Enabling Entrepreneurship: The Study of Startups, Venture Capital, and Policies towards a "Market for Ideas" in Japan

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Note: This text consists of 2 merged chapters I initially wrote independently. The citations for the second section are missing (please check my book). The flow may also be somewhat interrupted. Not for distribution.

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1. Introduction

Entrepreneurship in Japan has received renewed attention recently, both within the country and abroad, as it is considered a needed engine for new economic growth and reform. Most evaluations tend to be negative: some claim there is hardly any, and most agree there is "not enough". Many reasons for the alleged lack of risk-taking and new business formation have been put forward, including a political economy partial to incumbent large firms, a society unforgiving of failure, higher social status associated with large-firm employment, and even a social distaste for "getting rich fast".

In general, research on entrepreneurship faces many challenges. First, without a clear definition, what constitutes "entrepreneurial behavior" is in the eye of the beholder, and commentators differ greatly in what they mean with the word. Second, even though academic research on "entrepreneurship" has become an active area of inquiry, it is not a clearly defined field. Moreover, the comparative dimension is often biased toward the situation in the United States, making Silicon Valley the standard compared to which all other places allegedly pale. And finally, data research poses a great challenge, because the total activity is not known: startups may come and go without ever registering, they may be acquired while unlisted, thus being subsumed in the larger set of "acquisitions", or they may quietly become very successful without being noticed. There are very few companies such as Google and Rakuten in the world, and analyzing those outliers can hardly offer a complete picture of

entrepreneurial activity.

It behooves us to know more about entrepreneurship in Japan, for the country's history is chock-filled with entrepreneurs, and in modern times these have played crucial roles in shaping the country as one of the world's largest economies. Examples include Mitsui Takatoshi and Takeda Chōbei in the Tokugawa-period, or Iwasaki Yatarō (Mitsubishi), Takashi Hisashige (Toshiba) and Oki Kibatarō (Oki) in the Meiji era. For the postwar years, the list begins with the startup companies of Toyota Kiichirō, Honda Sōichirō and Matsushita Kōnosuke, and more recently Son Masayoshi (Softbank), Mikitani Hiroshi (Rakuten), and Yanai Tadashi (Fast Retailing). It would be easy to list hundreds of successful postwar entrepreneurs that have shaped Japan's economy.

Insofar as these path-breaking Japanese entrepreneurs share one thing in common, it is that they started their enterprises in periods of great change – political, regulatory, societal, and technological. Even during the postwar period, when Japan researchers were perhaps preoccupied with the study of large firms and the "developmental state", numerous new firms were founded after the "oil shock" of the 1970s and again after the collapse of the bubble economy after 1991. The 2000s may emerge as yet another distinct period of an entrepreneurial boost in Japan's business and political history. Successful role-models have emerged during and after the IT bubble of the turn of the century, such as kakaku.com, DeNA, CyberAgent, mixi or Gree, and these have encouraged a growing number of young Japanese to think contrarian. Meanwhile, at the turn of the century Prime Minister Koizumi launched unprecedented reforms "toward the market" which gave great hope to aspiring captains of industry. Measures to support new business formation included the "One Yen company" policy of 2003 that removed previous tenuous capital requirements; new laws facilitating venture financing; and new "playing field" regulation such as antitrust enforcement and intellectual property protection to reduce large firm advantage. The Great Eastern Japan Earthquake of March 2011 may bring another wave of startup activity by giving a wakeup call to those unhappy in their current employment positions or offering new opportunities, in business, politics, or social endeavors.

Given these developments, it is sometimes disputed whether the 1990s and 2000s were truly a "lost decade", or a period of fruitful yet painful reform. For Japan-related research, this period clearly posed great challenges, ranging from agenda changes in the various disciplines to "Japan passing" and a rising interest in China at the expense of Japan. One cannot escape the impression that Japan Studies is a field in search of new inquiries. Perhaps it will take a breakthrough

event or study to open up new venues and stir the needed enthusiasm. In the meantime, I propose that the lens of "entrepreneurship" opens up an exciting new area attractive to scholars with an interest in Japan and a professional need to contribute to their disciplines. In so doing, we can exploit the very fact that the field of entrepreneurship remains ill-defined, as this opens up a large range of questions to pursue. At the same time, entrepreneurship offers a terrific lens through which to analyze recent changes in Japan's political economy, business and society. Thus, change and reform in early 21st century Japan affords researchers of all disciplines plentiful ground for case studies through which to advance our understanding of "entrepreneurship" as an academic field of inquiry.

In what follows, in Section 2 I briefly argue these two points by, first, providing a literature review that leads me to a working definition for "entrepreneurship" towards this two-sided endeavor. In Section 3, I look at some of the challenges faced by the various scholarly disciplines in studying entrepreneurship, and submit that the study of Japan can add rich empirical depth. Part 3 introduces the current state of entrepreneurship in Japan, in particular with a view to regulation and government involvement in shaping a new market for ideas and businesses.

2. What is "Entrepreneurship"?

An internet search for the word "entrepreneurship" yields some 16 million hits, yet no single or dominant definition emerges. The word originates from the French e*ntrependre* – "to do something". As we dig deeper, we face the challenge that "entrepreneurship" is an area of research, but not a discipline of its own. As such, the scholarly delineation of "doing something" is dependent on the various academic disciplines for logic, methodology, and tools. As of 2011, no coherent research agenda has emerged, limiting scholarly legitimacy of the field. Yet, it is precisely this openness that makes "entrepreneurship" a new research opportunity for Japan Studies.

The ambiguity in the field persists in spite of great efforts by scholars to push a research agenda. In a Delphi survey, Gartner (1990) asked 119 researchers and practitioners what they associate with the word "entrepreneurship", and received the following answers, in this order: individuals that "do something"; innovation; the creation of organizations; the creation of value; growth; uniqueness; owner-managers.

These associations follow closely on the heels of existing definitions established in the various disciplines. Schumpeter (1934)

provided perhaps the most enduring definition with "carrying out new combinations". Such combinations may include the introduction of a new good or idea, a new method of production, a new market, the conquest of a new source of raw material, or the creation of the new organization of an industry (Swedberg 2000). Knight (1921) referred to entrepreneurship as "the ability to predict the future successfully". Management guru Drucker (1985) refined this notion by describing entrepreneurship as "the commitment of present resources to future expectations, i.e. uncertainty and risk".

Early studies in the 1960s in psychology focused on the individual. McClelland (1961, 1965) identified the "need for achievement" as the driving engine for "doing something". An entrepreneur, in this view, is the type of person that assumes responsibility, sets goals and accomplishes these through effort. Character traits associated with such a person include independence, flexibility, creativity, high self-esteem, initiative, endurance, assertion, and high problem-solving skills. As interesting as this list may read, it proved not very helpful because it describes too many people. What is more, some of these character traits may be the result of, rather than the trigger for, entrepreneurial activity, and to boot, they may describe successful entrepreneurs just as well as failures (Low/MacMillan 1988; Swedberg, 2000).[1]

Subsequent studies began to treat entrepreneurship as a behavior, or a set of capabilities, rather than a personality trait. This has led to definitions of entrepreneurship as "the purposeful activity to initiate, maintain, and develop a profit-oriented business" (Cole 1968), the "perception of an opportunity" (Stevenson et al. 1985), and the "ability to discover and exploit an opportunity" (Venkataraman 1997). Finally, the study of "entrepreneurship" becomes more meaningful if it also addresses the question of "so what", i.e., the effects of these actions as "competitive behavior that drives the market process" (Kirzner 1973).

Taken together, these definitions aim to differentiate an "entrepreneur" from a "self-employed". Sociologist Rona-Tas (2002) coined the refreshingly short - though perhaps somewhat demeaning - terms of "caterpillars" and "worms" for this differentiation. A "worm" is a self-employed who aims to make a steady living by serving a steady clientele. A "caterpillar" differs from the "worm" in four dimensions:

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[1] Schumpeter also touched upon the entrepreneur as a person. In his view, entrepreneurs are obsessed with what they are doing, as innovation is primarily a "feat not of intellect but of will" driven by a desire for power, a will to succeed, and a satisfaction with getting things done. The resulting behavior, according to Schumpeter, means that entrepreneurs are not "economic men in the theoretical sense" (Swedberg 2000; McCraw 2007).

the goal of wealth creation, the speed of wealth creation, the level of risk-taking, and the introduction of innovation. An entrepreneur, in this definition, is somebody who wants to get rich fast, by betting on a new business. That is, a "worm" might be a plumber, run a dry-cleaning shop with regular working hours, or open a private day care; a "caterpillar", in contrast, might develop a new business model for an internet sales startup. The worm, while important for society, will not affect the competitive nature of markets, whereas the caterpillar tries to accomplish exactly that.

But where to make the cut? If I were to open a new restaurant, risking my own savings, my unique recipes could be considered "new combinations". If I attracted a large number of customers every night, I might even earn increasingly more money. But would that be entrepreneurial? One way to answer this question is to ask whether I follow existing practices or develop a new business model. If my approach were truly new and different in ways that change the competition in the market, I might qualify as a "caterpillar" according to the above differentiation. As we will see shortly, the difficulty in making this judgment has so far thwarted most attempts at large-scale data-based research on entrepreneurship.

