INSEAD

The Business School for the World®

Faculty & Research Working Paper

Japan: Coordinated Capitalism Between Institutional Change and Structural Inertia

Michael A. WITT
2012/105/EPS
(Revised version of 2011/113/EPS)

Japan: Coordinated Capitalism Between Institutional Change and Structural Inertia

Michael A. Witt*

Revised version of 2011/113/EPS

I thank Harukiyo Hasegawa, Patricia A. Nelson, and Steven K. Vogel for very helpful comments. Any errors that remain are my sole responsibility.

A copyedited version of this chapter has been published in the *Oxford Handbook of Asian Business Systems*. Unless you quote directly, please cite as: Witt, M.A.. 'Japan: Coordinated Capitalism Between Institutional Change and Structural Inertia'. In M.A. Witt & G. Redding (Eds.), *The Oxford Handbook of Asian Business Systems* pp. 100-122 Oxford, Oxford University Press. If you quote directly, please refer to the official published version

This paper can be downloaded without charge from the Social Science Research Network electronic library at: http://ssrn.com/abstract=2171236

* Affiliate Professor of Asian Business and Comparative Management at INSEAD, 1 Ayer Rajah Avenue, Singapore 138676, Singapore. Email: michael.witt@insead.edu

A Working Paper is the author's intellectual property. It is intended as a means to promote research to interested readers. Its content should not be copied or hosted on any server without written permission from publications.fb@insead.edu
Find more INSEAD papers at http://www.insead.edu/facultyresearch/research/search_papers.cfm

Abstract

This chapter of the *Oxford Handbook of Asian Business Systems* provides an overview of the institutional structure of the business system of Japan. It explores the role of the state, the financial system, ownership and corporate governance, the internal structure of the firm (management), employment relations, education and skills formation, inter-company relations (networks), and social capital. The analysis suggests that recent institutional change in the Japanese business system has been less pronounced than many observers expected or claimed. Informality — deviance of actual practice from formal structures — in the Japanese business system lies at the heart of much of this divergence. This chapter contributes directly to the business systems and varieties of capitalism literature and identifies institutional contingencies for comparative and international social science research in general.

Keywords: Japan, Asia, business systems, varieties of capitalism, institutions, institutional change, informality

Electronic copy available at: http://ssrn.com/abstract=2171236

Introduction

Japan was the first country in East Asia to industrialize, and is still the region's second-largest economy. Its meteoric rise from the ashes of World War II inspired many of the Asian miracles that followed. Japanese-style industrial policy (Johnson 1982) featured prominently in South Korea and Taiwan, and later also in China. By the 1980s, Japan had become a source of learning and even awe for Western nations.

Then came the burst of the Japanese bubble economy of the 1980s. With Japan unable to extricate itself from its sea of troubles, awe initially turned to relief — Japan was not going to take over the world after all — then to concern and resignation. Public attention turned to dynamic China, and Japan was mentally written off. Perhaps as a result, few seem to have realized that Japan registered higher GDP growth on a *per capita* basis in the first decade of this century than the United States. It has also remained one of the leading sources of profits for foreign firms in the Asia-Pacific region.

An open question in this context is how the business system has evolved during the past two decades of trials and tribulations. The objective of this chapter is to draw on the latest available data to shed some light on this question.

The Role of the State

From the end of World War II through about the 1980s, Japan was the paradigmatic developmental state (Johnson 1982). Its approach to economic development became the model for much of Asia (e.g., Amsden 1989; Woo-Cummings 1999), and it is arguably impossible to understand the economic trajectory of Asia-Pacific without some appreciation of the Japanese model.

The Japanese developmental model has received considerable attention in the literature (Johnson 1982; Samuels 1987; Okimoto 1989; Pekkanen 2003). In simple terms, the objective of Japanese post-war industrial policy was to accelerate economic development by speeding up the transition from labour-intensive to capital-intensive and later to knowledge-intensive industries. Based on observation of Western nations' development, Japan knew what industries would follow one another. A capable and clean bureaucracy — especially the Ministry of International Trade and Industry (MITI) —judged when it was time to start developing a given industry and then used a combination of tools to help the fledgling industry grow and become internationally competitive. Firms engaged in new industries typically received preferential access to capital, then a scarce resource, often at depressed interest rates. Capital controls ensured that the money was used within the country. Strict barriers on imports and inward foreign direct investment prevented established international firms from out-competing infant Japanese industries. At the same time, the drive to export Japanese products brought in foreign currency and, more importantly, exposed Japanese companies to international competition, pushing them to improve their exported products. Through licensing and R&D consortia, the Japanese state also fostered the acquisition and diffusion of knowledge from the West. While all this sounds straightforward today, it was revolutionary in its day. South Korea and Taiwan in particular drew inspiration from it, and China's management of its state-owned sector shows intriguing parallels.

In initial accounts, the policy- and decision-making process looked top-down: the bureaucracy decided, and industry obeyed (Johnson 1982). Later accounts (Samuels 1987; Okimoto 1989; Tsuru 1993) found that the process was coordinated rather than top-down, or in Samuels's expression, characterized by 'reciprocal consent' between government and business. Most observers also argued that while politicians may have had the formal trappings of power, the bureaucracy really ran the country. This may be an overstatement (see Ramseyer and Rosenbluth 1993), but given that the general direction of the country was clear during the decades following the war — focus on economic recovery and further development — the country effectively ran on autopilot for most of this period.

This point is important, because it partly accounts for the far less impressive state of Japanese politics today. As Japan caught up with the West technologically and economically, the developmental model had run its course, raising the question of where to take Japan next. The burst of the 1980s bubble economy and the subsequent 'lost decade' of the 1990s added pressure for political leadership, which neither the bureaucracy nor the politicians have been able to provide. The former lacks legitimacy, while the latter seem to have neither the will nor the skill. Prime Minister Junichiro Koizumi (2001-2006) was the exception that proves the rule, but the drive for structural reforms he initiated has proved ephemeral. Since then, Japan has had six prime ministers and is effectively directionless, with the bureaucracy administering the *status quo* and institutional change proceeding slowly, as discussed below.

One important shift in recent years has been a reduction in the extent of state intervention in the economy. The OECD's product-market regulation index (OECD 2011) shows a steady decline in regulatory burden, from around the OECD average in 1998 to somewhat below the average in 2008, remaining somewhat higher than the average for Anglo-Saxon countries, but lower than that for the Northern Europeans. However, this probably understates the extent of state intervention, as much intervention has traditionally occurred informally ('administrative guidance') (Johnson 1982). There is also evidence that deregulation, at least in some sectors, actually amounted to a process of re-regulation with more rules (Vogel 1996). Finally, it is worth noting that even among the business community, there is no desire for free-market competition: while deregulation *(kisei kanwa,* lit. a softening of regulations) is high on the wish list of senior executives, liberalization *(jiyuka,* denoting the abolition of regulations) is perceived as undesirable (Witt and Redding 2009).

Financial System

Japan's present-day financial system is best understood in the context of its classical post-war configuration as a bank-led system. Firms obtained most of their funding through a long-term business relationship with a single 'main bank'. In particular, business groups, also known as *keiretsu* (discussed below), all centred on a major bank that represented the main source of funding for group members. In the early days of post-war recovery, the state controlled the allocation of financial capital through directed lending to firms targeted by industrial policy (cf. Johnson 1982). As Japan caught up with the West and firms grew larger and richer, this state role faded into the background, and market criteria such as credit-worthiness attained greater importance. Throughout, however, the nature and strength of the 'main bank' relationship continued to matter. Bank loans remained available for the long-term, as shown in the proliferation of so-called 'zombie' companies in the late 1990s and early 2000s: while practically insolvent, these companies were kept afloat by the willingness of their banks to roll over existing credit and extend new loans as needed (Caballero, Hoshi, and Kashyap 2008).

