

Lazonick, William H.

Research Report

Japanese corporate governance and strategy: Adapting to financial pressures for change

Public Policy Brief, No. 48

Provided in Cooperation with:

Levy Economics Institute of Bard College

Suggested Citation: Lazonick, William H. (1998) : Japanese corporate governance and strategy: Adapting to financial pressures for change, Public Policy Brief, No. 48, ISBN 0941276651, Levy Economics Institute of Bard College, Annandale-on-Hudson, NY

This Version is available at:

<https://hdl.handle.net/10419/54233>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Public Policy Brief

**Japanese Corporate
Governance and Strategy**

Adapting to Financial Pressures for Change

William Lazonick

The Jerome Levy Economics Institute of Bard College, founded in 1986, is an autonomous, independently endowed research organization. It is nonpartisan, open to the examination of diverse points of view, and dedicated to public service.

The Jerome Levy Economics Institute is publishing this proposal with the conviction that it represents a constructive and positive contribution to the discussions and debates on the relevant policy issues. Neither the Institute's Board of Governors nor its Advisory Board necessarily endorses the proposal in this issue.

The Levy Institute believes in the potential for the study of economics to improve the human condition. Through scholarship and economic forecasting it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

The present research agenda includes such issues as financial instability, poverty, employment, problems associated with the distribution of income and wealth, and international trade and competitiveness. In all its endeavors, the Levy Institute places heavy emphasis on the values of personal freedom and justice.

Editor: Lynndee Kemmet

The Public Policy Brief Series is a publication of The Jerome Levy Economics Institute of Bard College, Blithewood, Annandale-on-Hudson, NY 12504-5000. For information about the Levy Institute and to order Public Policy Briefs, call 914-758-7700 or 202-887-8464 (in Washington, D.C.), e-mail info@levy.org, or visit the Levy Institute web site at <http://www.levy.org>.

The Public Policy Brief Series is produced by the Bard Publications Office.

© Copyright 1998 by The Jerome Levy Economics Institute. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information-retrieval system, without permission in writing from the publisher.

ISSN 1063-5297

ISBN 0-941276-65-5

Contents

Preface	
<i>Dimitri B. Papadimitriou</i>	5
Japanese Corporate Governance and Strategy	
<i>William Lazonick</i>	7
About the Author	51

Preface

During the 1970s and 1980s Japanese corporations were considered models for business enterprises in other nations. But today, as the Japanese economy languishes in recession, many corporate executives, economists, and policymakers are looking to the American corporate model as the one that will bring success. In this brief, William Lazonick, of INSEAD and the Center for Industrial Competitiveness at the University of Massachusetts Lowell, challenges this view, arguing that American corporations, having followed a strategy of downsizing, may appear strong, but their policy of extracting short-term financial returns for the benefit of stockholders and executives will be detrimental in the long run.

In Lazonick's view, the Japanese focus on allocating resources in ways that strengthen the corporation and boost the productivity of labor provides benefits to the society at large and makes possible a commitment to lifetime employment for the labor force. This focus makes corporate enterprises fundamentally stronger than American corporations and in a better position to generate sustainable prosperity—the spreading of the benefits of economic growth to more and more people over a prolonged period of time. Japanese corporate managers have been protected from shareholder pressure to extract immediate financial gains and have been allowed to retain control over the allocation of resources and returns of their companies by the institution of cross-shareholding and by the existence from the 1950s to the 1980s of a highly integrated banking system structured to provide financial support for industrial development.

How long this system of corporate governance will remain in tact, however, is now open to question. According to Lazonick, the financial

crisis and the prolonged recession of the 1990s were due not to weakness in the productive capacity of the Japanese economy, but to a transformation of the role of the financial sector and to its participation in speculative activities (which arose as a result of the success of the industrial development). The government is now in the process of altering the financial sector in order to create new business opportunities and new sources of profits for banks, securities companies, and insurers. As yet, financial reorganization does not entail dismantling the cross-shareholding system or deregulating domestic interest rates and the government appears committed to financial reforms that do not threaten the retain-and-allocate strategy of the existing corporate governance system. However, some changes in Japanese corporate governance are inevitable in response to the realities of competitive challenges and financial pressures.

Economists and policymakers generally agree that it is important for the world economy that Japan pull its economy out of recession. Lazonick's work suggests that the Japanese industrial economy remains strong and points to the possibility that the Japanese corporate model may still be the best one for corporations in other nations, including the United States, to follow. I welcome your comments on this research.

Dimitri B. Papadimitriou, *President*
December 1998

Japanese Corporate Governance and Strategy

Japan's financial morass and recessionary conditions in the 1990s stand in contrast to its high growth from the mid 1950s to the early 1970s and its booming prosperity from the late 1970s through the 1980s. The growth rate of the Japanese economy has sputtered throughout the 1990s and was even negative in 1997 (Yokoyama 1997). During the first quarter of 1998 Japan's gross domestic product declined at an annual rate of 5.3 percent (Abrahams and Tett 1998). Japan's unemployment rate of just over 4 percent in April 1998 is enviable by world standards, but the unemployment rates since 1996 are higher than they have been in Japan since the current mode of calculating the rates began in 1953 (Nikkei Weekly 1998). As many, if not most, economists see it, Japan has now entered the real world of international economics, and unless it quickly deregulates its capital and labor markets, it will not be able to get its economy back on track.

Meanwhile, in the United States, stock markets have been booming throughout the 1990s, and the economy has been growing rapidly since the mid 1990s. The U.S. unemployment rate of 4.3 percent in May 1998 was the lowest for the nation since early 1970 (U.S. Bureau of the Census 1976, 135; 1997, 397). The financial turmoil that the United States experienced in the 1980s, with the savings and loans crisis and major bank failures, now seems to be a thing of the past. Many Americans are also now hopeful that the increase in income inequality that began in the mid 1970s and the corporate downsizing that began in the early 1980s have also been relegated to history. In the late 1990s the perception of the U.S. economy, both at home and abroad, is that it is

back on a path of sustainable prosperity—stable growth that will benefit more and more Americans over a prolonged period of time.

In this paper I examine the perceived weakness of the Japanese economy in the 1990s from a comparative and historical perspective (Lazonick and O'Sullivan 1997a). The basic question is how do the resource-allocation strategies of corporations influence the sustainable performance of national economies (Lazonick and O'Sullivan forthcoming). The main propositions that frame this perspective as applied to the United States and Japan are:

- The economic development of advanced economies depends critically on the investment strategies of corporate enterprises to develop and utilize productive resources.
- Both U.S. and Japanese corporate enterprises are making, and will continue to make, investments in productive capabilities that can result in higher-quality, lower-cost products.
- The resource-allocation strategies of U.S. corporate enterprises favor the downsizing of corporate labor forces and the distribution of corporate revenues to financial interests.
- In contrast to the "downsize-and-distribute" strategy of U.S. corporations, Japanese corporate enterprises pursue a "retain-and-reallocate" strategy, retaining corporate revenues and reallocating the labor force.
- The choice of the downsize-and-distribute strategy or the retain-and-reallocate strategy reflects fundamental institutional differences between the two nations in the ways in which, at the macroeconomic level, money is saved and invested and, at the microeconomic level, corporate enterprises are governed.¹

In the advanced economies, major industrial corporations, by virtue of their prior success in developing and utilizing productive resources, control at any point in time vast amounts of productive resources and financial returns that remain to be allocated to alternative uses. Corporate strategy is about the forms that these allocation decisions take, corporate governance is about the institutions that shape the allocation decisions

(O'Sullivan forthcoming a), and the institutions are about the ways in which people are employed and the ways in which investments are financed. The institutions have deep historical roots in particular social, generally national, environments (Lazonick and O'Sullivan 1997b), but they also evolve in response to pressures on corporations to change the way they allocate their resources and returns. The institutions of employment and finance that prevail in the United States place much more pressure on corporations to downsize and distribute than the corresponding institutions in Japan. Even so, the downsize-and-distribute strategy did not become a widespread phenomenon in the United States until the 1980s and 1990s, when it replaced the corporate retain-and-reallocate strategy that had been dominant in previous decades.

The main sources of these pressures in the United States since the 1970s have been (1) corporate overextension, which made it difficult for corporate strategists to understand the investment requirements for the development and utilization of productive resources in different lines of business, (2) international competition, which transformed the organizational requirements of technological development in different industries, and (3) intergenerational dependence, which shifted the balance of power within the United States from those whose interests lay in employment incomes to those whose interests lay in retirement incomes (Lazonick and O'Sullivan forthcoming). In the 1990s the pressures from these three sources have been building in other advanced economies as well. Currently, for example, as O'Sullivan (1998) argues, corporate governance in Germany is at a crossroads in responding to these pressures.

Japan is not immune to these pressures. Like all the advanced economies, Japan faces the long-run problem of a growing financial burden in providing pension and health benefits to an aging population. But thus far, in contrast to the United States and western European countries, Japan has been pursuing a strategy of keeping people employed until later in their lives as a way of decreasing intergenerational dependence. Japan is also facing new competitive challenges, particularly from other East Asian economies, such as South Korea, Taiwan, and China, but it remains a power in international industrial competition; despite high wages and a relatively strong currency throughout most of the 1990s, it has continued to create competitive pressures on the rest of the

world. The leading Japanese corporations have grown larger and become more bureaucratic than in the past, but as a central feature of their retain-and-reallocate strategies, they have avoided some problems of corporate overextension by spinning off personnel and money into new business enterprises that are autonomous units of strategic control.