This differentiation is important because it forces us to be precise as to what we really study when we say "entrepreneurship". Are we concerned with overall job creation in an economy, social change, or social opportunity – in which case all new company formation matter -, or are we rather interested in ideas, processes, and technologies that result in forward progress? The confusion resulting from this lack of clear delineation has been perhaps the biggest reason why entrepreneurship has not emerged forcefully as a scholarly domain (Low/MacMillan 1988). While it is important to study self-employment, small businesses, family-owned business and succession issues, placing such studies under the label "entrepreneurship" has only contributed to the field's "potpourri appearance" (Davidsson 2008:46).

The lack of precision is not for a lack of trying. Schumpeter (1934) was the first to conceptualize the latter with his concept of "creative destruction". In his typology, a creator introduces new products or methods of production that either open new markets or reshape the organization of an entire industry. This means that the innovation brought forward does not have to be technical, nor need it be a thing (Drucker 1985).

Following Venkataraman (1997) and Davidsson (2008), who combined the insights from this literature, we can identify three core concepts associated with entrepreneurship. The first relates to capabilities: a knack for identifying and exploiting opportunities. The

core premise is that people differ both in knowledge and in information processing, so an entrepreneur sees a chance where others see nothing. The second is the risk calculation. Knight (1921) separated risk – something that can be calculated based on historical data and hedged against – from uncertainty that can never be known. An entrepreneur is somebody who is able to handle risk and is also willing to commit resources in the face of uncertainty.[2] The third is the impact of this activity in changing competition in the market (Kirzner 1973).[3] Based on these insights, the working definition proposed here is:

> "Entrepreneurship is competitive behavior that changes the market process, as it involves identifying and exploiting opportunities for new combinations under great uncertainty."

Note that by identifying entrepreneurship as activities that create something new with the assumption of risk, implicitly this definition broadens the scholarly pursuit to large organizations, as well as all many areas of social, political and business pursuit. The definition also sharpens our focus toward a separation of the "caterpillars" from the "worms". The intent with this narrower definition is not to dismiss broader studies of social change, new types of self-employment, or policies toward small businesses, but rather to encourage studies that carve out the differences in aspirations and effects. Moreover, studying the larger context in which entrepreneurship occurs is critical for addressing a host of broad research questions that are implicit in the definition and can fruitfully be pursued across disciplines, including:

- Why and how do opportunities arise?
- Why and how do individuals differ in how they perceive and exploit these opportunities? Where do venture ideas come from?
- How does the new activity affect the market? What are the outcomes at different levels of individual, industry or society (note that this could be a market for ideas, the political marketplace, the market for talent by effecting society, etc.) (Venkataram 1997:120; Davidsson 2008: 42).

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[2] Drucker (1985) pointed out that entrepreneurship does not have to be risky, though it often is risky because entrepreneurs don't know what they are doing, especially in high-tech areas. However, whereas the risk condition can be relaxed, the uncertainty condition is an important component of the definition of entrepreneurship as it is immediately tied to the newness condition.

[3] Note that even unsuccessful endeavors can change the nature of competition, so that this condition does not introduce a "success bias" to the study.

3. Research of Entrepreneurship and the Disciplines

A first challenge in studying entrepreneurship is a selection bias towards, as well as a preoccupation with, success cases. The "success" or "hindsight" bias is problematic not only because we lose an important control group along the way; we can also learn as much, or perhaps more, from hundreds of failed attempts than from one "Google" episode. The obvious issue is how to collect data on failure cases.

Even data on success cases are often difficult to gather and analyze. The dominant approach in the early studies was to collect descriptions, conduct some ex post statistical testing, and conclude that certain factors appear to contribute to success. However, few studies have advanced to identify causalities (Low/MacMillan 1988). Surveys are difficult to design, due to sampling challenges: What type of companies should be in the sample, and how stable is the sample over time? Because cases are so heterogeneous, and attrition of the sample over time practically preordained given the high probability of failure, consistent longitudinal data are rare and the design of survey studies is fraught with complications (Davidsson 2008).[4]

Another research design challenge is to identify the appropriate dependent variable. Given the emergent nature of entrepreneurship, we need to study the phenomenon as it happens, before the outcome is known. Moreover, what is "success"? Should it be measured in money, the reshaping of an industry, a political party or a social movement, the happiness of the entrepreneur, technological progress, or something else? In business, money is often used as it offers a convenient metric. But even this is fraught with trouble, because total income streams by entrepreneurs are often known only post-hoc. Launching a "caterpillar" could be much more expensive than opening up a "worm" business, so at least initially the true entrepreneur may fare comparatively poorly. Further, the two dominant exit strategies for startup companies are to be acquired or to go public. Data on acquisitions often remain undisclosed, so we are reduced to using IPOs (initial public offerings) as a proxy for entrepreneurial returns, or even entrepreneurial activity. This becomes particularly problematic in international comparison, because stock

[4] One exception was the Stanford Program on Entrepreneurial Companies (SPEC), based on a five-year data collection of startup companies in Silicon Valley (eg., Baron/Hannan 2002). Because the same companies were followed for five years, these data include successes as well as failures. However, gathering such specialized survey data is time-consuming, and no such data exist for Japan at this point.

market and IPO rules and processes differ, as do business and social norms regarding acquisitions.

Thus, we face persistent challenges to academic research. Entrepreneurship is an emerging process, yet equilibrium models are not helpful for studying change. While surveys may be the best source of data collection, sampling is difficult. The inherent instability of the subjects only exacerbates the situation. Next, what are appropriate dependent and independent variables? Even if profits or income were measurable, these are hardly good proxies for contribution to economic progress, market dynamics, or societal progress. Success in entrepreneurship is sometimes a matter of being at the right place at the right time; in a way, "blind luck" becomes the null hypothesis (Shane/Venkataraman 2000). Finally, while we need to borrow from the disciplines, not all the theory needed for studying entrepreneurship already exists, and established tools may not be adequate to answer the particular questions of this domain (Davidsson 2008).

In addition to these shared challenges, each scholarly discipline faces its own, home-made problems when using existing tools to study entrepreneurship. Below I highlight a few of these.

Economics

Even though one might think that economics should take the lead in studies of entrepreneurship, as Rumelt (1987:12) put it, "the economic analysis of innovation and entrepreneurship has been only weakly concerned with the description of real events". One reason is that "economic models, very useful for other purposes, have proven resistant to the phenomenon of entrepreneurship" (Swedberg 2000:11). This is because in equilibrium, the perfectly competitive market wipes out all entrepreneurial rents, as all information is available to all agents, so nobody sees incentives to explore and exploit. Moreover, in spite of Hayek's (1945) admonition that knowledge is partitioned, diffused and idiosyncratic, in the standard economic model knowledge is assumed to be equally distributed and accessible to all, so nobody can exploit an informational advantage even in the medium run. Entrepreneurship, in this model, can only be a meta-economic event, an exogenous shock that shapes the economy but is not generated from within (Drucker 1985:13). As Baumol (1968:66) put it, "the theoretical firm is entrepreneurless – the Prince of Denmark has been expunged from the discussion of *Hamlet*."

Perfect market assumptions force an economist who wants to have impact in the study of entrepreneurship to either invent ways to fit entrepreneurship into the equilibrium model (such as through "temporary monopoly rents on innovation") or develop a new model

for how the economy works. Some recent studies have made great strides toward a new application, such as Parker (2005, 2006). Still, given data constraints, so far most empirical studies in economics have used broad definitions of entrepreneurship such as "all self-employed" or "all small firms", and have concerned themselves with "success" and "failure" – thereby missing out precisely on the differentiation between worms and caterpillars, and the societal impact even failed firms may have.

Business Strategy

Business strategy as a field draws on three separate disciplines: industrial organization economics, game theory, and organization theory (the latter discussed under "Sociology"). In the variety that is flavored by industrial organization economics, strategy has contributed to the study of entrepreneurship by way of three important insights. First, it has replaced the rigid concept of monopoly rents with entrepreneurial rents that accrue thanks to temporary isolating mechanisms, such as entry barriers to competitors due to innovation (Rumelt 1987). Studies triggered by Porter's (1980) concept of competitive strategy have over the years informed us on how these temporary isolating mechanisms can be created and studied, such as by looking at entry strategies, the competitive setting of the market segment, the business model, or the sales model. In the 1990s, the resource-based view of the firm added to this important concepts why firms differ, and how entrepreneurs pursue opportunities without regard to the resources they currently possess (eg., Wernerfelt 1984, Peteraf 1993, Teece et al. 1997, Harreld et al. 2007).

Finally, transaction cost economics added a toolkit with which to analyze dangers or advantages stemming from asymmetric information, moral hazard, and asset specificity (Williamson 1985). This approach has proven particularly helpful in the study of venture capital. In trying to attract support for their venture, entrepreneurs face the challenges of asymmetric information and opportunism: suppliers and stakeholders will get relevant information on the new business only after the market has been created, and if they invest regardless, they face the risk of unreliable behavior by the founder or other stakeholders.

In spite of these problems, some entrepreneurs are successful in attracting resources (money, talent, supplies), and one line of research that has shed light on these processes is the study of networks (social capital), credible commitments and trust as lubricants for exchange (Venkataraman 1997). For example, we have learned that the less developed and established the institutions for startup activity, the

higher the returns on trust in business dealings.

All of this has brought important new venues for teaching, but much less for empirical research. Game theory, for all the insights it has provided, has yet to establish powerful predictors. Under what conditions do repeated games result in business success? In the final analysis, business strategy faces the same challenges as economics, in particular the lack of specialized survey data that allow a differentiation of entrepreneurs from the rest of the world.