Recent evidence suggests that while the importance of bank lending has declined and markets have become more important (Witt 2006; Yoshikawa and McGuire 2008; McGuire and Dow 2009; BIS 2010), Japan's financial system remains bank-led. The ratio of bank credits over GDP in Japan fell from about 1.25 in 1980 to about 1.05 in 2009 (BIS 2010). During the same period, the ratio of stock market valuation over GDP increased from about 0.2 to about 0.55 (BIS 2010). For comparison, the respective ratios for the United States in 2009, which is clearly a market-led system (Witt 2006), were about 0.6 for credit and 0.6 for stock valuation (BIS 2010). Germany, where banks play an even stronger role than in Japan (Witt 2006), had 2009 ratios of about 1.15 and 0.3 (BIS 2010).

Ownership and Governance

Most outstanding shares of listed firms used to be owned by the main bank and other friendly firms, such as other members of the same business groups. In 1980, 64.4 percent of the value of outstanding stock of listed corporations was in the hands of financial institutions and business corporations (TSE 2010). These shareholdings would often be reciprocal, leading to high levels of cross-shareholdings in the Japanese economy. Monitoring by the main bank and other business group members represented the main mechanism of corporate governance (Dore 2000). Boards were typically large collections of insiders; Sony, for instance, had a board of 38 (Yoshikawa and McGuire 2008). A market for corporate governance involving hostile take-over bids was practically non-existent; indeed, firms had begun to adopt cross-shareholdings in the 1960s to counter the threat of such take-overs (Witt 2006).

Shareholding patterns began to shift during the 'lost decade' of the 1990s, as corporations and financial institutions sold off shares to recapitalize themselves. In 2000, the combined holdings of financial institutions and corporations were 60.9 percent of market valuation. In 2009, their holdings were down to 51.9 percent, though this marks a slight recovery from a 2006 low of 51.5 percent (TSE 2010). As firms and, to a lesser extent, individuals in Japan sold shares, foreigners increased their share from 5.8 percent in 1980 to 18.8 percent in 2000 and 26.0 percent in 2009 (TSE 2010).

Increased foreign shareholdings have meant pressure for changes in corporate governance toward more attention to shareholders' interests. Traditionally, shareholders mattered little to Japanese corporations. Instead, firms focused on fulfilling their obligations to a range of stakeholders, including employees, society, and customers (Dore 2000), an attitude that had little changed by the early 2000s (Witt and Redding 2010). Firms, especially those with large foreign shareholdings, have started to yield to the pressure. Legal reforms starting in 1997 facilitated this development, culminating in a 2002 change of the Company Law to permit the formation of US-style boards of directors (Shishido 2007). Notable changes visible in practice include reductions in board sizes (Sony cut its board to ten members), the introduction of the executive-officer system, the appointment of outside directors, and increases in disclosure and transparency (Ahmadjian and Okumura 2011).

The practical significance of most of these changes is unclear. Perhaps the greatest progress has been made in terms of disclosure and transparency (Ahmadjian and Okumura 2011). Other reforms have been less successful. For instance, as of July 2012, only 58 of Japan's nearly 4,000 listed firms had introduced a US-style committee system (Japan Association of Corporate Directors 2012; World Bank 2012a). Even where structural reforms have occurred, this may matter little in reality. Dore (2007), for instance, explained how the same senior directors now making up reformed smaller boards used to form a sub-committee of the old board — the *jomukai* — to drive many of its decisions. Meanwhile, the old board continues to exist and meet in the guise of joint meetings of the new board and the newly-created executive-officer group (who under the old system would have been board members).

In addition, outside directors continue to be a great rarity. In 2009, 44.1 percent of firms had at least one outside director, with the average number of such outsiders at 1.76 (Ahmadjian and Okumura 2011). The effect thus seems to be one of insiders monitoring insiders, as before (Ahmadjian and Okumura 2011; Aman and Nguyen 2012). In addition, the loose definition of 'outsider' has in effect enabled parent companies to take even tighter control of their formally independent subsidiaries, thus defeating the intended goal of openness and transparency (Dore 2007).

At the same time, take-over defences continue to deprive shareholders of their ultimate recourse, selling to the highest bidder. Cross-shareholdings seem to have started to strengthen again from 2005 onward (Nakamura 2011). In addition, by 2008, 23.8 percent of first-section TSE firms had take-over defences such as poison pills, and hostile take-over bids, whether by Japanese or foreign investors, have generally failed (Ahmadjian and Okumura 2011). A further deterrent, at least for insiders, is likely to be found in the fate of the two leading Japanese activists for shareholder rights, Takafumi Horie and Yoshiaki Murakami. After a public hostile take-over bid for Fuji Television in 2005, both were found guilty of securities fraud and handed prison sentences.

Internal Structure

Japanese firms tend to be hierarchical. Within general management grades, five to eight layers seem to have been the norm, compared with about the same number in the UK and up to thirteen layers in US firms (Morris, Hassard, and McCann 2008; McCann, Hassard, and Morris 2010). In the past decade, Japanese firms seem to have sought to streamline operations by de-layering, roughly halving the number of managerial grades (Inagami and Whittaker 2005; Morris, Hassard, and McCann 2008; McCann, Hassard, and Morris 2010). However, studies documenting such de-layering are based on relatively few cases, so it remains open how widespread this really is. The evidence is also contradictory. For instance, in two separate studies involving the same author, one found de-layering to be common (Morris, Hassard, and McCann 2008), the other found the opposite (Iida and Morris 2008). It is also unclear whether the reduction of formal managerial grades has led to a reduced hierarchy in actual practice. Given the hierarchical nature of Japanese society, it is possible that informal determinants of hierarchy, such as seniority, may have substituted for abolished formal titles.

Despite the hierarchical structure, decision-making in Japanese firms has had a consensual and participatory element in non-routine decision-making (Dore 1973; Aoki 1988). Major decisions usually involve informal consensus-building among the main internal stakeholders before formal steps are taken, a process known as *nemawashi* (preparing the roots). Once consensus has been reached, the proposal is put on the agenda of the appropriate forum, such as the board, where it usually passes without further discussion. Middle-management in this context is an important source of initiatives and factual input.

In contrast with much of the rest of Asia, improving a company's workings is the responsibility of all (regular) employees. The principle of *kaizen* (continuous improvement), for instance, calls on all echelons of the firm to keep looking for ways to increase productivity. Suggestion boxes and teams such as quality circles are conduits by which individual workers can contribute to this process. The *ringi* system enables non-executive managers to feed proposals into the decision-making system. The process involves writing up a proposal for a change, which is then circulated for peer review before being submitted to higher-level management for a decision. Usually, authors of a *ringi* proposal will seek to build an informal consensus before drafting a formal proposal. Accordingly, comparative statistics suggest that Japan has the highest level of delegation among the economies considered in this volume, scoring 4.8 out for 7, with highest numbers indicating more delegation (Schwab, 2010). This is about par with the average for Anglo-Saxon countries, 4.87, though lower than the average score in northern European countries, 5.31 (Schwab, 2010).

Recent developments seem to have not so much abolished these processes as streamlined them, to speed up decision-making and improve efficiency. De-layering, for instance, should in principle speed up information flow through the hierarchy. At the same time, there is evidence that companies have devolved more decisions to lower management levels, emphasized the need to make more decisions without lengthy consensus-building, and increased the control spans of individual managers (Inagami and Whittaker 2005; McCann, Hassard, and Morris 2010). As with de-layering and for the same reasons, it is unclear to what extent these other changes have diffused through the Japanese economy. In addition, as discussed, some firms have also shrunk their boards and brought them structurally in line with the US model, though this may in effect amount to no more than a renaming exercise (Dore 2007).

Employment Relations

Japanese post-war employment relations has rested on three main pillars, or 'sacred treasures': lifetime employment *(shushin koyo)*, seniority system *(nenko joretsu)*, and enterprise unions. All three came under considerable pressure from the 1990s onward (Dore 2000; Jacoby 2005; Vogel 2006), raising the possibility of possible convergence, partial or total, on the Anglo-Saxon model. The most recent evidence on the question suggests that practices in all three areas have changed, though not necessarily as much as earlier studies had anticipated.