Japanese corporations continue to pursue a strategy of retain and reallocate on the basis of the strong persistence of the institutions of lifetime employment and cross-shareholding, which shaped Japanese corporate governance in the past. Nevertheless, in response to the realities of production and financial pressures of the 1990s, important changes are taking place in the ways people are employed and remunerated in Japanese corporations. Working within the institutional framework of lifetime employment and cross-shareholding, the challenge now facing Japanese industrial corporations is how to retain people as productive employees for more years of their lives and how to reallocate these labor resources to make them more productive.

The Japanese System of Corporate Governance

Lifetime employment and cross-shareholding form the institutional foundations for the operation of the Japanese system of corporate governance, with cross-shareholding making lifetime employment possible (although not necessarily viable). Lifetime employment means that the company takes responsibility for a certain class of employees from the time they are hired to the time they retire. By ensuring that the returns of the enterprise can be devoted to reinvestment in the productive capabilities of these employees and the capital equipment that they can use, cross-shareholding provides a foundation of financial commitment for the pursuit of the enterprise's employment objectives.

From the perspective of the Anglo-American principal-agent model of the firm, which posits that corporations should be governed in the interests of stockholders without regard to the interests of employees, the institutions of cross-shareholding and lifetime employment make the Japanese system appear to be what one scholar has termed "anti-governance" (Scher 1995). Such a perspective ignores the implications of the

commitment to deliver lifetime employment as the fundamental objective of the Japanese enterprise.² This commitment accentuates the need for active corporate governance in the allocation of resources and returns. The corporation must develop and utilize its productive resources, including its human resources, in ways that enable it to generate the sustained returns that can keep its labor force employed at acceptable standards of living. Within the rigidity imposed by the commitment to lifetime employment, considerable flexibility in corporate governance in the allocation of resources and returns is required (Dore 1986).

Financial Foundation of Corporate Governance

The Japanese system of corporate governance is intensely hierarchical, with ultimate strategic decision making the prerogative of an executive board of top managers, of whom the president is the most powerful figure. Many of these top managers also sit on the company's board of directors. Among the largest Japanese companies, about one-tenth of the directors are employed by other corporations that are major shareholders of the company and with which the company has extensive business relations. Another one-fifth of the directors are full-time managers with the company who have pursued most of their careers with other companies or government agencies but have been permanently transferred (Gerlach 1992, 132-137, 299).³ Typically, banks, business enterprises, and government agencies have each supplied about one-third of these part-time and full-time "dispatched directors," with banks generally having no more than one such director with any one industrial or commercial enterprise at a time. The rest of the directors, including the company auditors, are lifetime company employees or former employees.

Board of directors meetings are in effect executive management meetings, and any independent supervisory function that the board of directors as such might serve is merely ceremonial. Even more ceremonial are stockholders' meetings, which are held once a year. This is so despite the fact that, legally, the top managers and board of directors of a company are responsible to stockholders, who, according to the Japanese Commercial Code, have the right to elect directors, approve the annual balance sheet, decide dividends, and approve top management decisions such as gifts of stocks to companies for business purposes.

The essence of cross-shareholding, which accounts for about two of every three shares, is the willingness of participant companies to be "stable shareholders." Except under conditions of financial duress, a Japanese company does not sell the stock of another company it holds as a stable investor; when it must sell the stock, the buyer is another stable shareholder, and the company that sells is expected to repurchase the stock when it regains its financial strength. Stable shareholders do not typically come to stockholders' meetings, but routinely give their proxy votes to the top managers of the companies. Besides being willing to forgo capital gains and control rights, stable shareholders have also, over time, been increasingly willing to accept low levels of dividend yields, given the market value of the stock that they hold. These actions by stable shareholders make Japanese cross-shareholding in effect a system whereby the Japanese business community protects the power of corporate managers to control the allocation of the resources and returns of their companies.

Those stockholders who would like to exercise their voice find that they are given little chance to do so. It has long been the practice for most Japanese companies to schedule their annual stockholders' meetings concurrently. For example, on June 27, 1996, 94 percent of 1,864 listed companies held their meeting on the same day and most at the same time. Their meetings lasted an average of 26 minutes (Morishita 1997a).

As for individual and institutional investors who are not stable shareholders, the only way in which they can generate financial returns is through stock price appreciation. The Nikkei 225 stock price index (which reflects the prices of 225 stocks listed on the First Section of the Tokyo Stock Exchange) appreciated gradually during the 1950s, stagnated during the 1960s, and then, save for declines in 1974 and 1975 in the aftermath of the oil crisis, rose at a relatively rapid pace until 1982. After a small decline in 1983 to about 7,000, the Nikkei exploded over the next six years to a peak of 38,915 at the end of 1989. During the 1970s and 1980s, therefore, even as the dividend yields on stock fell from around 3 percent to well under 1 percent, these nonstable stockholders were kept happy by the run-up in the market prices of corporate equities. However, that increase could not be sustained; the Nikkei fell as low as 14,309 in September 1992 and fluctuated between 14,600 and 16,700 during the first half of 1998.

Stable shareholders throughout the 1970s and 1980s, but particularly in the "bubble" period of the late 1980s, declined to cash in on the rise of other companies' stocks. However, Japanese companies sold large quantities of their own stocks to the public at inflated market prices, either directly in the form of equities or indirectly in the form of convertible bonds. At the same time, the volume of conversions of bonds to stocks (some but not all of which ended up in the hands of nonstable shareholders) was high. In addition, during the 1980s companies issued large volumes of warrant bonds—bonds with rights to buy stocks attached—that were mainly floated abroad. In the late 1980s large amounts of warrants were exercised, accounting for 16 percent of the new shares issued by listed Japanese corporations between 1987 and 1989.

Given these sales of equities, much of which ended up in the hands of nonstable shareholders, how then did Japanese corporations maintain levels of cross-shareholding at about 65 percent during the 1980s? They distributed massive amounts of stock to stable shareholders as rights issues, private placements, "offerings to selected persons" for business purposes, and stock dividends (Japan Securities Research Institute 1996, 40). Thus, while the public was buying up shares of Japanese companies at price-earnings ratios that averaged about 58 in 1987 and 1988 and 71 in 1989, Japanese companies were ensuring that stable shareholders, who sought neither capital gains nor high dividend yields, would continue to hold a marked majority of the companies' outstanding stock.

From the 1950s to the 1970s the growth of industrial companies was highly dependent on their leveraging retained earnings with bank finance. Retained earnings were hardly sufficient to fund the investments in technology and organization required in this era of rapid growth. To supplement retained earnings, companies were able to turn to a highly regulated banking system that, since the Meiji era, had been structured to provide financial support for industrial development (Lazonick and O'Sullivan 1997b). This financial structure became known as the "main bank system" (Aoki and Patrick 1994). A company's "main bank" is the financial institution that takes the lead in providing it with loan finance, even though much, if not most, of the loans are made to the company by other financial institutions. The main bank takes responsibility for monitoring the performance of the company and for leading the rescue should it fall into financial distress, thereby

permitting other banks to make loans to the company without having to take on these functions themselves. The result is that, based on the reputation of the main bank and its close relationship with a particular company, a *de facto* loan syndicate finances the company.

Under the main bank system Japanese industrial corporations were able to engage in developmental investment strategies with debt-equity ratios far in excess of those that existed in the advanced economies of the West and with debt financing that was almost entirely in the form of unsecuritized bank loans as opposed to securitized bonds. In 1960 bank loans accounted for 65 percent of the financing of large Japanese enterprises, bonds less than 7 percent, paid-in capital 14 percent, and reserves 14 percent (Teranishi 1994). For the period 1962 to 1979 bank loans as a percent of all sources of funds to the nonfinancial corporate sector averaged 45 percent in Japan, 19 percent in the United States, 24 percent in Germany, and 21 percent in Britain. During the second half of the 1970s Japanese bank finance declined to 42 percent, down from 50 percent during the first half of the decade, a trend away from bank finance that continued during the 1980s. Yet even during the 1980s, bank loans as a percent of all nonfinancial corporate funds were 34 percent in Japan, 15 percent in the United States, 19 percent in Germany, and 21 percent in Britain (Aoki, Patrick, and Sheard 1994).

Besides the Industrial Bank of Japan (the most important long-term credit bank) the most significant main banks are the city banks that are part of the Big Six enterprise groups (*igyo shudan*). These enterprise groups are also called "horizontal *keiretsu*," because they link together a number of powerful companies across an array of industries. The city banks of these groups are the recently merged Bank of Tokyo-Mitsubishi Bank, Sakura Bank (another merger of the 1990s that includes the former Mitsui Bank), Sumitomo Bank, Fuji Bank, Dai-Ichi Kangyo Bank, and Sanwa Bank.

In 1987 the nonfinancial enterprises that were part of the Big Six horizontal *keiretsu* included 163 parent (or core) companies, 4,960 subsidiaries (in which the group held more than 50 percent of the stock), and 6,875 affiliates (in which the group held between 10 percent and 50 percent of the stock). The core companies alone accounted for 13 percent of assets and 15 percent of sales in the Japanese economy; with all

of the subsidiaries and affiliates, these enterprises accounted for 27 percent of assets and 25 percent of sales (Maruyama 1992). Each of these enterprise groups has a president's council, consisting of the presidents of the parent companies in the group (ranging from 20 companies in the Sumitomo council to 47 companies in the Dai-Ichi Kangin council). The presidents discuss matters of common concern, but the councils have no legal means to force member enterprises to act as part of a collectivity (Gerlach 1992, 237-238).