Sociology

The contribution of the field of sociology comes in three prongs. The first concerns what is called the "entrepreneurship habitat" (eg., Lee et al. 2000, Rowen 2007). This includes an analysis of society's definition of "success" or "status", obstacles to getting ahead, and social change as a trigger for entrepreneurial activity, such as the entry of women into the "caterpillar" categories of self-employment (e.g., Swedberg 2000). Demographic studies of entrepreneurs, for example, have shown that entrepreneurs tend to be better educated, come from entrepreneurial families (parents started or operated their own business), and start companies that are related to previous work (Cooper/Dunkelberg 1987). Interestingly, however, even the most careful studies on entrepreneurs find little in the aggregate, for diversity emerges as the main characteristic. As Low/MacMillan (1988:141) put it, the entrepreneurs "tend to reside at the tails of population distributions" and differ from the mean in unpredictable ways.

Even though attempts at social profiling of entrepreneurs have proven difficult, the economist Baumol (1990) challenged the field of sociology with a set of interesting questions. If we agree that the supply of entrepreneurial talent within any society or organization is plentiful, the question becomes how this talent is drawn into innovative, productive and constructive entrepreneurship (as opposed to destructive activities such as crime, or unproductive ones such as mere rent-seeking). In other words, what conditions in society determine in which direction entrepreneurial talent will move? Research questions that result from this include how societal infrastructure (eg., school systems) influences the level of demand and supply of entrepreneurial individuals; how these individual are incentivized to engage in positive risk-taking; whether entrepreneurial talent differs across societies (organizations, countries) and if so, why; and what the implications are for public policy (Venkataraman 1977).

The second area of inquiry in sociology is network theory, which has been successfully applied by arguing that structural holes

trigger opportunity for new endeavors. This line of thinking has brought us, among other things, incubators and the research of supporting entrepreneurship by providing structure (Low/MacMillan 1988). Incubators are facilities that offer laboratories, office space, support and other services, with the twofold goal of reducing entry barriers for startup companies and creating connections between entrepreneurs, engineers and other talent, and venture capitalists. The Japanese government has turned this concept into a new line of industrial policy, as Japanese universities are considered less able than U.S. research universities to build or contribute to such networks (Schaede 2008).

The third contribution comes from population ecology, which due to the rigor of its analytical toolbox has recently contributed more to entrepreneurship research than any other discipline. This field cares about the rise and decline of organizational populations, and from the assumption of a selection mechanism follows that adaptation to the environment and inertia make organizations successful in the medium run (Hannan/Freeman 1977). Thus, identifying diversity within specific populations allows research of change and forward progress. Technological and demographic change may create new opportunities for organizational creation or expansion, and the ensuing progress of selection and retention leads to a new push toward adaptation to the dominant organizational form. In this setting, entrepreneurship can be studied by either looking at large firms that are doing new things, or by studying the emergence of new industries and sectors and the processes by which these develop.

Political Science

The definition of "entrepreneurship" as competitive behavior that changes market processes by presenting new combinations under great uncertainty, clearly also applies to the realm of politics. Examples of political entrepreneurship include changing electoral or party rules, introducing new policies, launching a revolution or leading a country into war. In each case, the "entrepreneur" is likely to encounter considerable opposition from established political interests, and the trade-offs are not always clear. Perhaps even more than in business, political entrepreneurship can be extremely risky.

Similar to the other disciplines, political science usage has been nothing short of vague, but in different ways. Unlike in business studies, some political science scholars use the terms entrepreneurship and leadership interchangeably. Others apply the former term to instances of innovative or creative leadership, often without explaining what that entails. Still others avoid the term entrepreneurship

altogether.

Many challenges confront political scientists who study entrepreneurship as defined here. Empirically, politicians often face so many conflicting pressures from multiple and often overlapping arenas that it is difficult to delineate the many variables that might influence their propensity to be entrepreneurial. This in turn poses problems for theory building, which in the political science field requires careful analysis of lines of causation. Building universal theories of political entrepreneurship is further complicated by the increasing specialization of different political science subfields, all of which have developed their own methodological and theoretical traditions (Jones 1989).

These challenges notwithstanding, the field has much to gain from the systematic study of political entrepreneurship. Many insights into political phenomena can be gained through analyses of the relative contributions of—and interplay between—the effects of the institutional context on leadership and of an entrepreneur's particular leadership qualities. One gets the sense, though, that political scientists could benefit from a more careful analysis of scholarship on business entrepreneurship, including recent findings in business organization and psychology. Under what conditions, for instance, might we expect political entrepreneurship to materialize? How, might different perceptions of risk and uncertainty affect the likelihood of entrepreneurial behavior among political leaders? The development of more comprehensive conceptual understandings of political entrepreneurship and, by extension, of more rigorous theory can in turn have positive reverberations for our analysis of the business world. For when all is said and done, it is often the political entrepreneur who changes the institutional context of business—for better or for worse.

4. Japan and the Study of Entrepreneurship

Taken together, the lens of "entrepreneurship" offers a rich area of inquiry for scholars with an interest in Japan and a professional need to contribute to their disciplines. While implicit in what was outlined above, it may be useful to spell out a few possible Japan-related research agendas.

One of the basic research queries in this realm is how entrepreneurial opportunities arise. Drucker (1985) identified three sources: inefficiencies in existing markets; inventions or discoveries that produce new knowledge; and significant changes in social, political, demographic and economic forces. I submit that Japan's "developmental state" regime of the 20th century produced many

inefficiencies, and that since the 1990s Japan has undergone such fundamental change that it offers the perfect setting for research in entrepreneurship. The Great Eastern Japan Earthquake of March 2011 may have added more emphasis to what was already an ongoing transformation. Since 1998 Japan has undergone a great transformation of laws, processes of regulation, and market institutions so drastic that some refer to this period as a strategic inflection point (e.g., Schaede 2008). With this is meant a point in time when industry dynamics shift so profoundly that it changes what it takes to win. This opened up a variety of arenas for entrepreneurship, in business, politics and society. For business entrepreneurs, deregulation afforded entry to areas previously dominated by large firms (such as telecommunications), just when a sea-change in corporate strategy by Japan's leading companies towards refocusing opened up new opportunities for innovative firms to cater to the larger, nimbler firms that no longer control everything in-house. To offer but one example, the electronics firm Panasonic used to conduct a lot of new business exploration, such as in IT, as in-house venture projects. With Panasonic's restructuring around the turn of the century, these projects were abolished and many employees chose to form their own companies to pursue their ideas. Those that were successful can now cater to the market, including Panasonic itself. Panasonic is by no means a singular case. Moreover, proactive government policies to support new company formation have facilitated market entry, such as through a legal change in 2003 that abolished a minimum capital for new companies, a change in patent protection by removing the previous bias towards large firms, and the creation of incubators and university reform to support the formation of structures supportive of small firm growth. Japan's previously rigid market structures began to break open just when technological progress, in particular the arrival of the internet, offered new opportunities for exploitation.

At the same time – and probably not by accident - Japan also began a slow yet steady process toward more pluralism in society. Whereas in the 20th century a "successful" career was unequivocally that as a bureaucrat or a lifetime employee at a very large bank or corporation, the "salari-man" model has lost much of its previous glamour. As "work-life balance" became a Japanese word, even though perhaps still a theoretical concept for many, the notion of equating the company with family began to make way for a new ideal of having a successful career *and* a fulfilled private life. Even as the discourse around increasing inequality heated up in the late 2000s, social stratification continued. Meanwhile, demographic change brought an inflow of talent to the labor pool, in particular through women and

foreigners. New HR practices at large firms began to shift away from generalization (cemented through pay by seniority) and toward performance, and thus encouraged individual specialization, which in turn offered a better springboard toward opening one's own company. Even as these developments are still unfolding, the inflection point has already greatly opened new opportunities of innovation and entrepreneurship.

Politics is another area of great change in Japan, both in terms of party politics and a change in the electoral system as well as the relationship between politicians and bureaucrats. As these shifts coincide with exogenous shocks – the burst of an IT bubble, or an earthquake and nuclear disaster – it may open new opportunities for political leadership.

These ongoing changes offer a window for research. To what extent does the habitat invite entrepreneurship, and in a comparative setting, what type of reforms or emerging habitats invite what kind of entrepreneurship? Another area of inquiry concerns industry studies of *de novo* and *de alio* entrants in industries where deregulation has suddenly opened up the playing field? Who are the exploiters of these new opportunities? Studies of women entrepreneurs, *datsu-sara* (salari-man who quit their employed status and open their own shop) and hi-tech entrepreneurs are of high potential at this critical juncture because in many sectors the "old" and "new" co-exist, offering easy control groups. Another area of research might be the entrepreneurial infrastructure, such as through a new type of venture capital financing and the new formation of specialized services in legal and financial counsel, accounting, and other suppliers.