Lifetime employment refers to the promise, usually implicit rather than spelled out in contracts, to keep regular male employees *(seishain)* until retirement age (initially 55, now usually around 60). Even though only about a quarter of private-sector firms offered 'lifetime employment' (Iida and Morris 2008), it became a normative model for society (Dore 1973). As a result, most small and medium-sized enterprises tended to follow the same basic norm of long-term employment (Iida and Morris 2008).

Counter to earlier expectations, lifetime or long-term employment seems still the norm. Following a review of the literature of the past two decades, Iida and Morris conclude that “the lifetime employment system thus appears to be fairly robust” (Iida and Morris 2008:1075), though they also note the rise of non-regular employees without such guarantees and a possible shortening of the age bracket during which it applies. Keizer (2011:579) paints a consistent picture, noting, among others, a 2007 survey by the Japan Institute for Labour Policy and Training, which found that almost 90 percent of companies “aimed to maintain lifetime employment policies in their current or partially adjusted form”. The same survey reported that 78 percent of employees preferred the practice. Similarly, a 2010 survey of new recruits shows that almost 60 percent preferred to stay working for the same company (Japan Productivity Centre 2010).

Even if companies want to reduce their workforce, regulations make this fairly difficult. The Global Competitiveness Report rates the ease of hiring and firing on a scale from 1 to 7 (1=impeded by regulations, 7=flexibly determined by employers). Japan scores 3.0, the lowest value for all Asian countries in the survey (Schwab 2010), putting Japan roughly par with continental European countries such as Belgium, France, Norway, and Sweden. Similarly, the OECD rates Japanese employment protection for regular employees at 1.87 – lower than for northern European countries, but considerably higher than the Anglo-Saxon nations (OECD 2012).

This all suggests little change in actual employment practice. The statistics on duration of employment present a consistent picture. According to the Basic Survey on Wage Structure by the Ministry of Health, Labour and Welfare, in 2010, the average tenure of regular male employees combined was 18.4 years for middle-school graduates, 14.8 years for high-school graduates, 11.7 years for graduates from junior colleges and colleges of technology, and 12.8 years for college and university graduates (Ministry of Health 2011b). Breakdown by company size shows a positive correlation between firm size and tenure, especially for middle-school and high-school graduates. However, even for small firms, the numbers are only just below average. Importantly, tenure lengths have actually increased over the past decade. In 1998, the earliest date for which the survey contains them, tenure durations were 17.6, 13.4, 9.2, and 11.9 years, respectively (Ministry of Health 2011b). Increases in the pension age may be part of the explanation. Overall, while there is no doubt that some individual firms may have moved away from the norm of lifetime or long-term employment, it is also clear that at the level of the business system, the practice seems to persist.

'Seniority system' describes the practice of increasing wages or salaries with tenure inside the firm (which correlates with age, as most recruits of a given background join at the same age). One rationale for this practice is that length of tenure is an indicator of experience in the company, and thus of knowledge or ability. In addition, the system has historically differentiated on the basis of educational attainment, with holders of higher degrees receiving higher pay.

In recent years, a third element has entered the scene: performance-based pay. By 2010, 45.1 percent of companies had introduced a performance-evaluation system. Among large firms with 1,000 employees of more, the proportion was 83.3 percent. While several authors initially suggested that this development could lead to the breakdown of the seniority system (e.g. Keizer 2011), this does not seem to have happened. In particular, the 2010 Basic Survey on Wage Structure by the Ministry of Health, Labour and Welfare (2011b) shows that across education levels and industry sizes and up to the usual retirement age of 60 years, salaries still increase with age, peaking around age 55. What seems to have changed is the relative height of the peak. For instance, for male university graduates, Inagami and Whittaker (2005) find a peak of about 2.7 times the pay of fresh recruits in 2000, while the 2010 multiple was 2.23. This continues a gradual trend visible since the 1970s (Inagami and Whittaker 2005). One interpretation is that, unlike firms elsewhere, especially in the United States, Japanese firms are restraining wages at the top rather than bottom.

Case studies exploring the details of the introduction of performance-based pay similarly suggest that in general, its impact on the seniority system has been limited. For instance, Keizer (2011:590) found performance-based pay to be “usually limited to more senior employees and predominantly impact[ing] bonus payments”. Iida and Morris (2008:1076) suggested that “while pay is increasingly individualized, promotion remains seniority-based”, which implies a *de facto* continuation of the seniority system augmented by increased variance around the mean pay for the respective age group. The overall result is thus that “changes have not been as revolutionary as suggested in the early years of the debate” (Keizer 2011:590).

The third pillar, enterprise unions, seems to have stabilized in the second half of the 2000s, after years of decline. According to the Ministry of Health, Labour and Welfare’s Basic Survey on Labour Unions (reported by Japan Institute for Labour Policy and Training 2011), union density has fallen from 25.2 percent in 1990 to 18.5 percent in 2010, though it is showing some signs of recovery from its low of 18.1 percent in 2007/08. In large companies with more than 1,000 employees, density fell from 61.0 percent in 1990 to 46.6 percent in 2010, recovering from a low of 45.3 percent in 2008.

The overall downward trend in Japan started in the 1970s and is consistent with the decline of labour unions worldwide (cf. Witt 2006), stemming from factors such as globalization and sectoral shifts away from manufacturing. Specific to Japan are two further challenges: First, non-regular workers, traditionally ineligible for membership, make up a much larger proportion of the working population today. And second, the need for unions as interest representatives is limited, at least for regular employees, given that most Japanese business-leaders consider the provision of benefits to employees a prime reason for the existence of their firms and see unions as partners in running the firm (Witt and Redding 2010). As a result, the interests of regular employees and their firms are generally well-aligned, as expressed in the fact that Japan has the lowest number of strike days among any OECD country, regardless of population size (OECD 2012).

Japanese unions have sought to respond by re-inventing themselves, changing their organizational boundaries together with their enterprises (Sako 2006) and starting their own welfare programmes (Akimoto and Sonoda 2009). They have also begun to admit part-time workers, achieving a unionization rate of 5.6 percent among this group in 2010. Whether these changes will lead to a sustainable stabilization or even a recovery remains to be seen.

A development informing much of the recent debate on industrial relations is the increase of non-regular employees (e.g. Inagami and Whittaker 2005; Vogel 2006; Schaede 2008). This is of potential significance, because the three pillars of employment relations have traditionally only applied to regular employees. A proliferation of non-regular employees would thus be indicative of major changes to the Japanese way of handling human resources.

On the surface, such a proliferation is precisely what has occurred over recent decades. In 1984, the first year of the historical time-series offered by the Japan Statistics Bureau (Ministry of Internal Affairs and Communications 2011), 15.3 percent of employees were in non-regular employment. This proportion rose to 20.2 percent in 1990, 26.0 percent in 2000, and reached 34.4 percent in 2010. It is tempting to see this as evidence of a breakdown in traditional employment relations.

A more careful analysis suggests a different picture. The numbers on the rise of non-regular employment usually cited include all workers in the economy, male and female, of all ages. However, being a 'regular' employee has traditionally meant being male and between about 25 and 55 years of age — in other words, out of school and before retirement. To avoid comparing apples with oranges, one needs to look exclusively at this group of employees. There, the data (Ministry of Internal Affairs and Communications 2011) show that between 1990–2010, the proportion of non-regular workers increased from 3.6 percent to 10.1 percent. Most of this growth comes from the age-group 25–34, which rose from 3.2 percent to 14.0 percent during this period. Part of the explanation for this latter trend is a higher propensity to stay in tertiary education and engage in part-time work while doing so (see below). In addition, some younger workers probably permanently lost out on the chance to become a regular employee as a result of reduced hiring during the recessionary years of the 1990s and 2000s (Ahmadjian and Robinson 2001; Morris, Hassard, and McCann 2008).