In addition to the horizontal *keiretsu*, "vertical *keiretsu*" emerged during the 1950s and 1960s. Core companies of vertical *keiretsu* provide development finance, often substantial, to large numbers of subsidiaries that supply them with goods and services, either directly or through a chain of suppliers and distributors. The finance may be in the form of equity stakes in and loans to the subsidiaries. To make matters more complicated in the dense web of business relations that tie the fates of Japanese companies together, many of the core companies of the vertical *keiretsu* have relations with the horizontal *keiretsu* and both cross-shareholding and bank lending transcend *keiretsu* relations.

Much has been made by students of the main bank system of the role of the main banks in monitoring corporate management in an industrial economy in which companies are clearly not run for stockholders (Aoki, Patrick, and Sheard 1994). During the 1950s and 1960s, when the Japanese economy and the industrial companies that constituted its developmental core faced uncertain futures, main banks did have to know to whom they were making financial commitments. As the financial institution that was obliged to lead the effort to revitalize an ailing company, the main bank had to understand the long-run potential of a company if and when circumstances placed it in severe financial difficulty (Sheard 1994).

But by the 1970s and 1980s, when the Japanese economy and its core companies had overcome the inherent uncertainties of the developmental process, the monitoring role of the main banks became virtually routine. Indeed, so as not to be overly dependent on one main bank, strong industrial companies sought bank loans from a greater range of sources than they had before or used retained earnings or funds raised on the securities market to pay off large amounts of their bank debt. Awash with

cash and having lost their best customers, the banks turned to making loans to real estate developers and stock speculators, among others. When the "bubble economy" burst in 1990, the collapse of land and stock markets left the banking system with a massive bad loan problem (Watanabe 1996).

Even when, in earlier decades, the Japanese banks had more power over how the industrial corporations to which they lent allocated their resources and returns, they were actors in a highly regulated financial system in which, given the uncertainties involved, they were willing to take relatively low returns on their lending activities to support the success of the industrial economy. One reason that banks were willing to participate in such a system is that they expected the government would stand behind them should the loans go bad. As central participants in the cross-shareholding movement, the banks themselves were run not for the sake of their stockholders but for the sake of developing the economy. Developing the economy meant delivering on the promise of lifetime employment, not only to the banks' employees but to the employees of the industrial enterprises that the banks helped to finance.

Strategic Decision Making within the Management Structure: Labor Relations

Japanese corporations have been, and continue to be, governed by their top managers as part of a hierarchical structure of organizational control. Within the management structure key allocation decisions are generally made by a process of consensus decision making that includes the formal *ringi seido*, circulation of a memorandum to be signed by all concerned, and the informal *nemawashi*, a process of seeking out differences of opinion and generating discussion before an important decision is made (Abegglen and Stalk 1985, 208; Ballon 1996, 54-55). Top managers ultimately make the allocation decisions, but they are integrated into a process that makes them aware of the capabilities and expectations of those responsible for implementation (Nonaka and Takeuchi 1995).

This process extends down the hierarchy to the enterprise unions through joint consultation committees (JCCs) that involve labor and management (Nakamura 1997; Shimokawa 1994, ch. 3). Most top managers, having come up through the company and having been union members

early in their career, have participated in JCCs on the labor side. For example, a 1978 survey by Nikkeiren (Japan Federation of Employers' Associations) found that two out of three of the major companies had executives—accounting for almost one in six executives—who had at one time served the company as union officials (Maruyama 1992, 196). Union officials, who are company employees, hold regularly scheduled conferences with management at different levels of the enterprise to resolve issues concerning remuneration, work conditions, work organization, interdepartmental and intercompany transfers, and production. Japanese enterprise unions have no explicit rights to engage in the executive or supervisory institutions of corporate governance, in contrast to work councils and codetermination in Germany (O'Sullivan 1998). In large companies JCCs perform an information-gathering function for both management and labor that is a preliminary to collective bargaining. In smaller companies, in which enterprise unions are absent, collective bargaining takes place in the JCCs (Kuwahara 1982, 51).

JCCs can make management aware of what labor wants, but they certainly do not give labor the power to influence the allocations of resources and returns against the wishes of top management (Nakamura 1997). Since the 1970s overt and prolonged labor-management strife has been virtually nonexistent in major Japanese companies, largely because of the commitment of management to lifetime employment and management's willingness, behind the wall of cross-shareholding, to share the gains of the enterprise with employees. In turn, workers' claims on enterprise earnings take into account financial requirements for reinvestment and the performance of the economy as a whole. Workers have been willing to restrain their demands for pay increases on the understanding that the enterprise will retain and invest what they do not take now in ways that will benefit them later. Guiding this wage bargaining at the enterprise level is a comparison of enterprise performance with the national benchmark for enterprise wage increases created by *shunto*, or the Spring Offensive—the annual public debate over the possibilities for augmenting the earnings of Japanese employees without jeopardizing the sustainable prosperity of the nation (Sako 1997; Dore 1987, 70–72).

A key issue other than wages for the enterprise unions is whether to cooperate with management in its plans for the reallocation of labor.

Keeping people employed over a lifetime means putting them in jobs where they can generate the productivity that can justify their pay. For employees in their twenties, thirties, and forties, the key to labor allocation is their integration into a process of organizational learning that enables them to become more productive as they receive the higher earnings that occur under the seniority pay system (*nenko*). When they reach their fifties, however, the key to labor allocation is putting employees in jobs where they can live off their experience but often at lower pay, and in many cases this means a transfer to subsidiary enterprises. In the 1990s such transfers have become much more central to the maintenance of lifetime employment as an institution of Japanese corporate governance.

Pressures to Change Corporate Governance and Strategy

The Banking Crisis

The banking crisis of the 1990s is an example of what happens when financial markets rather than productive organizations drive the allocation of resources in the economy.⁴ During the 1950s and 1960s the Japanese erected a highly regulated financial system that was extremely effective in supporting the development of the Japanese economy (Suzuki 1987; Aoki and Patrick 1994). Into the 1990s the Ministry of Finance and the Bank of Japan supported a range of highly specialized private-sector institutions in financing industrial development (Sakae 1996). With all financial vehicles moving in the same direction and at the same pace under this coordinated system, the "convoy fleet system" (*gososendan*) became the popular name for the Japanese financial infrastructure (Morishita 1996).

Since the start of the 1990s, financing to Japanese business enterprises has come from six main sources:

- 3 long-term credit banks, which make long-term loans to major industrial enterprises
- 7 trust banks and 27 life insurance companies, which make long-term loans to large companies, but increasingly since the 1980s have absorbed corporate government securities, both domestic and foreign

- 11 city banks (centered in Tokyo, Osaka, and Nagoya and reduced to 10 city banks with the merger of the Bank of Tokyo and the Mitsubishi Bank in 1995), which make ostensibly short-term loans, many of which have been continually rolled over to finance long-term investments, to major companies
- 64 regional banks spread out over Japan's 47 prefectures, which extend loans to larger regional businesses
- 66 second-tier regional banks, which cater to the financial needs of small and medium enterprises (SMEs)
- large numbers of credit unions and associations and agricultural institutions (*shinkin* banks), which extend loans to small enterprises and farmers

The Bank of Japan has supported this system of business finance by maintaining a structure of low and stable interest rates and by extending "overloans" to banks, especially the city banks, so that banks could increase their volume of business loans beyond that permitted by their deposit base (Suzuki 1987). The Ministry of Finance's Trust Fund Bureau, which controls the investment of Japan's postal savings deposits and public pension funds, has supported the system through the Fiscal Investment and Loan Program (*zaito*) by financing infrastructural investments, small and medium enterprises, and public works (including housing) and by absorbing the debentures of long-term credit banks (which have no depository base, other than their corporate customers) and other financial institutions (Nakamura and Yamada 1996, 131-136; Endo 1996). In addition, *zaito* draws on funds that the Ministry of Posts and Telecommunications controls in the postal insurance system.

Zaito must generate sufficient returns to cover the savings, pension, and insurance obligations to households for the funds that it uses. But these rates are kept low by Japan's regulated interest rate structure, and the Ministry of Finance and the Bank of Japan coordinate their policies and operations. *Zaito* functions as a second or shadow government spending budget, but one that does not rely on either tax revenues or public debt issues (Suzuki 1997a). During the first half of the 1980s investments and loans made with *zaito* funds were about 50 percent of the government's general account appropriations. This proportion increased sharply in the

Table 2 Bad Loans of Japanese Financial Institutions, September 30, 1997 (Percent)

Institution	Share of All Bad Loans	Bad Loans/ Assets	Bad Loans/ All Loans	Provisions/ Bad Loans ^a
City banks	34.41	2.22	3.45	69.02
Long-term credit banks	10.22	3.37	5.63	58.90
Trust banks	13.90	1.56	6.86	55.52
Regional banks	20.33	2.06	2.95	59.98
Total banks	78.86	2.12	3.81	63.00
Shinkin banks	12.27	3.03	4.82	49.45
Credit unions and associations	7.25	8.00	12.10	12.81
Agricultural cooperatives	1.62	0.45	1.96	141.39
Total	100.0	2.19	4.05	58.97

^a"Provisions/Bad Loans" is the amount of funds placed on reserve to absorb bad loans as a proportion of bad loans outstanding.