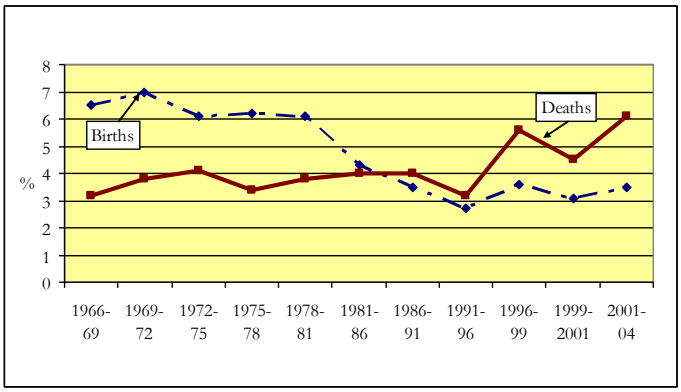
5. Government Policies toward the Creation of Venture Capital in Japan[5]

Throughout the postwar period, Japan's large firms were little concerned about either the threat of new entry or being replaced by disruptive "substitutes". The government structured R&D policies, such as research consortia, with the stated goal of diffusing new technologies to only a few, hand-picked incumbents and uphold market hierarchies. Patent policies likewise were oriented towards ensuring large firms' access to innovation. The focus of the financial system on bank loans, combined with regulated interest rates, all but precluded startup firms from access to credit, as banks were unwilling to provide risk capital at low rates. Meanwhile, ongoing diversification of large firms meant that

[5] This section is based on my book *Choose and Focus,* and will be updated soon.

new technologies were developed in-house, while outsourcing of critical technologies was limited. To the extent outsourcing occurred, it was structured in hierarchical and often exclusive subcontractor relations. Therefore, in the rare cases where an innovator managed to find financing and develop its own technology, it often faced insurmountable difficulties finding buyers. Moreover, the high status associated with being a bureaucrat or lifetime employee meant that talent was attracted into ministries and large companies. Entrepreneurial inventors were rare, and usually unable to profit from technological innovation.

Figure 1: "Births" and "Deaths" of Business Places, 1964-2004
Source: 1966-1981: Aoyama (2001:59), 1981-2004: SMEA (2006), in %, not including agriculture; see SMEA (2006) Statistical Appendix Chart 11



During the recession of the 1990s, this issue was picked up by the Ministry of Economy, Trade and Industry (METI). A survey dating back to the 1970s revealed great obstacles to innovative new firms, and most new firms were in the traditional service sector, such as restaurants. In the 1990s, bankruptcies of small firms hit a postwar high, as the rate of new firm formation continued a long-term downward trend (Figure 1). METI was concerned about these developments because it was also in charge of overall small firm policies through its affiliated Small and Medium Enterprise Agency (SMEA). Created immediately after WWII, the SMEA operated on a perceived need to support and protect small firms which were considered, by definition, as weak. Postwar small firm policies came to pursue a strongly socialist objective, soon hijacked by the conservative LDP (Liberal Democratic Party) in its attempt to appease large numbers of small firm voters.

The story of how this changed begins with one man, Hideaki Kumano. During the early 1970s, Mr. Kumano worked in the Machinery Insurance Division of the Machinery and Information Bureau at MITI

(Ministry of International Trade and Industry). It was mostly personal curiosity that made him join a discussion group of small firm managers in the late 1960s, but he was soon convinced that Japan had no future without new entrepreneurship. He also realized that existing small firm policies were counterproductive to nurturing new firm formation in high-technology areas. Kumano succeeded in creating a new section within his ministry's Machinery and Information Policy Bureau: the "New Industries Section" (*Shinki sangyō shitsu)*. After several reorganizations, including of the ministry itself in 2001, this is now the "New Industries Section" of the Economic and Industrial Policy Bureau, of METI. It is this initiative that created an initial bias in Japanese VC policies toward IT-related startup firms.[6]

Mr. Kumano's contribution was his insight that in every economy, there are two types of small firms that benefit from fundamentally different policies – the high-charging entrepreneurs and the low-tech self-employed (or, in the words of a sociologist, the "caterpillars" and the "worms"; Rona-Tas 2002). The former are entrepreneurs with new ideas and a hunger for success. More often than not they fail, but when they succeed they may make economic history. These are Schumpeter's "captains of industry" who contribute to creative destruction by overthrowing existing business models or technologies. Policies supportive of their activities are access to markets (finance, products, buyers, etc.) and a social safety net to cap the risk of failure for personal livelihood.

The second type of small firms is self-employed small shop owners whose main goal is to secure a stable clientele to make a living. These contribute in important ways to production and distribution by producing low-technology parts, distributing goods to consumers, or providing everyday services, such as the 4th-tier suppliers in Japan's production networks, the greengrocers around the corner, the dry cleaners or the local *soba* restaurant. These firms may benefit from policies protecting them from competition (e.g., Japan's rules on minimum distance between bathhouses, special liquor licenses for mom-pop stores, or the blanket exemption from antitrust rules of cooperatives; Schaede 2000a).

Japan's challenge in the 1990s was that small firm policies had been geared towards supporting this second type of small firms, while

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[6] Hamada (1999: 99). The story was confirmed by Mr. Kumano in interviews in 2001, 2003. Mr. Kumano became administrative vice ministry of METI in 1993, and after retirement from MITI in 1994 became the President of Tokyo SBIC, a government-related VC. He was instrumental in shaping new firm policies in the 1990s. Mr. Kumano passed away on December 30, 2004. It is no exaggeration to call him one of the fathers of Japanese VC policies.

the "caterpillars" had been stifled by industrial policy priorities for large firms. Although small firms account for the majority of companies in all countries, Japan stands out among industrialized nations in that 99.3% of companies are small, but employ 80% of the workforce and contribute more than 50% to GDP. What is more, "very small firms" (with fewer than 20 employees) account for 73% of all firms, and 26% of employment (SMEA 2006).

In the 1990s, humming the mantra of creative destruction, METI made hi-tech startups a main concern. A series of legal revisions aimed at opening access to credit and markets. The global internet and IT bubble around the turn of the century brought a first truly market-driven startup boom. Success stories of internet-startups altered both the economics and competition in many industries, and society's evaluation of entrepreneurship as well as of the moral integrity of becoming rich fast. As of 2006, the Japanese VC industry may still have looked small in comparison with the U.S., but it was by no means negligible or marginal. New entrepreneurs with sufficient ideas and willpower were no longer at the mercy of the old system dominated by banks and large firms. New market opportunities have sprung up, and new entry is possible. Meanwhile, the private VC industry itself has evolved in its own process of "choose and focus", to become more strategic, specialized, and result-driven.

Venture Creation Policies in the 1990s

The fact that it was government industrial policies that thwarted new firm formation meant that it took government measures to jumpstart Japan's venture capital market. Similar to European countries such as Germany and France, the *ex ante* constraints of the legal system limited new opportunities, so that the laws needed to be revised first for a new industry to emerge. This began to happen in Japan in the second half of the 1990s.

Table 1 highlights the most important policy measures taken in regard to venture firms and financing.[7] In combination with the concurrent major revisions of the Commercial Code and the 2006 Corporation Law, these policy measures have reshaped the business environment for venture capital financiers and startup firms in Japan. While the details may seem a bit tedious, a brief overview is warranted here to underscore the breadth and depth of reforms that have opened a rapidly growing and vibrant private venture capital market in Japan.

[7] Details on these programs can be found in the final section of the annual SMEA White Paper, titled "SME Policies"; see http://www.chusho.meti.go.jp/hakusyo/index.html.

Easing Entry: Startup Enabling Laws

In line with industry policy thinking in the postwar period, the policy approach to small firm finance under interest rate regulation was to insert the government as an agent, by offering subsidized loan programs and loan guarantees through public banks. These loans were earmarked for "modernization" or "rationalization" of weak small firms, until the 1989 "New Businesses Law" (*Shinki jigyō-hō*) introduced special measures for newly founded firms. However, given the dominant evaluation of small firms as needy of protection, during the 1990s recession these programs were quietly re-routed to all small firms in trouble, including companies that had been in business for decades (Hamada/Asai 2001: 35, Schaede 2005).

True venture support measures materialized in 1999. A first attempt to foster high-tech business creation with the 1995 Small Firm Creation and Support Law was boosted by the 1999 Venture Business Support Law (*Benchaa kigyō shien hō*). This law stood out for its ambitious goal of doubling the number of start-up firms over a five-year period, through a complete makeover of the environment for entrepreneurship, ranging from financial subsidies to education programs and management consulting, to a "people movement" to change the social acceptance of startup firms.[8] The revision of the SME Basic Law, also in 1999, underscored the reorientation in small firm policies. Small firms were no longer considered "losers" in need of help, but as growth engines for the economy.

Perhaps the biggest boost to new company formation came with the "One-Yen System" of 2003. In an exemption from existing Commercial Code provisions, a startup no longer needed to have a minimum capitalization of ¥10 million minimum, but could be founded with paid-in capital of ¥1. Within a year, almost 12,000 companies were founded under this system, and the measure was made permanent in the 2006 Corporation Law.

[8] See Hamada/Asai (2001: 36). The"*Sōgyō/Benchaa Kokumin Undō*" (People's Movement Towards Startup and Venture Businesses) consisted of public hearings and seminars on the necessity of supporting small firms in high-tech areas. For a full list of measures based on this law, see METI (2003).