Much of the growth in the total proportion of non-regular employees is explained by a rising propensity of women to work. Between 1984 and 2010, the overall number of male employees in the economy grew by 14.4 percent; that of female employees, by 61.0 percent. Since women are approximately three times as likely to work in non-regular employment, this has served to inflate the overall proportion of non-regular workers in the economy. Furthermore, much of the rise in female employment seems to involve areas not covered by regular employees. For instance, in the 2000s, the industry with by far the greatest increase in female employment was medical, healthcare, and welfare, which seems to be related to newly-created lines of employment such as home-care.

Similarly, the number of employees above the age of 55 has more than doubled since 1984. The increase in the retirement age from 55 to 60 years is part of the explanation, but so is improved health and life expectancy. Increasing the proportion of young Japanese in tertiary education has likewise had the effect of driving up non-regular employment within the 15–24 age bracket; in fact, students in 2010 accounted for half of non-regular employment in this group.

Overall, while there is no doubt that the proportion of non-regular employment has increased and that some firms are substituting cheaper non-regular workers for some of their regular workers, the picture does not suggest a breakdown of the traditional employment system. It does suggest the rise of a second major form of employment practice in the Japanese political economy. On present evidence, it seems that this represents more of a complement to, than a substitute for, the traditional regular employment system.

Education and Skills Formation

The present education system was put in place after World War II on the basis of the US model. Students go through six years of primary school, three years of junior high school, and three years of high school before moving on to two-year or four-year college, which in turn may be followed by graduate degree programmes. Schooling is essentially universal through high school, and Japan's 2010 secondary gross enrolment rate of 102 percent[1] was the highest in Asia except for Brunei (World Bank 2012a). The proportion of students attending college is similarly high, with a 2010 tertiary gross enrolment rate of 60 percent, third in Asia after South Korea and Macau (World Bank 2012a).

The output of this system is generally good. In the 2011 UNDP education attainment index, which presents a composite score of mean years of schooling of adults and expected years of schooling of children, Japan scores 0.883 (United Nations Development Programme 2011). Among world nations, this places Japan 18th, approximately par with Belgium and ahead of all the economies in this handbook except South Korea. In comparative studies of student attainment, Japan similarly tends to perform well. In the 2009 PISA studies comparing students' ability in reading, mathematics, and sciences, Japan overall came 5th among 65 economies, beaten only by Hong Kong, Finland, Singapore, and South Korea (OECD 2010). In the 2007 Trends in Mathematics and Science Study, Japan ranked 4th among 36 economies, behind Taiwan, Singapore, and South Korea (National Center for Education Statistics 2009).

Relatively underdeveloped are public[2] vocational training schemes. Main avenues are specialized training colleges *(senmon gakko)* and colleges of technology *(kosen)*. Relative to other educational tracks, student numbers are fairly small. In 2009, these two types of school enrolled a total of 684,261 students, compared with a junior college and college population of about 3,006,884 students (Ministry of Education 2011). The gap between vocational and generalist education has been growing. College enrolment rose by 15.1 percent between 1990–2009, while vocational student numbers fell by 19.0 percent during the same period (Ministry of Education 2011). Part of the reason for this decline is that universities are facing a shortfall of students as a result of Japan's low birth-rate, which at least some of them are working to compensate for by recruiting students from the traditional catchment area of vocational schools.

Specialized training colleges have borne the brunt of this shift, suffering a 21.0 percent decline from 791,431 in 1990 to 624,875 in 2009 (Ministry of Education 2011). By contrast, colleges of technology have been holding up fairly well, with an increase of 12.3 percent during the same period, but even so they enrolled only 59,386 students in 2009 (Ministry of Education 2011). The Japanese vocational training system also looks weak in international comparison. For 2009, OECD (2012) statistics show 279,434 graduates from vocational and technical programmes at the upper secondary level,[3] less than two-thirds the number for Germany (441,522), a country with about two-thirds the population of Japan. The number has seen a precipitous decline since the beginning of the time-series in 1998, when Japan reported 1,580,988 graduates (OECD 2012).

As in most other East Asian nations, entrance examinations are an integral part of the

---

[1] The gross enrolment rate is the number of students in certain grades over the number of youths in the applicable age bracket. As a result, enrolment rates larger than 100 percent are possible.

[2] In the sense of publicly accessible.

[3] Data for post-secondary non-tertiary vocational and technical programmes for Japan are unavailable.

education system. Most colleges have such exams, and since leading firms tend to hire only from leading schools, competition for top schools is stiff. Entrance examinations further exist for the more prestigious primary and secondary schools as well as for Japan's leading kindergartens. These examinations, which have their origins in the Confucian examination system for civil servants, give the system a strong meritocratic element. In the Japanese case, family wealth seems to temper this element only moderately, as most Japanese families seem to have the means for private tutoring in cram schools *(juku).*

At the same time, the examination system has drawbacks. Pressure on students is tremendous, and it is not rare for school, cram school, and homework to keep students busy until the late evening hours. Rote rehearsal and recall are emphasized over application and creativity (Schoppa 1993). Since graduation is virtually assured once students have passed their college entrance examinations, tertiary education for many amounts to a four-year vacation. The result is that the average Japanese college student is likely to know less at the time of graduation than when s/he entered.

This latter point, in combination with the fairly weak public vocational training system and the highly firm-specific nature of skills in the Japanese workplace (Dore 2000), implies a need for extensive training of employees. This was traditionally accomplished through extensive on-the-job training (OJT) involving, among others, rotations through various departments of the firm for new recruits (Dore 1973). While recent years have seen the rise of off-the-job training (off-JT) programmes (Dalton and Benson 2002), OJT seems to remain the norm. According to a 2010 survey by the Ministry of Health, Labour, and Welfare asking firms to choose which they consider more important, OJT or off-JT, 70.5 percent emphasized OJT training for regular employees (non-regular: 76.9 percent) (Ministry of Health 2011a). Some OJT seems to occur informally, as only 57.8 percent of firms reported the implementation of deliberately-planned OJT for regular employees (non-regular: 27.7 percent). At the same time, 67.1 percent of firms reported implementing off-JT for regular employees (non-regular: 31.4 percent), and 41.7 percent of firms supported self-training programmes for regular employees (non-regular: 18.4 percent). While OJT proportions remained basically stable over the preceding three years, off-the-job training and self-improvement programmes showed a decline of 10 and 16.4 percentage points for regular employees (non-regular: 8.2 and 18.9 percentage points).

In general, employers and employees are willing to invest in these training schemes because the persistence of long-term or 'lifetime' employment, as explained earlier, gives both sides reasonable assurance that their investments will pay off. This is clearly visible in the willingness of employers to pay for off-JT and self-improvement programmes, which is considerably higher for long-term, regular employees than for shorter-term, non-regular employees, as the previous paragraph suggested. In addition, the quality and intensity of OJT offered to regular employees is higher than that of OJT for non-regular employees (Morishima and Shimanuki 2005; Jones 2007).

Inter-Company Relations

Inter-company relations in the post-war Japanese economy reached such levels of density that observers dubbed it a 'network economy' (Lincoln 1990; Kumon 1992). In reviewing the literature on social networks in the Japanese political economy, Witt (2006) summarized four general types: business groups (also known as horizontal *keiretsu*), vertical *keiretsu,* R&D consortia, and a government-association-industry nexus that includes cartels and, more commonly, intra-industry loops.