Source: Nikkei Weekly, *Japan Economic Almanac* 1998 (Nihon Keizai Shimbun), 11.

accumulation of bad loans.⁵ In March 1992 the Ministry of Finance revealed the extent of the bad loan problem, and the Bank of Japan cut the discount rate to an all-time low of 1.75 percent to help debtors make their payments. Nevertheless, the volume of bad loans continued to increase, and financial institutions began to write off large amounts (Nakamura and Yamada 1998, 137-143).

After credit unions and associations, hardest hit in terms of bad loans as a proportion of all loans have been the long-term credit banks and the trust banks (see Table 2). But, given the size of their loan portfolios, a disproportionate volume of bad loans has been concentrated in the city banks, which in September 1997 accounted for 34.41 percent of all bad loans in the private sector financial system. Even though the trust banks had a relatively low proportion of their total assets in loans, they also had the lowest level of loan loss reserve and hidden reserve coverage among the major bank lenders.

In September 1997 disclosed bad loans for Japanese banks were estimated at 28 trillion yen, down from 34 trillion yen in March 1996 but up from 13 trillion yen in March 1995 (Nikkei Weekly 1998, 10-11;

Takatsuki 1996, 15). Banks, insurance companies, and securities companies had made a significant proportion of these bad loans to *jusen*, loan companies that were incorporated in the 1970s for the purpose of making housing loans to individuals and that borrowed funds from the financial institutions. But in the 1980s many of the banks turned to making housing loans themselves, thus leading the *jusen* to turn instead to financing real estate development projects. When, in 1990, at the onset of the financial crisis, the Ministry of Finance introduced regulations that limited bank loans to real estate companies and nonbank lenders, the *jusen* turned to the cash-rich agricultural cooperatives.

As land prices plummeted in the early 1990s, the *jusen* loans went bad. In September 1995 seven *jusen* companies had 12.9 trillion yen in loans outstanding, of which about two-thirds were problem loans. About 48 percent of these borrowings came from banks (of which over one-third was from trust banks) and another 42 percent from agricultural cooperatives. At the end of 1995 the Ministry of Finance ordered the banks that had founded the *jusen* companies to write off all of their loans (3.5 trillion yen) to affiliated *jusen* and 45 percent of their loans (1.7 trillion yen) to nonaffiliated *jusen*. The ministry contributed 685 billion yen of public funds to wind down the *jusen* companies, thus enabling the agricultural cooperatives to write off only 530 billion yen. In July 1996 the government set up the Housing Loan Administration Corporation to take over about 6.8 trillion yen of the loans outstanding of the seven failed *jusen* (Morishita 1997b, 20–21).

A number of failures of smaller banks (second-tier regional banks) and cooperatives occurred through 1996. The first big bank failure occurred in November 1997 with the bankruptcy of the Hokkaido Takushoku Bank, the weakest of the ten city banks (Yokota 1997b). It was expected that it would require 1 trillion yen from the Deposit Insurance Corporation to cover the bank's bad loans. The failure of the Hokkaido Takushoku Bank occurred in spite of the Ministry of Finance's pledge in the early 1990s that none of Japan's major banks would collapse. In the aftermath of the Hokkaido Takushoku failure, there were proposals to use postal savings money—managed by *zaito*—to buy subordinated bonds issued by banks to supplement funds available to the Deposit Insurance

Corporation. Shortly thereafter, the fourth largest Japanese securities company, Yamaichi, also collapsed, raising fears of a recall of foreign loans (including money invested in U.S. Treasury bills), which, in the midst of financial failures in a number of other Asian economies, could have triggered an international liquidity crisis. In March 1998 the government implemented a 2.1 trillion yen plan to provide financial support to the nine remaining city banks, the three long-term credit banks, six trust banks, and three regional banks (Ishikawa 1998).

This crisis in the Japanese financial sector has certainly contributed to the prolonged recession of the Japanese economy in the 1990s. At the same time, however, Japan's industrial economy is strong. While the financial institutions wallow in bad loans, most major industrial enterprises are cash rich. In 1991 the ratio of their net financial assets to GDP was minus 10 percent, in 1996 plus 6 percent (Koll 1997, 28). Japan remains a creditor nation with a high savings rate, Japanese companies are investing in new technologies, and the Japanese economy is generating persistent trade surpluses. Japan's unemployment rate, 4.1 percent in April 1998, is high by the nation's postwar standards but low by world standards. Despite the financial turmoil, Japan's formidable productive system is not in danger of collapse.

Indeed, the Japanese financial crisis of the 1990s is the result not of an underlying weakness in the productive capacity of the Japanese economy, but of the transformation of the role of the nation's financial sector with the maturation in the 1970s and 1980s of perhaps the most highly successful national economic development effort in world history. The origin of the crisis lies in the participation of financial institutions in the unregulated financial speculation to which the phenomenal success of the Japanese industrial economy in international competition in the 1980s gave rise. During the 1980s the returns on the wealth that Japan's industrial development had created since the 1950s far surpassed the ongoing investment requirements of the Japanese economy, so that even within a highly regulated financial system this surplus wealth was permitted to find outlets in real estate and corporate stock speculation. Thus, in the wake of the very real and ongoing success of Japan's industrial economy in international competition, the "bubble economy" emerged.⁶

In the process, Japan's banks became less involved in financing the development of the industrial economy and turned to fueling speculative fever. The very success of the industrial economy made corporations much less reliant on the major banks to mobilize capital for their further development. In search of new business in the 1980s, Japanese banks engaged in lending activities that contributed to expanding the bubble until it burst. When, in 1990, the stock and land markets crashed, much of the value of the assets against which Japanese banks had lent money vanished into thin air.

During the 1950s and 1960s the role of the financial sector was to commit finance to industrial development through the provision of low-cost and secure loans to industrial enterprises whose innovative potential was yet to be revealed and whose prospects for financial returns were hence highly uncertain. The banks' access to Bank of Japan preferential "over-loan" credits and Trust Fund Bureau investments in bank debentures was conditional on their willingness to play this developmental role. By the 1970s the successful development of the industrial companies that had been central to the emergence of Japan as a major economic power meant that they had much less need for the support of the banking system. These industrial enterprises were now generating larger and more secure streams of retained earnings that they could use to finance their further growth, and for their additional funding requirements they could go directly to securities markets.

Moreover, with accumulated productive capacity in place, by the late 1970s companies did not have to invest as much capital as in the high-growth era to get a given amount of sales revenues. They could also use retained earnings and securities issues to reduce their bank debt. For Japanese nonfinancial corporations, internal sources of finance (depreciation and retained earnings) accounted for 58 percent of the total sources of funds in 1980. In 1985 it was 54 percent and in 1989 it was 51 percent. Of the external sources of finance, in 1980 equity and debt offerings accounted for only 12 percent and bank loans for 87 percent—proportions that were in line with the external sources during the 1960s and 1970s. In 1985, however, equity and debt offerings had risen to 17 percent of external finance and bank loans had fallen to 81 percent, with other sources of funds accounting for the other 2 percent. In 1989

proportion of securities offerings was 27 percent and bank loans only 10 percent, with commercial paper (unused before the late 1980s) accounting for 5 percent and other sources the remaining 4 percent (see Securities Research Institute 1996, 2-3).

From 1965 through 1977 the growth rate of bank borrowing by large manufacturing companies was persistently positive, averaging about 4 percent per year, whereas from 1983 to 1989 this growth rate was persistently negative, at minus 1 to minus 2 percent per year. In 1975 retained earnings accounted for 10 percent of the capitalization of these companies, paid-in capital 20 percent, corporate bonds 5 percent, and borrowings 65 percent. In 1990 retained earnings had risen to 28 percent, paid-in capital to 24 percent, and corporate bonds to 26 percent and borrowings had fallen to 22 percent (Watanabe 1996, 100). Depending on the terms under which they could raise funds on capital markets, even when these companies did not need to float securities to fund new productive investment, it could be worth their while to do so to pay off existing debt or even simply to build up cash reserves (Lake 1990). Hence, the same developmental process that in the 1970s and 1980s eliminated the uncertainty inherent in bank loans to industrial enterprises also enabled these industrial enterprises to reduce their reliance on bank loans. Especially during the bubble economy of the late 1980s, as price-earnings ratios of corporate stock increased dramatically, listed companies found that they could raise large sums by floating equities. In addition, the liberalization of the access of Japanese companies to international capital markets in the mid 1980s led many companies to engage in *shiteki*, or "financial engineering," which included significant issues of convertible (including warrant) bonds as well as commercial paper on foreign markets.