Table 1: Venture Policies in Japan, through 2006

	VC-Related Laws	Finance Measures	Tax/Investment Measures	Technology-Related Measures
1963	SBIC law; establishment of 3 SBIC			
1975	VEC established			
1982		First investment cooperatives (Civil Code based)		
1983		OTC listing requirements lowered		
1986	SBIC "privatized"			
1988		VEC introduces debt guarantee program for startups		
1989	New Business Law (*Shinki jigyō hō*); debt guarantees for firms specified by MITI			
1990	SME Agency singles out VC in its "Vision" for the 1990s			
1994	Government Policy Plan (first explicit mention of VC)			
	Revision of AML Guidance (to exempt VC from rules on personnel exchange)			
1995	Small Firm Creation Promotion Law (*Chūsho kigyō sōzō kanrendō sokushin hō*); basic law for VC support (replaces 1989 New Business Law)	Relaxation of OTC listing requirements	Stock option system for firms identified under the 1989 New Business Law	Science and Technology Basic Law
		Creation of "2nd OTC Market"		Venture education programs
		Japan Development Bank introduces "New Business Development Loans"		
1997		Relaxation of investment rules for pensions and mutual funds	Special tax incentives for Angels; Introduction of stock options	
1998	Limited Partnership Act for VC Investment; LP funds allowed effective 4/99	Holding companies allowed (revision of Antimonopoly Law)		SBIR (*Chūsho kigyō gijutsu kakushin*) started
	New Business Formation Promotion Law (*Shinnigyō zoshutsu sokushin hō*); abolition of MITI license system for startup support	Main "Big Bang" law implemented; revision of Foreign Exchange Act; deregulation of Securities and Exchange Act; Banks, insurance companies allowed to enter the mutual fund business		Technology Licensing Office Law; local education programs (*akinai* initiative); Incubator equity program and entrepreneurship seminars launched
1999	Revision of Commercial Code: stock transfers allowed	Complete deregulation of brokerage fees (big push for internet brokers)	JASMEC allowed to invest in private VC funds; invests in SBIC	Relaxation of "Bayh-Dole" system; to allow university professors to be interlocking executives at private firms
	Revision of "SME Basic Law"	Relaxation of IPO requirements	Investment funds allowed to invest in DBJ "Basic Fund"	
	Industry Strength Revitalization Law (*Sangyō kyōsōryoku kyōka hō*)	TSE opens MOTHERS market; JASDAQ turned into an exchange		
2000	Revision of Commercial Code, to facilitate spin-outs	OSE opens NASDAQ Japan market	Relaxation of rules on stock option transfers	Reduction of fees etc. on patents filed by SME; regional clusters program
		Revision of Investment Trust Law; stock exchange reforms		
2001	Revision of Commercial Code: accounting, rules on stocks (class voting rights)	Stock options completely liberalized		2nd S&T Basic Plan (independence of national laboratories), "University-based Startups 1000 Plan"
2002	Revision of Commercial Code: stock transfers, auditing rules, types of stocks allowed	NFLC startup loan program (non-collateralized)	Federation of Angels Forum	
2003	5-year suspension of minimum capitalization requirement for new firms ("¥1 Company System")	Hercules stock exchange opened (reform of NASDAQ at OSE)	Further extension of Angel tax incentives (front-end)	Venture Capitalist Education Program; IP Basic Law; Dream Gate Project
	Formation of LPs for specific buyout funds allowed	Tax reduction on stock transfers		
2004				Reform of national universities (allowing VC business)
2005	LLP for General PE funds			
2006	Corporation Law: LLP officially introduced; ¥1 Company System made permanent			

VC Finance Enabling Laws

Deregulation of financing small firms through private venture investments came about in the annual revisions of the Commercial Code between 1998 and 2006, as well as tax system reforms to make risk investments more attractive. Reforms regarding innovation processes included measures ranging from changing the patent system to privatizing national universities, thus fostering commerce-oriented research.

Another path-breaking legal change occurred in 1999 with the introduction of investment funds through the Limited Partnership Act for Venture Capital Investment (*Tōshi jigyō yūgen sekinin kumiai-hō*). Until then, a VC fund had to be based on the Civil Code and was fraught with problems, not the least of which was that liability could not be limited. The new law, based almost literally on the U.S. model, finally allowed for the easy pooling of investments in a fund. This paved the way for a larger-scale participation of institutional investors in the VC market as limited partners, with the VC firms assuming the role of general partner. The Corporation Law in 2006 and separate legislation for funds in 2006 finally introduced the LLP (limited liability partnership) as an organizational form, thus removing the greatest obstacles to market-based fund management.

The Commercial Code revisions between 1998 and 2006 that aimed at facilitating large firm restructuring also greatly assisted the growth of venture capital. This included the transfer of stocks between companies, which facilitated shifts in ownership stakes by venture capitalists in subsequent rounds of financing; the introduction of different classes of stock with different voting rights; and new ownership rules on spin-outs that attracted new money to the industry. In the area of taxation, the stepwise deregulation of stock options opened the door to new vehicles of VC payment. Taxation of venture investments was clarified, and taxes reduced, both for stock transfers and the provision of angel (very early stage) financing. These measures were adopted between 1997 and 2003, and have reached a point where the Japanese system, on paper, is largely at par with the U.S. system, although as of 2007 differences how the various instruments could be used persisted.

An important concern of any venture capitalist is the choice of exit options. In the U.S. by far the most commonly used option is to sell the small firm to a larger firm, particularly in the bio-technology, medical instruments, telecommunications and software sectors. In Japan, acquisitions had long remained limited, partially due to a lack of legal infrastructure, and partially due to a propensity to resist "selling out".[9] The legal revisions together with new ways of thinking about startup success have spurred the growth of M&A as exit options. The second option, listing on an exchange after an initial public offering, saw a first boom with the IT bubble at the turn of the century. IPOs require the functioning of so-called junior markets that list stocks of firms with no existing profit record. Since 1999, Japan has established

[9] Interviews with Japanese VC executives, Tokyo, 2002, 2005. One executive referred to this phenomenon as the "my company syndrome".

several such markets, including JASDAQ, MOTHERS, and Hercules. After an initial flurry in 2000, these exchanges had to retrench and reorganize, but have picked up again since (see below). Whatever these markets' initial challenges, their more stringent disclosure requirements and quarterly earning statement rules have eventually also reformed rules of the main segments of the Tokyo and Osaka Stock Exchanges.

Entrepreneurial Environment and Management Education

On the startup side, perhaps the most important reforms of the early 2000s pertained to university reform, the provision of incubators, and patent policy revisions, all of which were aimed at facilitating R&D by small firms. Perhaps the most drastic change was the privatization of national universities in 2004. As professors are no longer civil servants, they are at liberty to become company founders, corporate directors, or heads of research projects with an eye towards commercialization. It also allows universities to establish their own venture capital outlets, such as UTEC at Tokyo University, which launched its first fund in 2004. Together with measures to support Technology Licensing Offices (TLO) that began in 1998, the policy goal is to tap into universities as sources for cutting-edge R&D, offer support to academics and researchers with innovative ideas, and create linkages between innovators and entrepreneurs.

Even with these structural changes, however, a great challenge was to reorient the content of research at Japanese research universities most of which have traditionally been neither as well-funded nor as commercialization-oriented as their U.S. counterparts. To entice a move into this direction, the government made funds available to so-called incubators, in the form of impressive research facilities to support R&D and economic activity. With a few exceptions, such as the private Kyoto Research Center, these incubators have yet to show results in terms of new business breakthroughs. However, by creating opportunity for research and interaction between researchers and aspiring entrepreneurs, the tangible results of these incubators may be less relevant for an evaluation than their long-term effects on structuring exchange fora and a market for innovation.[10]

Another area identified by METI as needing support was management education. Unlike the U.S., where MBA programs and job mobility have created a vibrant market for managerial talent, Japan's management curricula remain limited. Moreover, postwar human

[10] Interviews, UTEC 2005, Kyoto Research Center 2002; site visit, Tamagawa Research Center 2003.

resource practices curtailed the mid-career market for managers. To address these social impediments and change the ways in which society regards the "*das-sara*" (leaving the salary-man existence behind), the government and prefectures launched education and consulting programs. For example, the city of Osaka opened an entire building dedicated to small firm management support, with the Japanese-English-German name of "*Akinai-Aid Platz, Osaka*". "*Akinai* (help) consultants" offer advice on management and finance, and in addition to seminar rooms and lecture halls, the building also makes cubicles and secretarial services available to startup firms at highly subsidized rates.

Overall, then, Japan's government was sending out clear signals that it is supportive of new company formation. In one program, METI even ventured into education, by developing textbooks and CDs for use in elementary, middle and high schools to explain the virtues of investments over savings, of entrepreneurship over employment, and of being wealthy. While the effectiveness of cartoon-based education in capitalism remains unexplored, these measures indicate an important shift in policy thinking away from government intervention to structuring a market for competition.

Underlying many of these programs was a broad range of subsidies. The total METI budget earmarked for startup programs in 2004 was ¥57.6 billion (roughly $600 million), and for 2005 it ran at ¥75.4 billion (roughly $770 million).[11] In addition, other ministries have their own funds (e.g., for biotechnology), and prefectures engage in so-called "system finance", in addition to providing facilities and entrepreneurship seminars.

Looking back on the period of 1998-2003, METI (2003:5) finds an upward trend in new firm creation in Japan, and believes its policies have contributed to creating an environment supportive of new entrepreneurship, by minimizing the time and effort its takes for startup firms to secure funding. In this positive evaluation, METI is in agreement with some European governments, such as Germany and France, that have adopted their own measures to promote entrepreneurship.

