiency)

Let p = frequency of H strategists in the population,
 EU_H, EU_D = expected gain of H-style and D-style

$$EU_H = \frac{P(V - C)}{2} + (1 - P)V$$

$$EU_D = \frac{(1 - P)V}{2}$$

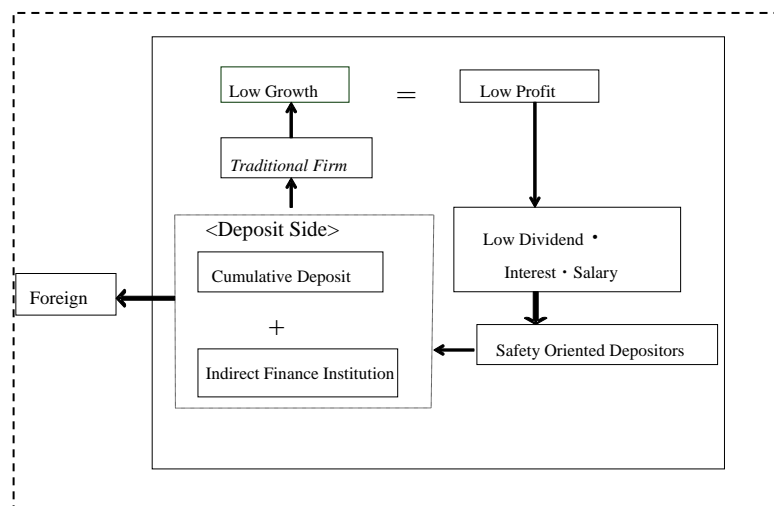
That is to say, if it is worth risking injury to obtain the resource, H-style is the only sensible strategy. The

second point that requires clarification is that D-style is more desirable if there are no H-style economies in the world because of $V/2 > (V - C)/2$, $V > 0$, $C > 0$. If two economies could choose D-style as their strategies, it results in Pareto improvement which is preferable to both economies. This example presents a dichotomy of styles, and in order for it to be applicable in real world economics, it would need to move beyond the dualism as this study attempts to do.

1.2 Closed Cycle of SME Finance in Japan

In the present state of affairs, the Japanese economy maintains a **Closed Cycle of Indirect Finance**, originally expressed by Hamada and Nakamura (2005). The Japanese economy is traditionally a D-style economy with a focus on long term relationships, and many Japanese are safety oriented depositors because of Low Growth in Japan until 2002 regardless of the rapid economic rise post World War II.

Chart 1 Closed Cycle of Indirect Finance



Note : This chart, translated by Hiromasa Nakamura, is quoted from Hamada and Nakamura (2005).

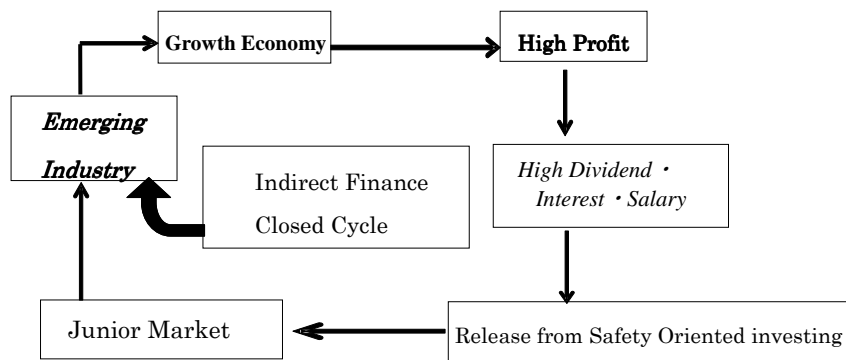
As shown in Chart 1, Low Growth means Low Profit, which doesn't give birth to high dividend, high interest, and high salary. Most Japanese have never been financially comfortable, so people felt unable to take a risk. Low Growth is caused by traditional industries not being reborn for the new business era which is hard to finance indirectly. The mechanism of indirect finance contributed the period of high economic growth (1950s-70s) because it needed the intense investment for important industries when the Japanese economy had to catch up with developing countries. Germany also had a similar mechanism known as the housebank system composed of Deutsche Bank, Dresdner Bank, and Commerzbank, but recently they have adopted a universal banking system which suits the international trend of direct finance. Becker and Hellmann (2004) represented the German experience of venture capital from the perspective of the theory of complementarities. In this story, Karl-Heinz Faselow, the latest CEO of WFG (Deutsche Wagnisfinanzierungsgesellschaft), the first German venture capital fund, was in anguish over heterogeneous economic system as opposed to direct finance and its complementary system.