Companies listed on the Tokyo Stock Exchange raised about 2 trillion yen annually through the sale of convertible bonds in the 1970s and about 4 trillion yen annually in the first half of the 1980s. In the second half sales of convertible bonds shot up, reaching 11 trillion yen in 1987 and peaking at 16 trillion yen in 1989 (Watanabe 1996, 96). Warrant bonds were particularly attractive to foreign lenders because they could sell the detachable warrants, which could be converted to stock. About 80 to 90 percent of these warrants were sold back to Japanese investors. The value of the

Table 3 Net Change in Japanese Bank Loans, March 1985 to March 1990

	Change in Amount (in trillions of yen)			Share of Net Change (percent)		
	City and Regional Banks	Long-Term Credit and Trust Banks	All Banks	City and Regional Banks	Long-Term Credit and Trust Banks	All Banks
All corporations	65.4	31.2	96.6	69.5	93.4	75.8
Manufacturers	-1.5	-3.3	-4.7	-1.6	-9.9	-3.7
Real estate and construction	22.3	7.7	30.0	23.7	23.1	23.5
Nonbanks	15.4	21.0	36.4	16.4	62.9	28.6
Others	29.1	5.8	34.9	30.9	17.4	27.4
Individuals	27.3	1.3	28.5	29.0	3.9	22.4
Others	1.4	0.9	2.3	1.5	2.7	1.8
Total	94.1	33.4	127.4	100.0	100.0	100.0

Source: Minoru Nakamura and Koji Yamada, "Financial Institutions of Japan," in Shigenobu Hayakawa, ed., *Japanese Financial Markets* (Cambridge: Gresham, 1996), 139.

detachable warrant in the booming stock market meant that instead of a bond coupon of about 5 percent that would be needed to float regular convertible bonds, Japanese industrial enterprises were able to float warrant bonds with a coupon of 1 percent (Lake 1990; Smith 1993, 118-119). One Tokyo-based analyst of a western money-market firm recognized that in securing these cheap funds on international securities markets, Japanese industrial enterprises were borrowing for the future: "It was an important part of the country's rise to industrial-empire status. The borrowing window was too good to overlook, and corporate treasuries exploited Japan's rise to the hilt. What is most impressive is that all this borrowing took place even though they did not need the money."⁷

Because of the dramatic decline in companies' reliance on bank borrowing, during the late 1970s and even more so in the 1980s the city banks, long-term credit banks, and trust banks that made loans to the larger Japanese industrial enterprises found themselves not only losing their best customers, but also amassing huge volumes of loanable funds, in part because of large increases in deposits by the very same corporate customers (Takatsuki 1996, 59). Table 3 shows the resulting changes in the banks' loan portfolios. Loans to manufacturers declined, while loans to real estate and construction, nonbank, other corporations, and individuals shot up. Much of these funds took the form of residential mortgages,

loans backed by real estate as collateral, or loans to nonbank corporations such as the *jusen* companies, which used the funds to make real estate loans.

Land, of course, has always been a scarce and hence valuable asset in Japan, especially in the Tokyo-Nagoya-Osaka triangle where Japan's industrial development has been concentrated. Not only is usable land scarce, but what land there is does not easily change hands. In Tokyo the annual turnover of land is about 2 percent, so a demand increase presses against a highly inelastic supply (Ziemba 1991, 51). During the first half of the 1980s the value of land for commercial, industrial, and residential uses in the six largest cities rose by about 40 percent; in the second half of the 1980s it rose by over 200 percent (Shimizu 1992, 32; Ziemba 1991, 47-49).

Real estate loans went from an average of just over 1 trillion yen per year in the first half of the 1980s to about 7 trillion yen per year in the second half, peaking at almost 11 trillion yen in 1987 (Ziemba 1991, 55). The long-term credit banks, city banks, and trust banks—for which loans to large companies had been an important part of their business—became heavily involved in loans related to real estate. The city banks increased residential mortgages from about 8 percent of their loan portfolios in 1984 to 16 percent in 1990. Long-term credit banks increased loans to the real estate industry from less than 4 percent of their portfolios in 1984 to over 13 percent in 1990, and trust banks increased such loans from about 12 percent to 16 percent. In addition, loans to nonbank financial institutions, which in turn lent heavily to real estate, amounted to only 2 percent of the loan portfolios of long-term credit banks and 8 percent of the portfolios of trust companies in 1983 but 22 percent and 25 percent, respectively, in 1990.⁶ Adding to the upward pressure on land prices were increases in government loans for housing purposes.

Accompanying the rise in land prices was a rise in stock prices, apparently with stock prices leading land prices (Ziemba 1991). As price-earnings ratios of listed stocks soared, it was tempting to look to the increase in the value of land as a justification. Fortunes that were made on the stock market could be turned to the purchase of land. On the supply side, the willingness of banks to lend during the 1980s was very

much based on the notion that land and stock prices would remain high. Indeed, during the height of the bubble of the late 1980s, there was a tendency for banks to increase the proportion of loans backed by land that was valued at increasingly inflated prices. Furthermore, banks sold and bought back some of their cross-shareholdings to increase their capitalization and thereby augmented the volume of loans that they could make under the equity capital requirements for banks engaged in domestic and international lending (Nakamura and Yamada 1998, 136–137). The dramatic decline in stock prices and land prices since 1990 have wiped out a considerable proportion of the collateral on the loans that the banks and other financial institutions made in the 1980s.

Growing Intergenerational Dependence

For the financial system to aid the process of economic development, it needs to commit financial resources to enterprises that, through investments in organization and technology, can develop and utilize productive resources. At the same time, a national financial system has another function to perform. In addition to its role in the process of value creation, it also has a role in the process of value extraction. The process of economic development entails not only the allocation of financial resources to the development and utilization of productive capabilities, but also the allocation of financial returns to participants in the process. Key participants are employees, who receive their returns in the forms of a stream of earnings while they are employed and old-age benefits when they are in retirement.

Value extraction and value creation can reinforce each other. On the supply side, the expectation of a stream of earnings from participation in a successful enterprise can give employees the incentive to engage in those activities that create the earnings they can extract. On the demand side, the success in creating value of large numbers of enterprises in a national economy provides earnings to large numbers of employees who can absorb the products that these enterprises produce and hence generate the financial returns that enterprises can reallocate. These returns can be enhanced by developing products that, even with high earnings for national employees, can augment the enterprises' market shares in international competition.

But, even under a system of lifetime employment, employees do not remain productive forever, particularly when, as in the case of Japan, the very success of its process of economic development has been a significant factor in permitting people to live longer. To support people in retirement requires a sustainable balance between allocation of financial resources to support productive employment and allocation of returns to employees who have retired. Such a balance is easier to achieve in the presence of investments in productive capabilities that make employees more productive over longer spans of their lives.

Japan has the most rapidly aging population in the world. The proportion of the population aged 65 and older increased from 5 percent in 1950 to 15 percent in 1995, a period during which the proportion of the U.S. population aged 65 and over rose from 8 percent to just over 12 percent. In 1995 Japan's elderly population was still a smaller proportion of the total than in most western European nations, but, with the proportion of elderly expected to rise to 20 percent by 2010 and 25 percent by 2020, Japan is expected to have the most aged society in the world within the next generation (Seike 1997a, 143; 1997b, 152; Bosworth and Burtless 1997, 11).

Driving this rapid aging of Japanese society is a combination of longer life expectancies and declining birthrates. In 1955, on the eve of the Japanese high-growth era, the average life expectancy at birth was 64 years for men and 69 years for women. By 1987 these figures were 76 years for men and 81 years for women—the highest average life expectancies in the world, a distinction that Japan still maintains (Japan Statistics Bureau 1989, 55). Meanwhile, the birthrate has declined persistently, reaching a record low of 1.43 in 1995 (the 1995 birth rate for the United States was 2.05 and for Germany 1.28). The rate was so low that in 1995 fewer babies were born in Japan than in any year since records began to be kept, which was 1899 (Nikkei Weekly 1997, 142).

These demographic trends have generated a long-run problem of intergenerational dependence. In 1990, 17 percent of the Japanese population were in the 20 to 29 age group and 12 percent were in the 60 to 69 age group. The proportion of the younger group rose to 19 percent in the mid 1990s, but will decline steadily into the early decades of the next

century. By around 2005 the proportions will be about equal, at 15 or 16 percent, but then the proportion of the older group will become increasingly greater than that of the younger group (Seike 1997b, 153). By around 2025 the proportion of those receiving government pension payments will have increased to over 40 percent from the current 20 percent (Kuwata 1997, 37).

All Japanese are covered by national health insurance (with premiums based on income) and by government subsidies for retired, elderly, and low-income people (Ogura 1994, 146). The public pension scheme is a two-tiered system. Available to all Japanese residents, with 70 million participants in 1995, is a national pension plan, which provides the same benefits to and requires the same premiums from each insured person. The second tier is a government-operated employee pension plan, in which 33 million people participated in 1995, with premiums and payments depending on the income of the insured. In addition to the public pension scheme, in 1995 12 million people were covered by corporate pension funds (42 trillion yen in assets), which are generally managed by life insurers and trust banks and can substitute for the state-run employee pension plan. Another 11 million people contributed to tax-qualified pension funds (18 trillion yen in assets in 1995), which are managed in-house by companies and cannot substitute for the government's employee pension plan. A person can begin to receive pension benefits at age 60, but in order to keep people working for more years and to reduce the social security outlays of the government, efforts are being made to change to 65 the age at which a person can receive full benefits (Suzuki 1996; Ogura 1994, 146-148; Seike 1997b, 153).

In 1995 social security costs accounted for 13.3 percent of national income, an increase from 7.5 percent 20 years earlier. The government's Economic Planning Agency projects that the burden of social security costs will rise to around 31 percent in 2025 and 35 percent in 2050 (Nikkei Weekly 1998, 73). Economic slowdown and recession in the 1990s have not helped the young and strong support the old and weak. Nor has the fact that the trend toward higher levels of female labor force participation means that women are no longer as available or willing to care for the sick and elderly as they were in the past. Between 1980 and 1990, as the number of people aged 65 and over increased by 3.8 million, the proportion of the elderly living with children or relatives declined

from 72 percent to 63 percent (Takayama 1994, 106). Proposals are now being floated for government funding of long-term nursing care for the elderly (Suzuki 1997b).