The SBIC: Government Venture Capital Firms

In addition to crafting policies, Japan's government also helped jumpstart the VC industry by establishing SBIC (small business investment companies) in Tokyo, Osaka, and Nagoya. Unlike their U.S. models in the 1950s and 1960s, which were private VC benefiting from

[11] Interview, METI New Industries Section, January 2005.

preferential tax treatment, the Japanese SBIC were funded by the government with the task of supplementing the equity base of small firms. Given industrial policies at the time, the SBIC were not initially tasked with funding startups, but with improving small firms' access to funding, regardless of firm age or industry.[12] Run by former government officials, their investment attitude was rather conservative, as they distributed small amounts of investments across a large number of recipients to reduce risk, in what is sometimes referred to as "salary-man type portfolio investment". Although the SBIC were privatized in 1986, a government flavor persisted and funding remained partially government-backed. Moreover, the SBIC business model remained anchored on dividend income resulting from the equity positions in small firms, underscoring a basic thinking of lending rather than investing. Even as of the early 1990s, the SBIC invested in small firms with a certain profit record over the past few years, thus supporting growth companies rather than early-stage startups. It was only after Mr. Kumano assumed leadership of the SBIC Tokyo in the 1990s that the SBIC Tokyo began to explicitly nurture the fledgling VC market by engaging in true venture investments.[13] The SBIC Tokyo is the most successful of the three SBIC and most resembles a private VC, both in strategy and appearance, as successful investments have allowed it to build its own office building in Shibuya.

Perhaps the best sign of success of the SBIC in jumpstarting a VC industry is an increasing complaint by private VC firms that they are no longer needed.[14] Private VC firms have emerged and claim that the SBICs distort the market as they compete for the best startups with subsidized refinancing through government backing. As industry data below will show, the SBICs were still among the largest VC investors in Japan in 2006, and the three firms have consistently represented between 7% and 8% of the market. From a startup's perspective, receiving SBIC funding reflects risk aversion in that it is shying away from private investors that provide hands-on management guidance. However, it is still easier for a startup to receive funding from an SBIC

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[12] Interview, SBIC Osaka, May 2002.

[13] Mr. Kumano's second imprimatur on Japan's VC industry was to transform the SBIC Tokyo into a true VC firm. He was instrumental in pushing through a legal revision in 1999 that allowed the SBIC to invest in startups (i.e. firms without a profit record). In the same year, JASMEC, a public corporation for small firm policies, was allowed to invest in venture firms, and the SBIC launched a joint fund in which JASMEC invested ¥1 billion (50% of the total). Interview with Mr. Kumano, 2001 see also Hamada (1999:90-91); Hamada/Asai (2001).

[14] Interviews with Tokyo-based VC, 1998, 2003, and 2005. As one VC commented, "they did a good job jumpstarting this market. But the problem with the government is, they don't go away even when their job is finished".

funding than from a private VC, and an initial round from SBIC may raise status and reputation, which may facilitate further funding.

6. Japan's Private Venture Capital Industry in 2006

Like other aspects of Japan, the private VC industry has undergone enormous change since the turn of the century. Until the late 1990s, the image of Japanese venture capital was that of an unspecialized, slow market dominated by subsidiaries of banks and insurance companies, with investment decisions made by people on a two-year rotation with little in-depth industry knowledge. The market was small and unexciting. All of this has changed. Japan's leading VC firms in the early 21st century are hard-charging, independent investors with professional staff. While the market remains small in comparison to the U.S., it is growing in leaps and bounds, both in size and qualitatively.

Market Overview

As in other countries, disclosure rules for VC are limited, and the industry's evolution must be traced with survey data. Two separate annual surveys have been collected since 1996, one by the Nikkei Financial Newspaper (*Nikkei Kinyū*), the other by VEC, the Venture Enterprise Center. Most reports on Japan's VC industry in the past have relied on VEC data, which contains more exhaustive questions. However, some large VC, notably industry leaders Softbank Investment, CMC and Orix Capital, do not regularly respond to the VEC survey. The following analysis therefore builds on a database constructed from the more representative Nikkei survey, published in early June in the years 1996-2006. Unfortunately, these surveys have not received responses from foreign VC, so that the important role of foreign funds during the IT bubble of 1999-2001 and the subsequent turn to MBO funds (see below) remains unexplored.

Nikkei's annual survey has enjoyed a fairly stable response rate from over 90 firms, and to the extent there has been turnover in the data, this was mostly caused by mergers between VC that in turn were often triggered by mergers between their parent financial firms.[15] Table 10.2 introduces the largest 30 VC firms in Japan, as of March 2006, in terms of outstanding and annual investments, average investment amount per target firm, global exposure, and operating profits. Industry concentration is high, as these 30 firms represent 91% of total

[15] Readers may wonder why Advantage Partners, an important shaper of the industry, is not included in this table, but it shifted exclusively into buyout funds in 1998 (see below).

estimated domestic VC investment. Table 10.2 shows that on average, only 8% of investments are made abroad, and only a few firms like JAFCO and JAI are active international players.

Table 2: The Top 30 VC Firms in Japan, as of March 2006

(in million Yen, %; Source: *Nikkei Kinyū Shinbun*, Annual VC Survey, July 7, 2006)

Rank	Name of VC	Affiliation	Total Investments	# Target firms	Average Investment per Firm	% of Investments Abroad	New Annual Investments FY 2006	Operating Profits
1	Softbank Investment Holdings	Publicly traded	249,220	304	820	5	62,578	51,365
2	JAFCO	Publicly traded	172,209	959	180	26	48,993	17,302
3	NIF SMBC Ventures (1)	Publicly traded	117,569	1,083	109	19	25,061	4,604
4	CMC (Chuo Mitsui Capital) (2)	Bank	85,630	72	1,189	0	74,332	na
5	Japan Asia Investment	Publicly traded	67,205	762	88	25	18,081	5,709
6	Mizuho Capital	Bank	49,641	1,149	43	6	8,901	6,556
7	Mitsubishi UFJ Capital (3)	Bank	43,948	1,200	37	9	9,698	10,488
8	SBIC Tokyo	Government	38,536	912	42	0	3,999	3,184
9	Nikko Antfactory	Securities	36,596	336	109	16	17,732	1,211
10	SBIC Osaka	Government	35,942	767	47	0	2,521	2,318
11	Tokyo Marine Capital	Insurance	29,447	25	1,178	0	5,110	885
12	Orix Capital	Corporate	28,015	709	40	4	7,825	na
13	Resona Capital (4)	Bank	27,409	1,026	27	1	4,481	2,152
14	SBIC Nagoya	Government	24,010	494	49	0	949	1,735
15	Yasuda Enterprise Development	Insurance	21,913	378	58	22	5,621	1,211
16	Nihon Venture Capital	Independent	18,135	272	67	24	4,444	990
17	Future Venture Capital	Independent	11,471	183	63	0	4,270	35
18	Nissei Capital	Insurance	9,426	401	24	4	2,364	1,171
19	Tsunami Network Partners	Independent	8,854	59	150	18	2,871	5
20	Globis Capital Partners (7)	Independent	8,623	32	269	5	1,951	na
21	Millenia Venture Partners (6)	Corporate	7,521	60	125	5	602	34
22	Aozora Investment (8)	Bank	7,370	218	34	3	1,585	na
23	MU Hands-On 14 (9)	Securities	7,276	97	75	10	1,142	69
24	Biofrontier Partners	Independent	7,253	33	220	29	747	na
25	Meiji Capital	Insurance	7,109	302	24	0	1,741	89
26	New Frontier Partners (10)	Corporate	6,808	169	40	6	1,374	-229
27	Nihon Technology VP	Independent	6,199	23	270	0	1,912	na
28	Hokuriku Capital	Bank	5,836	88	66	0	265	86
29	Kankaku Investment Co.	Securities	5,717	124	46	1	0	290
30	Shinko Investment	Securities	5,521	238	23	0	1,266	495
	Total / Average		1,150,409	12,475	184	8	322,416	111,755

Notes:

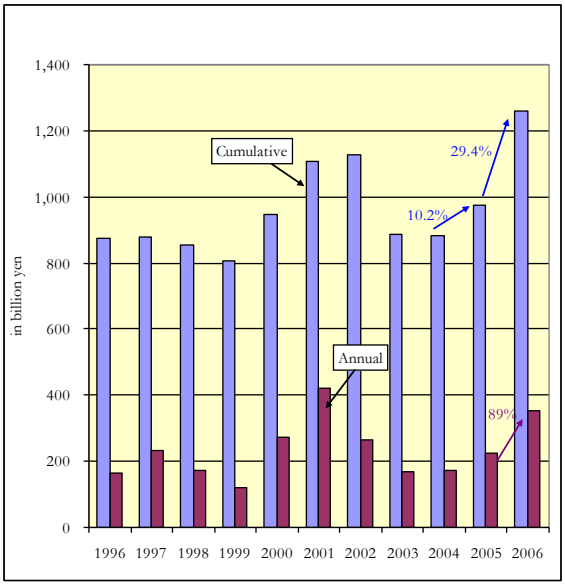
(1) NIF Ventures merged with SMBC Capital in Oct 2005. (2) CMC was founded in 2000 as the venture arm of two trust banks; heavily eng
(3) UFJ Capital = merger of Sanwa Capital, Central Capital, and Toyoshin Capital in 200; merged with Diamond Capital in 2005.
(4) Resona Capital = merger between Daiwagin kigyo-toshi and Asahigin jigyo-toshi as of 2003.
(5) Yasuda Enterprise Development merged with NED in 2000. (6) Globis Capital Partners - Merger of US VC Apax/Patricof and Globis
(7) Millenia Venture Partners = 100% subsidary of Mitsubishi Corporation. (8) Aozora Investment - Formerly Nippon Credit Bank Privat
(9) MU Hands-On = formerly UFJ Tsubasa Hands-On (10) New Frontier Partners = Owned by Aiful (formerly Kokusai Capital).