1.3 The Innovation Cycle of SME Finance in Japan

The **Innovation Cycle of Direct Finance** which was originally expressed by Hamada and Nakamura (2005) is the applied model in the Comparative Institutional Analysis. It represents a workable hybrid of H-style and D-style for the Japanese economy. This model has two aspects; one is the traditional core of **Indirect Finance**,

and the other is like a **Tornado** which means explosive energy from the **Closed Cycle**.

Chart 2 The Innovation Cycle of Direct Finance



Note : This chart, translated by Hiromasa Nakamura, is quoted from Hamada and Nakamura (2005).

In this hybrid cycle, the existent indirect cycle would support emerging industry and achieve a high growth economy. It would give rise to high profit, so many households would gain high dividends, high interest and higher salaries, thus many people could afford to take a risk; that is to say, the situation has changed completely. Individual investors stimulate Junior Market. The active Junior Market and Emerging Industry carry out enthusiastic initial public offerings (IPOs). Venture Capital also flourishes in this economy. In this case, the mechanism of small and medium enterprises (SMEs) has two strategic preferences between direct and indirect finance. In addition, this cycle is strongly supported by bank-based finance because there are 1,300 trillion yen in financial assets in Japan.

2. Present policy for The Radical Tornado in Japanese SME finance

2.1 The history and the existing environment of Venture Capital in Japan

It is clear that the mainstream financing of SMEs in Japan has been a bank-based system, so the venture capital industry in Japan has developed slowly and gradually.

In 1972, the first venture capital corporation, the Kyoto Enterprise Development company (KED) was established by the Kyoto Association of Corporate Executives (Kyoto Keizai Doyukai), including Kyoto Stock Exchange, Bank of Kyoto and Tateishi Electric, and Industrial Bank of Japan. The governor of Kyoto at that time, Ninagawa Torazou², was very influential in the area of SME finance, but unfortunately KED was unsuccessful, and the company liquidated only four years later.

In 1973, Nihon Godo Finance, which was the precursor to the present JAFCO, was formed by Nomura Securities, Sanwa Bank (the present MUFG : The Bank of Tokyo-Mitsubishi UFJ), NISSAY, and 13 other shareholders. JAFCO is the largest and leading venture capital firm in Japan and has invested in a cumulative total of 2,912 companies, of which 734 have gone public on a global basis. As of March 2006, JAFCO has managed 40 funds with ¥360.4 billion in assets (commitment based). JAFCO is listed on the Tokyo Stock Exchange.

In addition, between 1972 and 1974, eight venture capital companies were established by city banks, such as Sumitomo, Mitsubishi, Daiichi Kangyo, and securities firms, such as Yamaichi and Nikko. These major Japanese financial institutions formed venture capital subsidiaries; however, they were not listing companies.

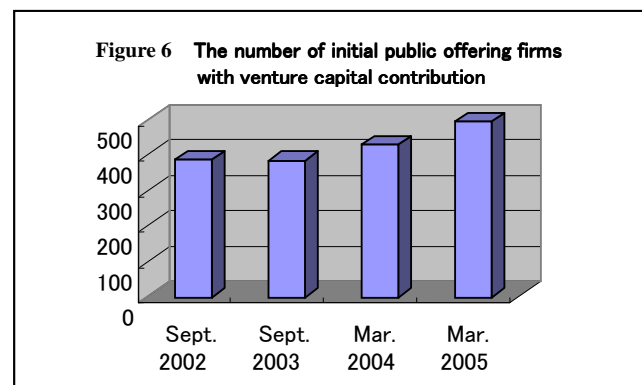
There are five listing venture capital companies in Japan. One is JAFCO, and others are JAIC (Japan Asia

² Ninagawa Torazou, who was a professor in the department of Economics, Kyoto University during World War II, and was the first secretary of the Small and Medium Enterprise Agency, and held the office of governor of Kyoto prefecture for 28 years (1950-78).