The highly regulated structure of interest rates and the low yields on Japanese corporate equities make it difficult to support the nation's aging population on the basis of high returns on financial assets, as in the United States. At the same time, the high volume of savings per Japanese household helps to offset these low returns (Nikkei Weekly 1997, 141). During the 1990s the savings rate in Japan has remained high, at about 13 percent (compared with 4 or 5 percent in the United States), and the average amount of savings per household in 1996 was 13 million yen. Bank and postal savings deposits absorb 55 percent of these savings, with life insurers holding 20 percent, private pensions 5 percent, and money trusts 4 percent. Another 12 percent of savings are in securities (Nakamura and Yamada 1998, 149).

As a proportion of national income, the value of insurance policies in force in Japan is almost two and a half times the U.S. proportion. Japanese life insurance companies, which manage a large portion of private pension funds, have a legal obligation to pay benefits out of interest income and have invested primarily in Japanese government bonds. During the 1980s the life insurers, in search of higher yields, invested heavily in U.S. Treasury bills, but sustained huge losses in the latter half of the 1980s with the 60 percent appreciation of the yen relative to the dollar. In the latter half of the 1980s the insurance companies also shifted their assets from domestic loans and bonds to equities and then sustained huge losses in the early 1990s when the stock market crashed.

In the 1990s, with the cost of their obligations around 5 percent but with dividend yields on stock well under 1 percent, the insurers have stayed away from new stock purchases. They have shifted much of their assets into subordinated bank debt and loans to consumer credit companies, but have not been able to come close to the 5 percent rate of return they require. In early 1996 the life insurers reduced their guaranteed returns to pension funds from 4.5 percent to 2.5 percent, leading some major pension funds to turn from life insurance companies to trust banks and investment advisory companies to manage their portfolios. The bankruptcy in 1997 of Nissan Mutual Life Insurance Company, the

sixteenth largest life insurer, resulted in more withdrawals of funds from the insurance companies (Yamamoto 1997; Tett 1997).

Corporate pension plans are under heavy pressure as well. A study done for 71 major companies, including Nippon Steel, Hitachi, and Toyota, calculated a 35 percent underfunding of pension assets in 20 years with a return on investment of 3.5 percent (the current average) and with 4,200 enrollees paying pensions to 1,000 retirees at current rates (Nakamura and Yamada 1998, 145-162). The low returns on Japanese savings are creating pressure to deregulate interest rates and unravel cross-shareholding for the sake of higher returns.

As for the public pension system, the government has made proposals to cut pension benefits or raise premiums or both (Yashiro 1997). An alternative is to keep people working for more years of their lives and to make working people more productive. The Japanese pension problem would be further exacerbated if, as in the United States and Germany, corporations and their employees opt for early retirement plans. Given a surplus of workers in their fifties in many Japanese companies, the recessionary conditions of the 1990s have made it particularly tempting for top management to offer early retirement packages to lifetime employees rather than keep them employed until the mandatory retirement age (currently 60 in most companies). Some companies have implemented such programs, but companies that are too aggressive about encouraging early retirement risk losing hard-to-replace human resources (Kodama 1997). Still more common among major Japanese companies is a strategy of reallocating older employees to subsidiaries so that they can remain employed and productive.

Responses to the Pressures to Change

Reallocation of Labor Resources

The long-term financial problem facing the Japanese is the increase in intergenerational dependence. The question is whether in the late 1990s their solutions to this problem are consistent with solutions to the more immediate problem of restructuring the banking system. The current strategy for resolving the problem of intergenerational dependence

entails keeping people employed for longer periods of their lives so that, as much as possible, they can sustain their standards of living through productive employment.

If the Japanese were to follow the U.S. model for dealing with the problem of intergenerational dependence, they would disband the system of cross-shareholding and deregulate domestic interest rates to generate a cash flow out of corporations that would support higher returns to savings. Unlike the American institutional environment, which favors market control over the allocation of corporate resources and returns, the Japanese institutional environment favors organizational control. The U.S. model entails a corporate governance strategy of downsizing corporate labor forces and distributing corporate revenues, whereas the strategy in the Japanese model is to retain revenues and reallocate labor forces.

Japanese workers already remain in the labor force much longer than in any other advanced nation. Although high by international standards, the current labor force participation rate of Japanese men aged 60 to 64 is actually a sharp decrease from the rate of 84 percent that prevailed in the 1960s. It appears that, as in other countries, Japanese workers have responded to increases in pension benefits by retiring earlier. The rate declined to 71 percent in the late 1980s, primarily because of an increase in real pension benefits—in 1973 the government began indexing public pension benefits to inflation—but also because of a decline in the proportion in the population of self-employed, who have a higher labor force participation rate for older workers (Seike 1997b, 155–157; Seike and Shimada 1994). In part because of the recession of the 1990s and in part because of a government policy to reduce pension benefits, from 1988 to 1993 the labor force participation rate of men aged 60 to 64 years old reversed direction, increasing from 71 percent to 75 percent in 1993, compared with 55 percent in the United States and 35 percent in Germany (Seike 1997b, 155). This was so despite the fact that employed workers in Japan are eligible for pensions at 60.

In view of the rapid aging of the population, the Ministry of Welfare had proposed in 1984 reducing future pension benefits and raising the minimum age of eligibility from 60 to 65. Benefits were reduced but, in the absence of policies that would ensure that those between the ages of 60

and 65 would be able to find employment, political opposition prevented raising the age of eligibility. The Ministry of Labor, therefore, proposed to the tripartite Employment Policy Council that employers should be required to keep employees on their payrolls until the age of 65—a policy that employers vigorously opposed (Seike and Shimada 1994, 43–44).

In 1994 the Japanese government reformed the public pension system by moderating benefit levels and gradually extending the age at which people would be eligible to draw the full pension annuity from 60 to 65, effective in 2013. The reform also introduced a partial pension for people aged 60 to 64 that provides about half of the full pension for those who would like to retire before 65. For those eligible for pensions who still remain employed, the reform increased the amount of permitted earnings to ensure that total income (earnings plus pension benefit) would not decrease as earnings rise (Seike 1996, 4; Seike 1997b, 160–161). Public pension policy is therefore working to keep people employed longer.

In the late 1990s the age structure of corporate employment combined with the continuing recession place a strain on most companies that would seek to keep people employed even longer than is presently the case. The postwar baby boomers are now creating a bulge of middle-aged employees in Japanese companies. But the demographics are changing. The size of the population in their twenties, which peaked at 19.2 million in 1996, is predicted to drop to 12.5 million in 2015; the number of people in their sixties will increase by about 4 million (Seike 1996, 5). Between 2000 and 2010 the proportion of the labor force aged 15 to 29 is expected to decline from 23 percent to 18 percent, and the proportion over 55 is expected to increase from 23 percent to 27 percent (Sugeno and Suwa 1997, 56). Other things equal, employers will find it necessary to employ an aging labor force over the next two decades.

To remain competitive, Japanese companies that employ an aging labor force have to concern themselves with the productive contributions of older workers, relative to both their pay and the productive contributions that could be made by younger workers. High levels of education and training and the good health of the labor force combine with the prevalence of in-house organizational learning to enhance the productivity of employees over the course of their careers (Lazonick 1997).

Nevertheless, the intense demands of organizational learning, particularly in the presence of rapid technological change, place limits on the motivation and ability of older workers, with given education and experience, to attain higher levels of productivity. To enable companies to fulfill the commitment of keeping workers employed, the employment system must be flexible enough to permit the reallocation of labor resources and returns to labor in response to changes in the productive and competitive environments.

Japanese companies already had such a flexible employment system coming into the 1990s, and during the 1990s that flexibility has been increasing (Kameyama 1993; Takanashi 1998). One source of flexibility is the ability to reduce the number of new hires. The employment system is noted for the practice, especially among the major companies, of recruiting new employees directly from the educational system (high school in the case of blue-collar workers, university in the case of white-collar workers). In the past, when a company was growing rapidly and had not yet accumulated a large supply of experienced workers whom it had to support, it could hire large numbers of new graduates and then, after a decade or so, decide which of the cohort were best suited for employment tracks that provided more responsibility, authority, and pay.

What is new in the 1990s is that employers have to be more selective about new hires. There is a heightened competition for graduates, particularly university graduates, with specific capabilities. Companies used to follow the practice of hiring new employees at the same time every year to begin work on April 1. This practice (which, to be sure, some companies violated) was meant to reduce competition among companies for employees and ensure that new employees would enter a company and continue their careers in it as a cohort. Now it is becoming acceptable for companies to hire out of season. In a 1996 survey by Keidanren (Japanese Federation of Economic Organizations) of 501 Japanese companies, 13 percent said they hire at various times during the year and another 32 percent said they had such a hiring practice under consideration.