Figure 2 shows annual and total outstanding VC investments for Japan between 1996 and 2006. During the global technology bubble of 2000/01, VC investments topped the ¥1 trillion mark for the first time, and new annual investments topped the ¥400 billion mark in 2000. A recovery has materialized since 2004, when the market grew by almost 30% in 2005/06 and hit a new overall size record with ¥1.26 trillion (more than $10 billion) as of March 2006. In spite of this aggressive growth, in absolute volume this market is dwarfed by orders of magnitude in comparison with the U.S. market A METI calculation showed that as of March 2002, annual VC investments in Japan represented 0.06% of GDP and 1.8% of R&D expenditures, whereas in the U.S. these numbers were 0.41% and 15.6%, respectively (METI 2005). According to one estimate, in the early 2000s there were about 600 VC in the U.S., as compared to perhaps 200 in Japan, and Japan's market

was about 1/10 the size of the U.S. market.[16]

Figure 2: Annual and Total VC Investments Outstanding, 1996-2006

Source: Calculated from *Nikkei Kinyū Shinbun*, Annual VC Surveys, 1996-2006



Venture Capital in Japan, as of 2006

The widely-held image of Japanese venture capital until the late 1990s was that in addition to being small, the industry was underdeveloped as it focused on loans rather than investments. Indeed, the industry started out as a lending business during the postwar period, when interest rate regulation and restrictions on the stock market made VC a means to circumvent interest rate caps on loans for banks. The loan orientation was reinforced by the fact that some 80% of Japanese VC firms were subsidiaries of larger financial institutions (in comparison, in the U.S. about 20% of VC firm were thought of as affiliated, mostly with investment banks; DRI 2001).

Financial system reform and interest rate deregulation have brought the end of lending by VC firms. In particular, JAFCO's shift in business model in 1993 is credited as a main impetus for moving towards a stronger investment orientation.[17] Whereas in 1997, almost a

[16] Interview, Ignite Japan, Tokyo, 2005.

[17] (Hamada/Asai 2001). JAFCO started out as "Ace Finance" in 1973, as a joint venture of Nomura Securities, Daiwa Bank, and Nippon Life. It is often considered Japan's first venture capital firm. Although initially tightly connected to Nomura Securities, the company became increasingly independent, and when the banking portion of the business was spun off into "Nomura Finance" in 1993, JAFCO became a specialized venture investment

fifth of venture capital occurred as loans, by 2006 this ratio has dropped, for all intends and purpose, to zero. Still, in some bank-affiliated VC the attitude remained, as investments were sometimes treated as functionally equivalent to loans, and some startup firms reported fears that the VC could withdraw funds should they encounter trouble.[18]

Table 2 shows that only ten firms on the list are independent, while six of the 30 largest VC firms are related to banks, three to investment banks, and four to insurance companies. It is also noteworthy that four of the top five firms – SBI Holdings, JAFCO, NIF/SMBC, and JAI – are listed companies. While this has been commented upon as an unusual arrangement creating conflicts of interest between fund investors and shareholders, it may be a precursor of new industry developments, even in the U.S.[19] Although JAFCO and NIF were originally related to securities firms, they are now widely recognized as independent.

Another characteristic of Japanese venture capital was high industry concentration. Even in the early 2000s, the largest 10 firms accounted for more than 65% of market share, and for as much as 71% of all investments outstanding in 2005 (calculated from Nikkei Survey). The main reason for this high concentration was the dominance of the Top 4 independent firms which combined for 49% of the market. Figure 10.3 shows market shares by category of VC firm for the largest 30 firms in the Nikkei Survey. Between 1996 and 2006, the large four players have increased their dominance, whereas VC related to securities firms and banks have reduced their share. The largest increases are visible for insurance-related VC and independent VC.

The affiliation effect has influenced the development of Japanese VC in important ways. Given restrictions on funds and limited liability partnership until 1999, the affiliated VC firms used to invest mostly "own money" (i.e., mother company's assets). Even as of 2005, only about half of the VC investment in Japan was based on third party funds (VEC 2006). This reliance on own money reinforced a conservative bias in investment strategies. Bank- and insurance-related VC, in particular, invested small lots into many firms, thus engaging more in portfolio diversification than in venture financing. Only few offered hands-on guidance, except for advice on financial procurement which was usually tilted towards the interests of the mother company (e.g., bank-VC would praise the virtues of borrowing, investment

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firm. It was listed on the Tokyo Stock Exchange in 2001.

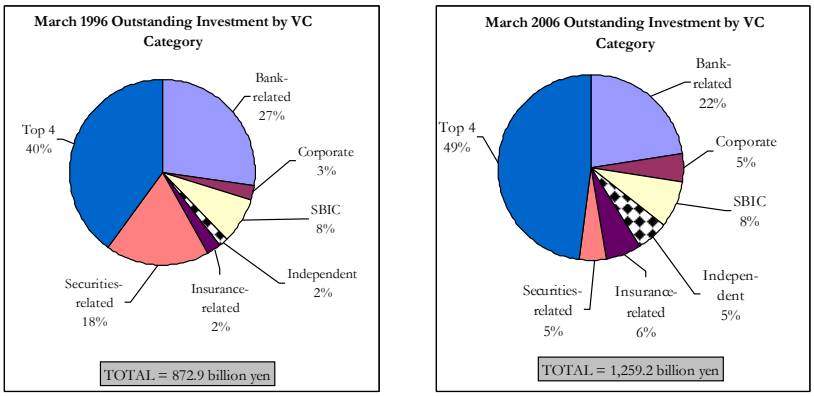
[18] Interviews with startup firms, Tokyo, 2002.

[19] Interview with Japanese VC, 2005. In March 2007, the largest private equity fund at the time, the Blackstone Group, announced plans to go public in the U.S.

bank-VC of IPOs, etc.).[20]

Figure 3: Market Share of the Top 30 VC Firms, by Affiliation, 1996 and 2006

Source: Calculated from *Nikkei Kinyū* Annual Surveys



Partially because of the conservative investment bias, and partially due to the 1990s recession, rates of returns reported by Japanese VC used to be paltry, with an annual average of 5.05% since 1982 (as compared with the Topix at 4.34%). Needless to say, variance in the reported VC IRR (internal rate of return) was much higher than the stock market, and in stellar years funds averaged returns of 38% (1994) and 21% (1997, 2003) (VEC 2006).

Venture Funds and MBO Funds in the 21st Century

All of this has begun to change. The growing market share of insurance-related and independent VC, as shown in Figure 3, is evidence of a shift away from own money investments and towards third-party funds. The introduction of limited liability funds for VC in 1999, and of LLP for private equity funds in 2005 have allowed more aggressive fund-raising and easier entry, and numerous new boutique VC have opened up, sometimes under the radar of the surveys.

During the aftermath of the burst of the IT bubble in the early 21st century, large VC realized that the wave of corporate reorganization had opened new, promising investment opportunities in

[20] The affiliation was also visible in staffing, as the mother companies may rotate staff into the VC subsidiary, which has earned these affiliated firms the nickname "salary-man VC". During the time that regular bank or insurance employees were sent to the VC subsidiary on a two-year rotation, their main ambition was not to incur losses that could mar their future careers (Interviews, Tokyo, Spring 2003 and January 2005). One survey found that as of fiscal year 2000, 60% of bank-related venture funding was in very late-stage firms (Fujita/Matsuno 2001).

management buyouts (MBO). As reorganization through spin-offs gained full speed after 2000, a market for small yet viable businesses sprung up. It was further nurtured by the so-called succession problem faced by the founders of the immediate postwar period, whose children were often not interested in continuing the family business. Both offered opportunity, if a fund could identify viable small enterprises, turn them around and sell them off. MBO investments are inherently less risky than venture investments, and the turnaround time is shorter, producing faster results. It also did not go unnoticed that foreign funds were earning very high returns with MBO funds in the early 2000s. Both factors combined to help raising third-money funds.

The emergence of successful MBO funds has in turn greatly propelled Japan's venture capital industry. It has allowed more aggressive VCs to gain independence from the mother company by raising outside funds. The rapid growth of third-party funds has diversified investment interests and increased transparency. Above all, MBO funds have attracted new liquidity to the market, thus also contributing to the growth of VC.[21]

Moreover, previous constraints that used to hamper fund-raising are slowly being lifted. For example, Japanese VC have long faced difficulties in raising funds from pension funds, which were said to be more risk averse than in the U.S. A 2001 SMEA survey revealed that only 1.6% of all Japanese pension funds had ever invested in VC funds. The main reasons cited for this reluctance were the lack of information and a lack of in-house expertise in evaluating these investments (Fujita/Matsuno 2001: 7, 20). However, the great success of turnaround funds in the early 2000s, and the shift towards professionalism in the industry in terms of industry knowledge, management guidance and business strategy consulting, has begun to attract sizable funds such as the Japan Pension Association.

Legal reforms have paved the way for new VC funds to enter the market. For example, the 2006 introduction of LLP allows VC partners to earn returns based on individual performance. New competition coincided with fundamental changes in the banking sector, where many mid-career employees found themselves discouraged and could more easily be tempted to join a cutting-edge, high-paying fund or venture firm. Tokyo now has a booming headhunting industry for finance professionals.

The new competition, including from foreign funds, has led the leading Japanese VC to change their investment strategies towards specialization. Even though, at $500,000 on average, funds remained

[21] Interview, Tokio Marine Capital and Ignite Japan, Tokyo, 2005.

much smaller than in the U.S., third-party money has brought a shift away from the previous portfolio diversification to targeted investments in industries where the VC has specialized knowledge and engages in hands-on management guidance. Human resource policies, likewise, have evolved to place emphasis on specialized knowledge. Thus, the venture capital industry has embarked on its own move towards "choose and focus" and can be expected to grow further in the future.