Investment), NIF SMBC Ventures, SBI holdings, and Future Venture Capital. In 1981, Japan ASEAN Investment, which was the precursor to the present JAIC, was founded by 102 members of Japan Association of Corporate Executives (Keizai Doyukai) with capital of ¥1.0 billion, and OECF (Overseas Economic Corporation Fund) was the main shareholder between Dec.1985 and Oct.1989. In June 1991, Japan ASEAN Investment was renamed Japan Asia Investment which has four subsidiaries abroad³, four offices abroad⁴, and seven domestic subsidiaries, such as JAIC Asia Capital, JAIC Securities, and JAIC Seed Capital. JAIC is listed on JASDAQ.

NIF SMBC Ventures was unified by NIF Ventures and SMBC Capital in Oct. 2005. NIF Ventures was established in 1982 as a venture capital company affiliated with Daiwa Securities, and in Apr. 2001, SMBC Capital was founded by Sakura Capital⁵, and SB Investment⁶, with the network and financial resources of the Sumitomo Mitsui Financial Group. NIF SMBC Ventures is listed on JASDAQ.

SBI Holdings is on the way to becoming Pure Holding company. In 1999, for the purpose of ventures incubation, Softbank Investment was formed in Tokyo. This company was listed on the Tokyo Stock Exchange in Feb. 2002 and Osaka Stock Exchange in Nov. 2002. It held e*trade securities (Jun. 2003), World Nichiei securities (Oct.2003), and Nissho Iwai securities (Dec.2003) as subsidiaries.



Source : VEC; Investment and bench-mark investigation on venture capital etc, in Japan

Future Venture Capital, established in 1998, is noted for its complete commitment to the regional financial economy. FVC made the first Limited Partnership (LPS) in Japan and contributed to regional venture business. This company has headquarters in Kyoto and six branches in Tokyo (2001), Kanazawa (2001), Iwate (2002), Mie (2004), Yamagata (2005) and Kobe (2005), and has tied up its investment with each regional administration. This company is listed on Hercules.

Japanese venture capital investigated by VEC contributed 386 IPOs in 2002, 384 in 2003, 427 in 2004, and 495 in 2005. On the other hand, the average of bank share holdings is very low in the Junior Market such as Q-board (Fukuoka) (0%), Centrex (Nagoya) (0.0421%), and Ambitious (Sapporo) (0%).

As for foreign-affiliated venture capital, in 1990, 3i had established 3iBJ, a joint venture with Industrial Bank of Japan. The business focused on growth capital deals and made roughly 100 investments over the next decade. In January 2001, 3i formed a new business focusing on Japanese buyouts. In the \$128 million buyout of Vantec, Nissan's logistics division, 3iBJ made the first true management buyout of a Japanese firm. The market, however, was slow to open, and in December 2002, 3i pulled out⁷.

2.2 The appropriate goal for Japanese IPO research

What has been demonstrated in the preceding research of IPOs is that there are three anomalies in the IPO

³ Indonesia, Hong Kong, South Korea, and the United States.

⁴ Bangkok, Jakarta, Shanghai and Singapore.

⁵ In Mar. 1992, Sakura Capital was established to receive the venture capital business of Mitsui Finance Service and Taiyo Kobe Mortgage Securities.

⁶ In Aug. 1995, SB Investment was established to receive the venture capital business of Sumigin General Finance.