In addition, Japanese companies have traditionally filled all openings for lifetime employment positions with young people (until the late 1980s invariably men), who were newly graduated from high school or

university. These employees would then be trained internally to develop specialized skills. Now, however, many companies are hiring people who already have specialized skills, either through work experience or university training. The Keidanren survey found that 27 percent of respondents were recruiting people for specific jobs, another 12 percent were recruiting only for specific research jobs, and 22 percent had such recruiting practices under consideration. This kind of change in hiring practices means that an increasing proportion of young workers are engaging in job-hopping, although the ultimate objective of their labor mobility is still to find the particular company that can offer an attractive lifetime career (Nitta 1995).

A second source of flexibility is in rewards. Traditionally, lifetime employees were recruited to companies from high school or college and then saw their earnings increase primarily on the basis of seniority (with supplements for larger numbers of dependents). The main competition among employees was over the pace and type of promotion, although even then seniority bulked large as a criterion for promotion over the first two decades of company service. In the 1990s individual performance has begun to count much more in determining promotion and pay. A 1995 survey of 210 companies based in Tokyo found that 24 percent had introduced merit pay systems and another 28 percent planned to do so in the next three years.

Third, and perhaps most important, as a source of flexibility is the major companies' right, in consultation with their enterprise unions, to transfer employees entering their late forties or early fifties to subsidiary enterprises, where pay and responsibilities are generally substantially lower (Japanese Institute of Labor 1997, 30-31). Provided the subsidiaries can absorb these employees, the benefit for them is that they get experienced personnel without having to invest in training. In some enterprises the core company assigns employees to the subsidiaries, and in others the subsidiaries recruit employees from the core company. At the same time, that small proportion of managerial employees who are considered to be especially valuable to the company are given the opportunity, even after the official retirement age, to continue to work for the company in positions of executive responsibility and at relatively high pay.

One type of labor reallocation is *shukko*, the temporary placement of a core company employee with a subsidiary, with the core company often

supplementing the pay of the transferred worker. In theory the worker could be transferred back to the core company, but in practice the transfer often becomes permanent, with the subsidiary taking over responsibility for the employee. A second type of labor reallocation is *tenseki*, the permanent transfer of an employee to another company. Most *shukko* and *tenseki* transfers are from larger to smaller companies. Of all companies with 1,000 or more employees, about 87 percent engage in *shukko* and *tenseki*; the employees transferred are likely to be in their fifties; and many, if not most, employees who are loaned to a subsidiary find that their new employment becomes permanent, that is, their status changes from *shukko* to *tenseki* (Sato 1996, 5).

Traditionally, both *shukko* and *tenseki* transfers were from a core company to a related company within the enterprise group. But increasingly in the 1990s, as subsidiaries have found it difficult to absorb the number of experienced personnel that the core companies want to reallocate, the core companies have been finding unrelated enterprises to which they can make *tenseki* transfers. The core company maintains its commitment to lifetime employment, but the company at which an employee ends his career may change and the late-career pay of the transferred worker is likely to be lower and his working conditions less attractive (Sato 1996, 1997a, 1997b).

This reallocation of labor resources is part of the Japanese phenomenon of enterprise "spin-off." Spin-off is a product of a system of corporate governance that permits a successful company to allocate both money and people to the creation of new business enterprises, which then have considerable autonomy in the allocation of their own resources and returns. During the 1970s and 1980s spin-off was used increasingly as an organizational strategy (Odagiri 1994, 145-146). During the 1990s it has become a particularly effective means for a company to reallocate labor resources in ways that create opportunities for its employees and potential sources of new employment in the economy more generally.

Spin-off enterprises can be suppliers or distributors in a vertical *keiretsu* or manufacturers of a new line of products as part of a horizontal *keiretsu* or *kigyō shudan*. Spin-off cuts down on layers of management and decentralizes authority and responsibility far more effectively than the much-vaunted multidivisional enterprise, in which responsibility may be

decentralized but authority remains centralized (O'Sullivan 1996, ch. 3). In horizontal *keiretsu*, by creating new units of strategic decision making that are focused on particular products, spin-off facilitates the integration of enterprise strategy and organizational learning. Spin-off increases the number of managerial positions that entail authority and responsibility without increasing the layers of management and hence is of great importance to the functioning of *shukko*.

Although not all spin-off entails the development of new technology, it often functions as a Japanese form of venture capital (Nitta 1997). In 1997 the Committee on Economic Policy of Keidanren proposed spin-off ventures as one way of meeting the challenges to the Japanese employment system. In making this proposal, Keidanren is promoting, on a national scale, a business strategy that has long been practiced by the major industrial enterprises. The leader in this campaign is Toyota Motor Corporation, whose president, Shoichiro Toyoda, was the chairman of Keidanren. In 1996 Toyota set up a 50 billion yen venture-capital fund to provide financial assistance to new enterprises within its group. In 1997 it expanded the program to include ventures outside the Toyota group, generally taking equity stakes of 50 percent or more in each company. In so doing, Toyota became the largest single source of venture capital in Japan; the next largest fund has 20 billion yen. As of June 1997 the Toyota fund had financed 8 ventures and, with applications from about 300 companies, planned to invest in about 10 companies per year in industries such as semiconductors, information and communications, biotechnology, environmental technologies, and services for senior citizens ("Toyota Expands Venture Fund" 1997; Odagiri 1998).

Such efforts by Japanese corporations to allocate resources to new sources of domestic employment have become all the more important as, in the face of high costs in Japan exacerbated by the strength of the yen, they have sought to rationalize their global operations and have shifted many of their operations to lower cost locations in Asia (Yahata 1996, 5; Hatch and Yamamura 1996, 7). In 1989 about 43 percent of foreign direct investment by Japanese enterprises went to Asia; by 1994 it had risen to about 83 percent, with more than 60 percent going to China (Japan Statistics Bureau 1998, 213). Most of this foreign direct investment is in manufacturing.

The accelerated pace of foreign direct investment and the rise in import penetration have raised some fears of a "hollowing out" of employment in Japan,³ but within Japan the consensus seems to be that such fears are overdrawn. Much depends on the incentive and ability of companies to make investments in higher value-added products and processes that require complex organizational learning. A 1994 survey by the Export-Import Bank of Japan found that well over 90 percent of Japanese companies that had transferred production facilities overseas either had retained their key technologies or were developing more advanced technologies in Japan (Okina and Kohsaka 1996, 72). Many opportunities exist for developing these technologies in small technologically oriented companies that are networked horizontally and vertically with other innovative enterprises in their industries (Okina and Kohsaka 1996, 76).

Financial "Big Bang"

There is abundant evidence that Japan is well-positioned in terms of its accumulation of technological capabilities and investments in new technologies to regenerate its industrial production. In manufacturing it retains distinct competitive advantages in the integration of precision engineering, advanced materials, and electronics. Prime sectors for industrial innovation are in the provision of telecommunications services, transportation services, and energy—inputs to industry and key components of living standards that remain high in cost in comparison with other advanced economies (Okina and Kohsaka 1996, 65).

In order to take advantage of the new technological opportunities, a larger proportion of the Japanese labor force will need higher levels of education and specialized training. From 1990 to 1996 the number of males enrolled in Japanese universities increased by 12 percent and the number of females by 48 percent (Japan Statistics Bureau 1998, 702–703). The changing hiring patterns of Japanese companies along with the increasing use of incentive pay reflect the needs of these companies to attract and retain more highly specialized personnel than was the case in the past.

The retain-and-reallocate strategy emphasizes incomes from productive employment rather than incomes from financial assets to support the employees over the course of their lives. Given low and regulated

Table 4 Deregulation Timetable for Japan's Financial "Big Bang"

Fiscal 1997

- Securities houses allowed to handle consumer payments for their clients

Fiscal 1998

- Companies and individuals allowed to handle foreign exchange transactions without government authorization
- Banks allowed to sell their own investment trust over the counter
- Ban on financial holding companies lifted
- Firms allowed to become securities brokerages without government licenses
- Securities houses allowed to expand asset management services

Fiscal 1999

- Securities houses free to set their commissions on securities trading of any size
- Market-value method applied to marketable securities
- Barriers that restricted banks, trust banks, and securities houses from entering each other's markets removed
- Banks allowed to issue straight bonds

By the end of 2001

- Banks and securities houses allowed to enter insurance sector

Schedule not set

- Enactment of a new financial services law to govern banking, securities, and insurance sectors

Source: Masato Ishizawa, "Big Bang' Program Taking Clearer Shape," *Nikkei Weekly*, June 16, 1997.

interest rates and the low yields on corporate stock that prevail in Japan, any higher rates to Japanese pensions will have to come from investments on international capital markets. Such investments, even in safe foreign securities, are fraught with exchange rate risks, as the Japanese life insurers found out in the late 1980s. A prime motivation of the financial "big bang" policy announced by Prime Minister Hashimoto after his reelection in November 1996 was to put the Japanese financial sector in a better position to manage such risks as they pursue higher yields on the savings under their control ("City Banks Are Jumping into Pension-Fund Consulting Services" 1996).

Central to the attempt to deal with the financial crisis is a transformation in the ways in which financial enterprises—particularly the long-term credit banks, trust banks, securities companies, life insurance companies, and some of the weaker city and regional banks—allocate the financial resources under their control and generate financial returns. These financial enterprises have found themselves on the short

end of speculative investments, made within a highly segmented financial system, that cannot generate returns. The financial "big bang" entails a deregulation of the historic segmentation of financial services in Japan to create new business opportunities, both at home and abroad, for those banks, securities companies, and insurers that are best able and willing to rise to the challenge. Such a strategy requires financial enterprises that have a sound financial base at home and can develop the capabilities to operate simultaneously and quickly on international securities markets and money markets. These augmented capabilities could open up new sources of profits for these financial enterprises, thus enabling them to employ more people in Japan and to bring in higher returns on household savings.