7. Startup Firms and IPOs

The combination of legal revisions and supportive policy measures with the growth of private funding geared towards innovative startups has greatly effected new company formation. Although Figure 10.1 at the beginning of this chapter showed that the overall rate of exits (bankruptcies, liquidation) still exceeded that of new entries as of 2004, one explanation for the "death" overhang was a continued weeding out of inefficient, Old Japan small firms. In contrast, many of the new entrants were drawn into new, fast growing market segments. In absolute numbers, in the period of 2001 through 2004, Japan recorded an annual average of 290,000 exits but 168,000 new entrants. As a result of this continuing trend since the 1980s, the total number of companies operating in Japan shrank by one fifth, from 5.35 million in 1986 to 4.34 million in 2004 (SMEA 2006).

The majority of exits were recorded for sole proprietorships. More than 43% of exits were by companies whose owner was older than 60 years old, and the majority were in the manufacturing and services industries, some of which were themselves fading out (e.g., public bathhouses). In contrast, 52% of the new company formations were internet-related, perhaps reflecting METI's jumpstart role, with biotech gaining ground in the early 2000s. The main target markets of these new firms were information and communication (10%), the ageing society (6.4%), and diversification of modes of employment such as temporary staffing (6%).

The creative destruction element of these startups stands out in biggest relief when looking at the age of founders: As of 2002, 44% of new founders were younger than 40 years old, and an additional 20% were in their 40s (SMEA 2006). A separate survey, dating back to the IT bubble year 2000, revealed two separate types of entrepreneurs. The first were middle-aged founders that left their regular employment, either because of lay-offs or job dissatisfaction. The second type were young founders drawn into the fast expanding new internet-based markets of information provision, services, or shopping (NLFC 2001).

As elsewhere, in-depth research on Japanese startup firms is

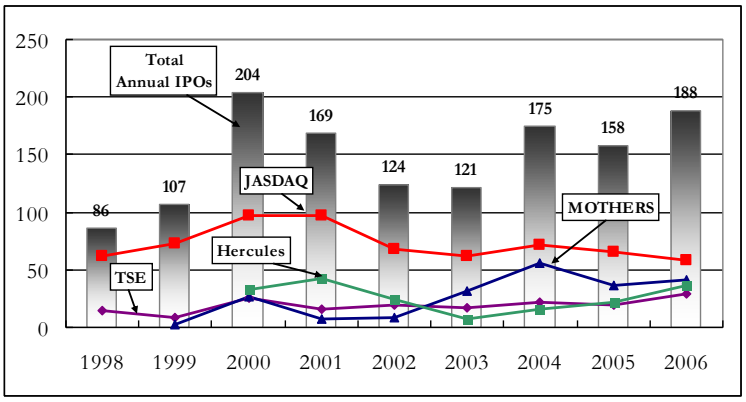
difficult because these are often not captured in the statistics. Anecdotal evidence bespeaks of a new subculture emerging, in particular in human resource practices, in "Bit Valley" (a startup cluster in Shibuya, Tokyo). Some startups, as well as VC boutiques, attract some of the brightest risk-takers and independent thinkers who loath rigid hierarchies of large firms (see case studies in Chapter 11). Just as for Silicon Valley, analysis is difficult to present in this fast-moving market, and has to confine itself to the upper layer, the IPO segment.

The IT bubble of the turn of the century provided a much-needed push for the development of a market for young companies and initial public offerings. Between 1998 and 2006, Japan recorded a total of 1,332 new company listings, of which 171 were on the Tokyo Stock Exchange, leaving 1,161 IPOs of startups. After the IT bubble in 2000, which resulted in 204 IPOs in that year, 2006 was the second most active IPO year in this period with 188 new listings.

In the mid-2000s, Japan had six exchanges with junior markets, the largest of which are JASDAQ, MOTHERS, and Hercules.[22] Some of these have since merged, but JASDAQ remains the important IPO exchange. It was founded by Japan's Association of Securities Dealers in 1963. As Figure 4 shows, it was Japan's largest IPO market, with a total of 653 IPOs between 1998 and 2006, and a total of 979 listed companies in 2007. It posts the J-Stock index, which is based on the stock prices of companies over a certain threshold of earnings and profits.

Figure 4: Initial Public Offerings in Japan, 1998-2006, by Stock Exchange

Source: Compiled from data on www.jasdaq.co.jp and www.tse.or.jp



[22] The others are Centrex (Nagoya Stock Exchange, established in 1999), Ambitious (Sapporo Stock Exchange, 1999), and Q-Board (Nagoya Stock Exchange). These cater to local startup firms aiming to attract local investors. Between 1998 and 2006, these exchanges attracted a total of 97 new listings.

The second largest market for new company listings was MOTHERS ("Market of the High-Growth and Emerging Stocks"), which was established as a section of the Tokyo Stock Exchange in November 1999. As of early 2007, 210 companies were listed on this exchange, of which 99.7% were actively traded, with an average monthly trading value per stock of ¥12 billion (roughly $100 million). In other words, the market was reasonably liquid and attracted increasing attention.

Reflecting the dominance of IT- and health-oriented service businesses, 36% of MOTHERS companies were in the Information and Communication sector, 26% in Services (including health care), and another 15% in Distribution and Retail.[23] A look at the largest companies, by market capitalization, listed on MOTHERS in February 2007 provides a flavor of this market. These included Access Co. (a software company), DeNa (an e-commerce website perhaps best known for its *Mobaoku*, "mobile phone auction" site), mixi.Inc. (Japan's wildly successful version of MySpace.Com), ARDEPRO (a Tokyo-based remodeler of condominiums), and Takara Bio (a biotech firm).

Japan's third largest IPO exchange was Hercules, located at Osaka Stock Exchange. As of early 2007, 164 companies were listed (of which one foreign), and flagship stocks included Starbucks Japan, BB-Net and Gungho Online Entertainment (as well as other Softbank affiliates), En-Japan (a web-based matchmaker for mid-career job changers), and the Osaka Stock Exchange itself. The roots of this exchange are in NASDAQ Japan, which opened in May 2000 with backing from Softbank (cf. Chapter 11). However, NASDAQ-J attracted less than 30 IPOs in its first three years of operations, and suffered from lack of trading. It was closed down and revamped into "Nippon New Market – Hercules" in December 2002. *Since then, the stock markets have been merged, and an update is needed here.*

New Money for New Markets

A policy shift away from market involvement by the government and towards enabling small firms to compete in open markets has brought about a sea change in new company formation. Deregulation, privatization and corporate reorganization have opened markets, both for the funding of startups and for entrepreneurs. Japan's VC firms in the early 2000s underwent their own transition of "choose and focus", by becoming less dependent on their mother companies through raising third-party funds, and positioning themselves in those

[23] Calculated from the list of MOTHERS companies, www.tse.or.jp/listing/mothers/list.html

markets where they have resident knowledge to evaluate the underlying technologies and can offer meaningful hands-on advise.

Until recently, perhaps the biggest obstacle to VC development in Japan was a dearth of promising startup firms. "Many fishermen, too few fish" was an often-heard phrase in the 1990s, describing the mismatch between VC funds available and lack of investment targets. Obstacles to startup formation and funding included a lack of networks among entrepreneurs, fora for entrepreneurs and financiers to meet, and a more structured exchange of ideas among researchers and aspiring entrepreneurs. Government policies to alleviate these shortcomings have shown some effect, and a network for VC firms has begun to build. For startup firms, the strategic inflection point also promises to bring greater opportunities to sell, as former business groups and vertical hierarchies are breaking open and markets for new technologies develop. For example, a new development in 2007 was the emergence of a viable biotech industry within Japan, based on newly structured collaborations between universities and companies.

Thus, in industry after industry, new domestic entrants are knocking on the door. The following chapter will highlight four industries – telecommunication, internet shopping, pharmaceuticals and investment banking – that exemplify how previously rigidly regulated or otherwise tightly controlled markets are breaking open and are driven to new competition by emerging entrepreneurs.

8. Conclusions

Entrepreneurship is the discovery of profitable opportunities, and their exploitation under uncertainty in ways that change the market process. "Profitable" here includes everything that pushes forward a goal or a career, and "market" includes all kinds of markets in economics, business, politics, talent, ideas, and academia. In order to increase legitimacy of the study of entrepreneurship as a scholarly domain, we need rigorous research that moves beyond the descriptive, principally by establishing causalities. The only way this can be accomplished is by borrowing heavily from the disciplines. Yet, we face great challenges as the disciplines may not allow us to raise the most important or interesting questions, as they are silent on some of the basic features that make for "entrepreneurship". One hopes that in the future we will see new efforts to design ways in which to exploit "Japan" as a case study. The opportunity has presented itself by way of the fundamental changes that Japan has undergone during the last decade. It is now upon the researchers to be entrepreneurial in how we study

these changes.

The slow yet steady rise of a market for ideas, and thus opportunity towards entrepreneurship makes Japan a unexplored, unexploited and exciting area of research. At the same time, Japan as a case study has the potential to refresh the field of entrepreneurship, by introducing new (non-Western, non-Silicon Valley) institutional, financial, regulatory and societal parameters to our studies. A large opportunity to broaden our insights into the processes of creative destruction has opened up.

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Note: Citations for part 2 can be seen in my book, *Choose and Focus*, and will be added here later.

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