⁷ Lerner, J., Hardyman, F. and Leamon, A. (2005) p.522, p.528.

market: (1) low prices of initial public stocks, (2) the cycle and the term of low price, (3) low long-run performance of initial public stocks. In the United States, the SEC (1963) first reported the pleasing performances of IPO stocks which prompted plenty of research namely by Stigler (1964), Ibbotson (1975), Baron (1982), Rock (1986), Ritter (1991) and Loughran (1993). These studies provided evidence that offering prices are lower than initial prices in the general trend. All in all, there is 'underpricing' from the offering firm to the underwriter (securities company). Ritter and Loughran (2002) called this phenomenon 'Leaving Money on the Table⁸.' In Japan, several researchers expressed the same opinion. Fukuda and Serita (1995) researched IPOs listed on Tokyo Stock Exchange during 1983-89, and insisted on the effect of fads (market-wide trends) to initial returns. Hamano, Packer, and Ritter (2000) researched auctioned IPOs listed on JASDAQ during 1989-95 and concluded that VC-backed IPOs had greater underpricing than non VC-backed IPOs over their sample period. Kutsuna, Okamura, and Cowling (2002) explained the underpricing phenomenon with ownership structure. Kaneko and Pettway (2003) found that the initial returns of book building IPOs listed on the OTC, Mothers, and NASDAQ-Japan markets during Jan. 1993 - Dec. 2001 are significantly higher than those of auctions, especially during hot markets. Tatsumi and Kayama (2003) researched IPO firms listed on JASDAQ during 1996-99, and sum up the difference between the book building system and the auction system in Japanese IPO mechanism. Funaoka (2004) investigated the signaling effects by lock-up agreements (270 samples) in IPOs listed on JASDAQ, Mothers, and Hercules during Dec. 2000 - Dec. 2002, and found evidence of a statistically significant relationship between post-IPO managerial locked shareholdings and offering price. This investigation discovered a strong positive relationship between venture capital's locked shares and underpricing. Berna and Colin (2005) developed a new method for measuring underwriter reputation and applying it to the Japanese IPO market during 1998-2002. There is a significant relationship between underwriter reputation and underpricing.

The basic principle at issue in these studies is that every underwriter dominates 'offer price' and gains profits after initial public offerings; however, it seems reasonable to suppose that most research for IPOs in Japan is biased for 'underpricing' or the 'three anomalies in the IPO market'. It is clear that IPO research has to contribute to the analysis for macro-financial economy, and accordingly IPO research in the future should attempt to give energy to the Japanese economy or validity to the system as shown in Chart 2.

2.3 Financial Economic Policy for Small and Medium Enterprises in Japan

Consider the implications of financial economic policy for small and medium enterprises in Japan. Financial economic policy has two aspects: one is the monetary policy operated by the Bank of Japan, and the other is the policy of the Financial Services Agency. Monetary policy is composed of open market operations, bank rate operations⁹, and reserve ratio operations, so the Bank of Japan is concerned with indirect SME finance.

The Financial Services Agency is hanging out its policies as a deposit insurance system, financial reform program, maintenance of reliability by financial market, regional finance and a measure of Basel II (BIS banking regulation). As for the financial reform program (Aug. 6, 2002), it aimed to target the maintenance of the securities market which noted that maintenance was supported by three things : (1) whomever participated in the market without constraint, (2) reliance by investors, and (3) efficient market competition. In order for the Japanese economy to be competitive in the global market, the Financial Services Agency must come up with a systematic plan for economic reform. A hybrid of D-style and H-style economics, such as in Chart 2, would provide a focused standard rather than the allopathic policy of SME finance which is currently in place.

3. Conclusion

Recently, things have changed drastically. Younger Japanese now have much greater exposure to U.S. influences, the Internet, and direct finance. These young people accept new ways of thinking.

The financial system is an important complement to other economic systems, so it sometimes challenges our traditional ways of thinking. We need to accept rules which are results oriented, such as performance management, profit maximization, or some other explicit rules¹⁰. It seems that these systems which press

⁸ 'Prospect theory' predicts that, in most situations occurring in the IPO market, issuers will sum the wealth loss from leaving money on the table with the larger wealth gain on the retained shares from a price jump, producing a net increase in wealth for preissue shareholders.'

⁹ Bank rate operations give birth to control credit creation.

¹⁰ In a culture distinction, explicit rules sometimes break down in an implicit way.

businesses to move speedily though Japanese conventional attitudes are very quiet (Wabi and Sabi); however, the younger generation is accepting a bolder style of economics.

Every country which has a unique culture is very influenced by such an international economy. Japan is also without exception. Everyone would like to work to their own strengths in pursuit of self-actualization. Please reconsider the desirable SME finance for all economic systems in the world.

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