Business groups developed in two basic types: former *zaibatsu*, and bank-led groups. The *zaibatsu* type, comprising the Mitsubishi, Mitsui, and Sumitomo groups, has its origin in pre-war and wartime *zaibatsu,* family-controlled holding companies owning vast conglomerates of firms in unrelated industries. US occupation forces dissolved holding firms in 1947 (Hirschmeier and Yui 1981). However, *zaibatsu* member firms maintained informal ties reinforced by business and equity ties, and the banks in each group informally replaced the abolished holding companies as the centre of group coordination (Ito 1992; Nakamura 1995). Bank-led business groups — Fuyo, Ikkan, Sanwa, plus some smaller groups — coalesced around banks only after the war. Partially forced together by what was then the Ministry of International Trade and Industry (MITI) (Johnson 1982), they were less closely knit than the former *zaibatsu*.

Evidence on the current state of Japanese business groups is mixed and complicated by cross-group mergers and reconfigurations (McGuire and Dow 2009). In particular, bank mergers in 2000 and 2001 effectively reduced the number of business groups to four, bringing together the Sumitomo and Mitsui groups and the Mitsubishi and Sanwa groups (McGuire and Dow 2009). Within these changing contexts, lower bank-lending to group members, a decline of cross-shareholdings in most groups, and reduced exchanges of personnel seem to indicate a reduction of the significance of business groups (Witt 2006; McGuire and Dow 2009), with some authors going so far as to suggest that they effectively no longer exist (Lincoln and Shimotani 2010). However, other data suggest a stabilization or even revival of some features. For instance, Nakamura (2011) shows evidence suggesting a strengthening of cross-shareholdings from 2005 onwards.

Vertical *keiretsu* have assumed three general types: production *keiretsu,* which are supply chain networks; distribution *keiretsu,* which are distribution networks; and capital *keiretsu,* which build on capital flows from a parent company to a subsidiary (Gerlach 1992). Of these, production networks have received most attention, in particular in the context of the competitive strength of the Japanese automobile industry (e.g., Dyer 1996). Recent evidence on vertical *keiretsu* is relatively scarce. What evidence is available suggests a weakening of ties starting as early as the 1980s, but also some trend toward ownership integration of key suppliers in order to prevent them falling into the hands of competitors (Ahmadjian and Lincoln 2001; Lincoln and Gerlach 2004; McGuire and Dow 2009).

R&D consortia link large firms in the same or related industry for the duration of a research and development project — typically, 5–10 years. Often, these projects receive government funding, though the amounts involved are usually relatively small (Sakakibara 1997). More important seems to be the signalling effect on firms and banks, as government decisions to support a project are usually taken on the basis of thorough reviews of the project's success potential (Witt 2006). In the decades following World War II, R&D consortia were geared mostly toward helping firms catch up with Western competitors. In recent decades, their character has shifted toward promoting basic research (Witt 2006).

Japanese firms are further embedded in a nexus connecting them to industry associations and the state. Large firms especially tend to belong to one or several peak-level associations, such as Keidanren (Schaede 2000). In addition, virtually all Japanese industries are organized in government-approved industry associations, which in turn count on average 90 percent of firms in the respective industries as members (Schaede 2000). These associations permit government to remain informed about the goings-on in industry, but they also provide firms with a pipeline to state bureaucracy and a means of coordination and information-sharing within the industry (Schaede 2000; Witt 2006). In addition, they become the main forum for the formation of intra-industry loops, i.e. informal connections that firms in the same industries use to trade market and technological information with one another (Witt 2006). Recent research suggests that industry associations and the intra-industry loops around them persist when they successfully adjust to the forces of globalization and technological change (Nelson 2010).

Social Capital

Japanese society is a high-trust society (Sako 1992; Fukuyama 1995). Prior research suggests that levels of interpersonal trust – that among family and friends – in Japan are high, at least in comparison with Anglo-Saxon nations such as the United States (Yamagishi and Yamagishi 1994; Yamagishi, Cook, and Watabe 1998) or UK (Dore 1973; Sako 1992). It is not clear how Japanese interpersonal trust levels have developed in recent years. However, there has been strong growth in voluntary non-governmental organizations (Ogawa 2009). Such NGOs have been shown to foster interpersonal trust in other contexts (Anheier and Kendall 2002), and as far as this mechanism holds for Japan as well, trust levels may well have risen in recent years.

Institutionalized trust levels are also relatively high (Fukuyama 1995). The 2010 Corruption Perception Index score for Japan was 8.0, with Japan ranking 14th of 182 nations and beating a number of Western nations, including the UK (7.8) and United States (7.1) (Transparency International 2012). Among the societies considered in this handbook, only Singapore and Hong Kong score higher, suggesting that, in general, the rule of law applies. Similarly, Japan's 2009 governance indicators for voice and accountability, political stability, government effectiveness, regulatory quality, and rule of law fall between the 75th and 90th percentile among 213 economies in the world, while the control of corruption scores above the 90th percentile (World Bank 2012b). Viewing the average of all indicators, most Anglo-Saxon and northern European nations score higher, as do Hong Kong and Singapore within the region studied in this handbook. To the extent that these statistics are indicative of institutionalized trust, they indicate high levels relative to most of the rest of Asia, though somewhat lower levels relative to Anglo-Saxon and northern European nations. In direct comparison of Japan *vs.* the United States, research at the level of the individual affirms this picture (Yamagishi, Cook, and Watabe 1998).

Unlike most advanced industrialized countries, the main mechanism for maintaining institutionalized trust is not the legal system, but social pressure. In international comparison, the Japanese legal infrastructure is weakly developed. For instance, the number of lawyers registered in bar associations in Japan on 1 June 2011 was 30,488 (Japan Federation of Bar Associations 2011), while the respective 2010 numbers for Germany and the United States stood at 153,251 and 1,225,452 (American Bar Association 2011; Council of Bars and Law Societies of Europe 2011). Lawsuits are thus relatively rare. Instead, the networked nature of Japanese society facilitates the flow of information about breaches of trust, which in turn can trigger sanctions such as ostracism or the withholding of contracts or information (Hagen and Choe 1998; Witt 2006).

Complementarities

The Japanese business system is rich in institutional complementarities. This has important implications for comparative advantages of the Japanese economy, but also for its evolutionary dynamics, as discussed in the following section.

The main complementarities among the elements laid out earlier can be summarized as follows:

1. Bank-led finance and the long-term availability of financial capital are linked. Having bank-led finance does not in itself guarantee patient capital, but given sufficient institutional and monetary support from authorities, banks are a suitable tool for long-term capital provision. The same cannot be said about markets, at least not in the institutional structuring of capital markets today. While individual investors may be long-term oriented, markets as we know them tend to focus on the short-term.
2. Bank-led finance is linked to relatively weak corporate governance, in the sense of

weak shareholder control over the company's fate. *De facto*, Japanese firms remain mostly under the control of insiders, and thus ultimately of employees. They can afford to do so because their ability to obtain funding from banks, instead of capital markets, deprives shareholders of an important source of leverage.

3. Weak corporate governance is linked to cross-shareholdings and take-over defences such as poison pills. They further help insulate management from shareholder pressure in the form of the threat of selling to the highest bidder in the context of a hostile take-over.
4. The combination of weak corporate governance and long-term finance enables long-term employment. Jointly, they offer at least partial protection against shareholder demands to improve profitability through layoffs.
5. Long-term employment is a prerequisite for the seniority system. Since tenure is an important determinant of rank and pay, the current hierarchical structure of the firm would be impossible to maintain if employees frequently changed firms.
6. Long-term employment is linked to collective decision-making in the firm. Long-term employment facilitates a sense that the firm is a community, and thus increases the probability that employees take an active interest in its concerns (Dore 1973; Inagami and Whittaker 2005). This, in turn, fosters a willingness to contribute to decision-making and to find a consensus.
7. Long-term employment is connected to OJT. Japanese-style OJT, such as training and job rotations especially during the first years of employment, is expensive. Firms can only afford to engage in it if they can be reasonably certain that employees will stay with the firm long enough for there to be a positive return on the training investment.
8. Insider corporate governance is connected to peaceful labour relations. In effect, Japanese firms tend to be run by employees for employees. This means that in the inherent conflict over the distribution of value created in the firm, employees tend to have the upper hand over shareholders.
9. Consensual decision-making contributes to peaceful labour relations. Because of the flow of information in decision-making processes, transparency inside the firm is fairly high. It is therefore easy for employees and their unions to verify that the information they receive from management – e.g. in the context of pay negotiations – is accurate.
10. Consensual decision-making is further linked to social capital. The transparency already noted fosters institutionalized trust, that is, a willingness to believe that the company will act appropriately and fairly. Among personnel involved in direct communications, it is further likely to help build interpersonal trust.
11. Institutionalized and interpersonal trust enable the high levels of social networking in Japanese society — people usually do not network with those they do not trust.
12. Conversely, the presence of these social networks is a prerequisite for the Japanese variant of institutionalized trust. Networks provide a conduit for reputational information, which makes them a useful tool for collective social punishment.

Evolutionary Dynamics

The evolutionary dynamics of the Japanese business system have attracted considerable attention in recent years. One can broadly distinguish two types of works in this vein: those exploring institutional stickiness, or inertia (e.g., Anchordoguy 2005; Schoppa 2006; Witt 2006), and those examining institutional changes (e.g., Vogel 2006; Aoki, Jackson, and Miyajima 2007; Schaede 2008; Söderberg and Nelson 2010). Though this is not immediately obvious, the picture they represent is more complementary than contradictory. The former types of works tend to focus on the state and conditions of the business system as a whole.

There, aggregate statistics suggest that considerable pressure has produced only limited change, and these works seek to establish the causes of this phenomenon. The latter kinds of works tend to explore how institutions are changing within limited contexts, such as individual firms or sets of them. They usually draw on case studies to identify changes and the mechanisms permitting or driving them. In other words, the first collection of works tends to examine slow change in the mean of the distribution of institutional characteristics in the business system, while the second group tends to explore how the progressive tail moves forward.

Among the sources of inertia identified in the literature, four stand out. First, the existing system has enjoyed a great deal of legitimacy, and the will to effect major changes seems to be weak, not only among people in general, but also among top managers (Vogel 2006; Witt and Redding 2009; Witt and Redding 2010). Second, the high levels of complementarities in the business systems constrain the extent of possible changes (Witt 2006). For instance, while change in a given element may be desirable, it may be difficult to implement, as doing so may require attendant changes in other elements that decision-makers would, for whatever reasons, prefer to maintain.

Third, the coordinated and consensual nature of decision-making in the Japanese political economy is prone to deadlock (Witt 2006). Factors contributing to this problem are manifold (Witt 2006). For instance, Japan needs to devise new institutional configurations mostly on the basis of conjecture and deliberation, as the unitary nature of the Japanese political economy does not provide for prior experimentation using local institutional variations, as in China or in the United States. Given the inherent uncertainty in institutional reforms and the costs of getting things wrong, the process requires extensive deliberations. Compounding this issue is the high level of institutional complementarities in the business system, as every change to a single component of the system may have knock-on effects on others. This increases complexity and thus time-intensity in decision-making. Furthermore, the consensual nature of decision-making, not just in the firm, but also in the political economy more generally, gives vested interests the power to block changes they disapprove of, even if they are in the general interest of the nation.

A fourth major source of inertia is the low level of institutional deviance in the Japanese political economy (Anchordoguy 2005; Schoppa 2006; Witt 2006). Usually, lack of change in the formal institutional structure prompts individual actors to adjust locally by working around formal constraints. In Japan, such deviant behaviour happens at relatively low levels, which means that they cannot build up sufficient pressure on policy-makers to change the formal institutional structure. Ironically, the same social networks that enable institutionalized trust in Japan make institutional entrepreneurship difficult (Witt 2006).

While these factors contribute to slowing down institutional change processes in Japan, they do not make them impossible. In some cases, amendments to formal institutions, such as the legal changes in the area of corporate governance already discussed, enable a series of formal structural changes (though, as also mentioned, not necessarily change in actual practice) (Aoki, Jackson, and Miyajima 2007). Institutional entrepreneurship, especially by large firms with high levels of legitimacy and under pressure from foreign shareholders, may provide the impetus for legal changes, which in turn may enable further institutional entrepreneurship, and so forth (Vogel 2006).

It seems likely that these patterns of inertia and incremental change will continue into the future. At the same time, confluence of factors is building pressure for more fundamental institutional adjustments. These include the aftermath of the 2008 financial crisis; the consequences of the 2011 earthquake, tsunami, and nuclear meltdown; the continued inability of Japan to reap the full benefits of the IT revolution (cf. Vogel forthcoming); strong competition from Korea in core areas of Japanese industrial strength; a shrinking and rapidly ageing population; and the rise of an increasingly assertive China.

Conclusion

In summary, the financial system continues to be bank-led, though markets have attained greater importance over the years. Corporate governance of listed firms has undergone structural changes toward the US model, but actual practice suggests continued insider control over the firm. Internal dynamics blend a hierarchical structure with a consensual decision-making process for non-routine issues, and a number of mechanisms enable lower echelons to contribute to and shape this decision-making process. Recent reforms in employment relations seem to have fine-tuned rather than destroyed lifetime/long-term employment and the seniority principle. The much-discussed rise of non-regular workers in the Japanese economy is, on closer inspection, not a sign of large-scale decline in long-term employment, but seems to signify the emergence of a new, possibly complementary, system. Labour relations are exceedingly cordial, with unions seeming to have arrested their decline and reorganizing in response to changed realities. Public education continues to excel at the general level, but is weak in vocational training, with firms filling this gap through a combination of OJT and off-JT. Inter-company relations in Japan include business groups, supplier networks, R&D consortia, and intra-industry loops. Overall, most of these networks seem to have weakened in recent years. Social capital is high on both the interpersonal and institutionalized level, with the latter maintained more through reputational mechanism than through the legal system. Complementarities among elements of the Japanese business system are strong and numerous.

Interpreted in the context of the Hall and Soskice (2001) model, Japan clearly represents a coordinated market economy (CME). Developments over previous decades seem to have pushed Japan closer to the Anglo-Saxon liberal market economy (LME) model. At the same time, it seems that the resulting partial convergence in structures — e.g. in the context of corporate governance — was not accompanied by a concomitant degree of convergence where it really matters (Aoki 2007): in actual practice. Rather, Japan seems to have adapted these structures to its own liking and needs, thus providing a good example of selective adaptation and institutional hybridization (Pieterse 1994; Djelic 1998).

For the literature on comparative business systems, the present case thus suggests a need to pay more attention to practice than structure. The focus of most of the literature to date has been on formal structures. For instance, Streeck and Thelen (2005) explicitly bracket informal institutions, and the bulk of the edited volume by Aoki *et al.* (2007) explores changes in the formal structure of Japanese corporate governance. At some level, this emphasis on formal structure is justifiable, because economic actors in most of the advanced industrialized countries do play by the official rules of the game. However, once we move to Japan — or indeed, outside the Anglo-Saxon and northern European countries — this alignment of practice and structure starts to deteriorate. This suggests a need to acknowledge to a much greater extent that, in the words of Aoki (2007: 434)., "the law defines the formal rules, but [what] we should ultimately be concerned with are the ‘ways by which the game is actually played’".

References

Ahmadjian, C.L. and J.R. Lincoln (2001). '*Keiretsu*, Governance, and Learning: Case Studies in Change from the Japanese Automotive Industry'. *Organization Science* 12(6): 683-701.

Ahmadjian, C.L. and A. Okumura (2011). 'Corporate Governance in Japan'. In C.A. Mallin, Ed., *Handbook on International Corporate Governance: Country Analyses*: 247-268. Cheltenham, Edward Elgar.

Ahmadjian, C.L. and P. Robinson (2001). 'Safety in Numbers: Downsizing and the Deinstitutionalization of Permanent Employment in Japan'. *Administrative Science Quarterly* 46(2001): 622-654.

Akimoto, T. and Y. Sonoda (2009). 'Labor Welfare in Japan: Social Change and Enterprise Unionism'. *Journal of Workplace Behavioral Health* 24: 243-264.

Aman, H. and P. Nguyen (2012). 'The Size and Composition of Corporate Boards in Japan'. *Asian Business and Management* 11(4): 425-444.

American Bar Association (2011). 'National Lawyer Population by State'. Retrieved 7 June 2011, from http://www.americanbar.org/content/dam/aba/administrative/market_research/2011_national_lawyer_by_state.authcheckdam.pdf.

Amsden, A.H. (1989). *Asia's Next Giant: South Korea and Late Industrialization*. Oxford, Oxford University Press.

Anchordoguy, M. (2005). *Reprogramming Japan: The High Tech Crisis under Communitarian Capitalism*. Ithaca, Cornell University Press.

Anheier, H. and J. Kendall (2002). 'Interpersonal Trust and Voluntary Associations: Examining Three Approaches'. *British Journal of Sociology* 53(3): 343-362.

Aoki, M. (1988). *Information, Incentives, and Bargaining in the Japanese Economy*. Cambridge, Cambridge University Press.

Aoki, M. (2007). 'Conclusion: Whither Japan's Corporate Governance?'. In M. Aoki, G. Jackson and H. Miyajima, Eds., *Corporate Governance in Japan: Institutional Change and Organizational Diversity*: 427-448. Oxford, Oxford University Press.

Aoki, M., G. Jackson and H. Miyajima, Eds. (2007). *Corporate Governance in Japan: Institutional Change and Organizational Diversity*. Oxford, University Press.

BIS (Bank for International Settlements) (2010). *Long-Term Issues in International Banking*. Committee on the Global Financial System Working Paper 41. Basel, Bank for International Settlements.

Caballero, R.J., T. Hoshi and A.K. Kashyap (2008). 'Zombie Lending and Depressed Restructuring in Japan'. *American Economic Review* 98(5): 1943-1977.

Council of Bars and Law Societies of Europe (2011). 'Number of Lawyers in European Countries - 2009'. Retrieved 7 June 2011, from http://www.ccbe.eu/fileadmin/user_upload/NTCdocument/2010_Table_of_Lawyer1_1297251018.doc.

Dalton, N. and J. Benson (2002). 'Innovation and Change in Japanese Human Resource Management'. *Asia Pacific Journal of Human Resources* 40(3): 345-362.

Djelic, M-L. (1998). *Exporting the American Model: The Postwar Transformation of European Business*. Oxford, Oxford University Press.

Dore, R.P. (1973). *British Factory, Japanese Factory: The Origins of National Diversity in Industrial Relations*. Berkeley, University of California Press.

Dore, R.P. (2000). *Stock Market Capitalism: Welfare Capitalism - Japan and Germany Versus the Anglo-Saxons*. Oxford, Oxford University Press.

Dore, R.P. (2007). 'Insider Management and Board Reform: For Whose Benefit?'. In M. Aoki, G. Jackson and H. Miyajima, Eds., *Corporate Governance in Japan: Institutional Change and Organizational Diversity*: 370-398. Oxford, Oxford University Press.
Dyer, J.H. (1996). 'Does Governance Matter? *Keiretsu* Alliances and Asset Specificity as Sources of Japanese Competitive Advantage'. *Organization Science*: 649-666.
Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York, Free Press.
Gerlach, M.L. (1992). *Alliance Capitalism: The Social Organization of Japanese Business*. Berkeley, University of California Press.
Hagen, J.M. and S. Choe (1998). 'Trust in Japanese Interfirm Relations: Institutional Sanctions Matter'. *Academy of Management Review* 23(3): 589-600.
Hall, P.A. and D. Soskice (2001). 'An Introduction to Varieties of Capitalism'. In P.A. Hall and D. Soskice, Eds., *Varieties of Capitalism*: 1-68. Oxford, Oxford University Press.
Hirschmeier, J. and T. Yui (1981). *The Development of Japanese Business, 1600-1980*. London, Allen & Unwin.
Iida, T. and J. Morris (2008). 'Farewell to the Salaryman? The Changing Roles and Work of Middle Managers in Japan'. *International Journal of Human Resource Management* 19(6): 1072-1087.
Inagami, T. and D.H. Whittaker (2005). *The New Community Firm: Employment, Governance and Management Reform in Japan*. Cambridge, Cambridge University Press.
Ito, T. (1992). *The Japanese Economy*. Cambridge, MA, MIT Press.
Jacoby, S.M. (2005). *The Embedded Corporation: Corporate Governance and Employment Relations in Japan and the United States*, Princeton, Princeton University Press.
Japan Association of Corporate Directors (2012). '委員会設置会社リスト(上場企業) [List of Companies That Have Established Committees (Listed Enterprises)]'. Tokyo, Japan Association of Corporate Directors. Retrieved 14 August 2012, from http://www.jacd.jp/news/gov/120720_02report.pdf.
Japan Federation of Bar Associations (2011). '日弁連の会員 [Members of the Japanese Federation of Bar Associations]'. Retrieved 7 June 2011, from http://www.nichibenren.or.jp/ja/jfba_info/membership/index.html.
Japan Institute for Labour Policy and Training (2011). 'Industrial Relations'. Retrieved 3 June 2011, from http://www.jil.go.jp/english/estatis/eshuyo/201106/e0701.htm.
Japan Productivity Center (2010). '平成 22 年度新入社員（2,663 人）の「働くことの意識」調査結果 [Results of the 2010 Survey of New Recruits (2,663 Individuals) About "Thinking About Work"]'. Tokyo, Japan Productivity Center.
Johnson, C. (1982). *MITI and the Japanese Miracle: The Growth of Industrial Policy 1925-1975*. Stanford, Stanford University Press.
Jones, R.S. (2007). 'Income Inequality, Poverty and Social Spending in Japan'. *OECD Economics Department Working Papers*. Paris, OECD.
Keizer, A.B. (2011). 'Flexibility in Japanese Internal Labour Markets: The Introduction of Performance-Related Pay'. *Asia Pacific Journal of Human Resources* 28(3): 573-594.
Kumon, S. (1992). 'Japan as a Network Society'. In S. Kumon and H. Rosovsky, Eds., *The Political Economy of Japan, Volume 3: Cultural and Social Dynamics*: 109-141. Stanford, Stanford University Press.
Lincoln, J.R. (1990). 'Japanese Organization and Organization Theory'. *Research in Organizational Behavior* 12: 255-294.
Lincoln, J.R. and M.L. Gerlach (2004). *Japan's Network Economy: Structure, Persistence, and Change*. Cambridge, Cambridge University Press.

Lincoln, J.R. and M. Shimotani (2010). 'Business Networks in Postwar Japan: Whither the *Keiretsu?*'. In A.M. Colpan, T. Hikino and J.R. Lincoln, Eds., *The Oxford Handbook of Business Groups*: 127-156. Oxford, Oxford University Press.

McCann, L., J. Hassard and J. Morris (2010). 'Restructuring Managerial Labour in the USA, UK and Japan: Challenging the Salience of 'Varieties of Capitalism''. *British Journal of Industrial Relations* 48(2): 347-374.

McGuire, J. and S. Dow (2009). 'Japanese *Keiretsu*: Past, Present, Future'. *Asia Pacific Journal of Management* 26(2): 333-351.

Ministry of Education, Culture, Sports, Science and Technology (2011). 'Statistics'. Retrieved 4 June 2011, from http://www.mext.go.jp/english/statistics/index.htm.

Ministry of Health, Labour and Welfare, (2011a). '平成 22 年度「能力開発基本調査」結果の概要 (Summary of the Results of the 2010 Basic Survey on Development of Skills)'. Retrieved 3 June 2011, from http://www.mhlw.go.jp/stf/houdou/2r985200000135nu.html.

Ministry of Health, Labour and Welfare, (2011b). '賃金構造基本統計調査 (Basic Survey on Wage Structure)'. Tokyo, Ministry of Health, Labour, and Welfare.

Ministry of Internal Affairs and Communications, Statistics Bureau (2011). 'Employees by Type of Employment'. Retrieved 10 June 2011, from http://www.stat.go.jp/data/roudou/longtime/zuhyou/lt51.xls.

Morishima, M. and T. Shimanuki (2005). 'Managing Temporary Workers in Japan'. *Diversification of Employment and Human Resource and Personnel Management Issues*: 78-103.

Morris, J., J. Hassard and L. McCann (2008). 'The Resiliance of "Institutionalized Capitalism": Managing Managers under "Shareholder Capitalism" and "Managerial Capitalism"'. *Human Relations* 61(5): 687-710.

Nakamura, M. (2011). 'Adoption and Policy Implications of Japan's New Corporate Governance Practices after the Reform'. *Asia Pacific Journal of Human Resources* 28: 187-213.

Nakamura, T. (1995). *The Postwar Japanese Economy: Its Development and Structure, 1937-1994 (2nd Ed.)*. Tokyo, University of Tokyo Press.

National Center for Education Statistics (2009). *Highlights from Timms 2007: Mathematics and Science Achievement of US Fourth- and Eighth-Grade Students in an International Context*. Washington, DC, National Center for Education Statistics.

Nelson, P.A. (2010). 'Stability and the Status Quo: Changing Power Structures in the Optics Industry'. In M. Söderberg and P.A. Nelson, Eds., *Japan's Politics and Economy: Perspectives on Change:* 161-181. London, Routledge.

OECD (2010). *Pisa 2009 Results: What Students Know and Can Do — Student Performance in Reading, Mathematics and Science (Volume I)*. Paris, OECD.

OECD (2011). 'Integrated PMR Indicator 2008'. Retrieved 13 June 2011, from http://www.oecd.org/dataoecd/33/12/42136008.xls.

OECD (2012). 'OECD.Stat', Paris, OECD.

Ogawa, A. (2009). *The Failure of Civil Society? The Third Sector and the State in Contemporary Japan*. Albany, SUNY Press.

Okimoto, D.I. (1989). *Between MITI and the Market: Japanese Industrial Policy for High Technology*. Stanford, Stanford University Press.

Pekkanen, S.M. (2003). *Picking Winners? From Technology Catch-up to the Space Race in Japan*. Stanford, Stanford University Press.

Pieterse, J.N. (1994). 'Globalization as Hybridization'. *International Sociology* 9(2): 161-184.

Ramseyer, J.M. and F.M. Rosenbluth (1993). *Japan's Political Marketplace*. Cambridge, Harvard University Press.

Sakakibara, M. (1997). 'Evaluating Government-Sponsored R&D Cooperatives in Japan: Who Benefits and How?'. *Research Policy* 26: 447-473.
Sako, M. (1992). *Price, Quality and Trust: Inter-Firm Relations in Britain and Japan*. Cambridge, Cambridge University Press.
Sako, M. (2006). *Shifting Boundaries of the Firm: Japanese Company—Japanese Labor*. Oxford, Oxford University Press.
Samuels, R.J. (1987). *The Business of the Japanese State: Energy Markets in Comparative and Historical Perspective*. Ithaca, Cornell University Press.
Schaede, U. (2000). *Cooperative Capitalism: Self-Regulation, Trade Associations, and the Anti-Monopoly Law in Japan*. Oxford, Oxford University Press.
Schaede, U. (2008). *Choose and Focus: Japan's Business Strategies for the 21st Century*. Ithaca, Cornell University Press.
Schoppa, L.J. (1993). *Education Reform in Japan: A Case of Immobilist Politics*. London, Routledge.
Schoppa, L.J. (2006). *Race for the Exits: The Unravelling of Japan's System of Social Protection*. Ithaca, Cornell University Press.
Schwab, K., Ed. (2010). *The Global Competitiveness Report 2010-2011*. Geneva, World Economic Forum.
Shishido, Z. (2007). 'The Turnaround of 1997: Changes in Japanese Corporate Law and Governance'. In M. Aoki, G. Jackson and H. Miyajima, Eds., *Corporate Governance in Japan: Institutional Change and Organizational Diversity*: 310-329. Oxford, Oxford University Press.
Söderberg, M. and P.A. Nelson, Eds. (2010). *Japan's Politics and Economy: Perspectives on Change*. London, Routledge.
Streeck, W. and K. Thelen (2005). 'Introduction: Institutional Change in Advanced Political Economies'. In W. Streeck and K. Thelen, Eds., *Beyond Continuity: Institutional Change in Advanced Political Economies*: 1-39. Oxford, Oxford University Press.
TSE (Tokyo Stock Exchange) (2010). '2009 Shareholdership Survey'. Tokyo, Tokyo Stock Exchange.
Transparency International (2012). 'Corruption Perception Index 2011'. retrieved 21 July 2012 from http://www.transparency.org/policy_research/surveys_indices/cpi/2011/results.
Tsuru, S. (1993). *Japan's Capitalism: Creative Defeat and Beyond*. Cambridge, Cambridge Uinversity Press.
United Nations Development Programme (2011). 'Education Index'. Retrieved 20 July 2012 from http://hdrstats.undp.org/en/indicators/103706.html.
Vogel, S.K. (1996). *Freer Markets, More Rules: Regulatory Reform in Advanced Industrial Countries*. Ithaca, Cornell University Press.
Vogel, S.K. (2006). *Japan Remodeled: How Government and Industry Are Reforming Japanese Capitalism*. Ithaca, Cornell University Press.
Vogel, S.K. (forthcoming). 'Japan's Information Technology Challenge'. In D. Breznitz and J. Zysman, Eds., *Can Wealthy Nations Stay Rich?* Oxford, Oxford University Press.
Witt, M.A. (2006). *Changing Japanese Capitalism: Societal Coordination and Institutional Adjustment*. Cambridge, Cambridge University Press.
Witt, M.A. and G. Redding (2009). 'Culture, Meaning, and Institutions: Executive Rationale in Germany and Japan'. *Journal of International Business Studies* 40(5): 859-895.
Witt, M.A. and G. Redding (2010). *The Spirits of Capitalism: German, Japanese, and US Senior Executive Perceptions of Why Firms Exist*. INSEAD Working Papers. Fontainebleau and Singapore, INSEAD.
Woo-Cummings, M., Ed. (1999). *The Developmental State*. Ithaca, Cornell University Press.

World Bank (2012a). 'World Development Indicators', World Bank. Retrieved 20 July 2012, from http://data.worldbank.org/indicator/all.

World Bank (2012b). 'Worldwide Governance Indicators'. Washington, DC, World Bank. Retrieved 21 July 2012, from http://info.worldbank.org/governance/wgi/.

Yamagishi, T., K.S. Cook and M. Watabe (1998). 'Uncertainty, Trust, and Commitment Formation in the United States and Japan'. *American Journal of Sociology*: 165-194.

Yamagishi, T. and M. Yamagishi (1994). 'Trust and Commitment in the United States and Japan'. *Motivation and Emotion* 18(2): 129-166.

Yoshikawa, T. and J. McGuire (2008). 'Change and Continuity in Japanese Corporate Governance'. *Asia Pacific Journal of Management* 25: 5-24.

Europe Campus
Boulevard de Constance
77305 Fontainebleau Cedex, France
Tel: +33 (0)1 60 72 40 00
Fax: +33 (0)1 60 74 55 00/01

Asia Campus
1 Ayer Rajah Avenue, Singapore 138676
Tel: +65 67 99 53 88
Fax: +65 67 99 53 99

Abu Dhabi Campus
Muroor Road - Street No 4
P.O. Box 48049
Abu Dhabi, United Arab Emirates
Tel: +971 2 651 5200
Fax: +971 2 443 9461

www.insead.edu

INSEAD

The Business School
for the World®

Printed by INSEAD