But, despite the image of radical change that the reform's slogan is meant to impart, the "big bang" does not entail a deregulation of domestic interest rates nor a dismantling of cross-shareholding (see Table 4). From the government's perspective, the success of this strategy of financial reorganization will depend on the ability of financial enterprises to learn how to make profits in the international world of financial liquidity, while being denied the opportunity to extract higher financial returns from productive enterprises at home. Such a transformation, if successful, could enable now fragile financial enterprises to survive by tapping into high returns on financial assets abroad to augment the returns on savings at home. By this means the returns on domestic savings could be increased without undermining financial commitment to productive enterprises. In transforming their capabilities to provide financial services, Japanese financial enterprises already face formidable competition within Japan from foreign (particularly American) companies, the largest of which have been operating in Japan since at least the mid 1980s. Indeed, a number of Japanese financial enterprises have linked up with foreign companies to reposition themselves in the new market environment.⁹

Neither the deregulation of domestic interest rates nor the unraveling of cross-shareholding is part of the financial reform agenda. Indeed, despite its failure to control the bubble economy of the late 1980s and to contain the accumulation of bad loans in the 1990s, the power of the Ministry of Finance and the Bank of Japan to coordinate and regulate the Japanese financial system in favor of productive investment has increased during the 1990s. The need to ensure financial conditions that

can help transform nonperforming loans into performing loans has provided a rationale for maintaining the structure of low and regulated interest rates. As for financial leverage, the ministry's Trust Fund Bureau directly controls at least half of financial transactions in Japan. With the return on postal savings accounts still somewhat more favorable than the return on commercial bank accounts and with the banking system in fragile condition, an increasing proportion of Japanese household savings have been deposited with the post office.¹²

Some, however, see the current financial reforms in the organization of the banking sector as a prelude to a dismantling of cross-shareholding that will eventually give financial interests their higher returns.¹³ Others contend that, with the deregulation of the financial services sector, Japanese households will gain access to alternative forms of savings that will lead to withdrawals from the postal savings system (Strom 1997, D4). How far the "big bang" can proceed without creating powerful financial interests that have not only the incentive but also the ability to extract higher yields from the Japanese domestic economy remains to be seen. What can be said is that the current agenda for financial reform seeks to work within the corporate governance framework that emphasizes the retain-and-reallocate strategy. Such a strategy is inconsistent with the ideology of financial deregulation and shareholder "value creation" that has driven the downsize-and-distribute strategy of U.S. corporations. It is dangerous, therefore, to analyze the possible outcomes of the transformation of the Japanese financial sector from an American perspective on the allocation of resources and returns.

Notes

1. Corporate strategies are influenced by corporate governance institutions that reflect different degrees of "market control" and "organizational control." Market control encourages a corporate strategy of downsize and distribute; organizational control encourages retain and reallocate. For the distinction between these types of control and their application to industrial finance in comparative historical perspective, see Lazonick and O'Sullivan (1997b).
2. For western perspectives that look only at the role of financial interests in corporate governance, see Kester (1991), Gerlach (1992), Schaefer (1994), and Sheard (1998). For critiques of this perspective as applied to the United States, see Lazonick (1992) and O'Sullivan (forthcoming b). For a perspective on Japanese corporate governance that is broadly consistent with the arguments in this paper, see Abegglen and Stalk (1985). See also Koji (1998).

3. The term for government officials who are finishing their careers at business enterprises is *amakudari*, or "descent from heaven."
4. For a more general argument concerning the roles of organizations and markets in the allocation of resources in the process of successful economic development, see Lazonick (1991). For the key characteristics of the innovation process and their implications for the applicability of modern financial theory for understanding resource allocation for economic development, see O'Sullivan (forthcoming a).
5. Bad loans are defined as loans to bankrupt borrowers, loans for which any part of interest has not been paid in six months (except when loans have been restructured), and, from fiscal year 1995, loans for which the interest rate has been reduced below the official discount rate that prevailed at the time of the reduction.
6. For a purely financial perspective on the "bubble economy" by a staff person for *The Economist*, see Wood (1992).
7. Mark Farrington, senior analyst at MMS International, quoted in Lake (1990).
8. Another expanding market in the 1980s for Japanese city banks, long-term credit banks, and trust companies was overseas lending; the proportion of overseas loans in the portfolios of all Japanese banks rose from just over 3 percent in 1975 to 6 percent in 1980, 8 percent in 1985, and 11 percent in 1990.
9. In February 1998, for example, cash-rich GE Capital Services Corp. took a major stake in Toho Mutual Life Insurance Co., and Merrill Lynch hired 2,000 former employees of the bankrupt Yamaichi Securities as part of a plan to develop a retail brokerage network in Japan. See Sprague and Mutsuko (1998), and articles listed at <http://bob.nikkei.co.jp/enews/SPECIAL/bigbang/bigbang0.html>.
10. As of July 1998, however, in a move to strengthen government oversight of financial institutions, a new Financial Supervision Agency under the administrative control of the Prime Minister's Office will take over the role of the Ministry of Finance in supervising and inspecting financial institutions. The ministry will continue to plan financial policy (Yokota 1997a). On proposed changes in the ministry's control over the Bank of Japan, see Fujiwara (1997). On the growth of postal savings, Yokota (1998).
11. See, for example, remarks by Akio Kanno, vice chairman and senior executive director, Zenginko (Federation of Bankers Associations of Japan) in *Economist Conferences* (1997, 52).

References

- Abegglen, James C., and George C. Stalk Jr. 1985. *Kaisha, The Japanese Corporation*. New York: Basic Books.
- Abrahams, Paul, and Gillian Tett. 1998. "Japan Slips into Recession as Economy Shrinks 5.3%." *Financial Times*, June 13-14, 1.
- Aoki, Masahiko, and Hugh Patrick, eds. 1994. *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*. Oxford: Oxford University Press.

- Aoki, Masahiko, Hugh Patrick, and Paul Sheard. 1994. "The Japanese Main Bank System: Introductory Overview." In Masahiko Aoki and Hugh Patrick, eds., *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*. Oxford: Oxford University Press.
- Bailey, Warren, Yasushi Hamao, and William T. Ziemba. 1991. *Japanese Financial Market Research*. Amsterdam: North-Holland.
- Ballon, Robert J. 1996. "Decision Making and Implementation." *Journal of Japanese Trade and Industry* 2.
- Berggren, Christian, and Masami Nomura. 1997. *The Resilience of Corporate Japan: New Competitive Strategies and Personnel Practices*. London: Paul Chapman.
- Bosworth, Barry, and Gary Burtless. 1997. "Budget Crunch: Population Aging in Rich Countries." *The Brookings Review*, Summer.
- "City Banks Are Jumping into Pension-Fund Consulting Services, Until Recently Offered Mainly by Foreign Firms." 1996. *Nikkei Weekly*, September 16.
- "Corporate Restructuring Sweeps Japan." 1996. *Focus Japan*, March.
- "Credit Crunch Sign of Basic Shift in Japan's Ending Environment." 1998. *Nikkei Weekly*, January 19.
- Dore, Ronald. 1986. *Flexible Rigidities: Industrial Policy and Structural Adjustment in the Japanese Economy, 1970-1980*. Stanford, Calif.: Stanford University Press.
- . 1987. *Taking Japan Seriously: A Confucian Perspective on Leading Economic Issues*. Stanford, Calif.: Stanford University Press.
- Economist Conferences. 1997. Summary Paper of the Fourth Roundtable with the Government of Japan, Tokyo, May 12-14.
- Endo, Yukihiko. 1996. "Historical Development of the Japanese Financial System." In Shigenobu Hayakawa, ed., *Japanese Financial Markets*. Cambridge: Gresham.
- Fujiwara, Sakuya. 1997. "More Power to the BOJ." *Look Japan*, January.
- Gerlach, Michael L. 1992. *Alliance Capitalism: The Social Organization of Japanese Business*. Berkeley: University of California Press.
- Hatch, Walter, and Kozo Yamamura. 1996. *Asia in Japan's Embrace: Building a Regional Production Alliance*. Cambridge: Cambridge University Press.
- Hodder, James E., and Adrian E. Tschoegl. 1993. "Corporate Finance in Japan." In Shinji Takagi, ed., *Japanese Capital Markets: New Developments in Regulations and Institutions*. Malden: Blackwell.
- Inoue, Tatsuya. 1998. "U.S. Insurer Joins Alliance to Ease Entry." *Nikkei Weekly*, February 23.
- Ishikawa, Masato. 1998. "Critics Say Bailout May Hurt Strong Banks." *Nikkei Weekly*, March 9.
- Ito, Kiyohiko. 1995. "Japanese Spinoffs: Unexplored Survival Strategies." *Strategic Management Journal* 16: 431-446.
- Japan Institute of Labor. 1997. *Japanese Working Life Profile 1996-1997*. Tokyo: Japan Institute of Labor.
- Japan Securities Research Institute. 1986. *Securities Market in Japan*. Tokyo: Japan Securities Research Institute.

- . 1996. *Securities Market in Japan*. Tokyo: Japan Securities Research Institute.
- Japan Statistics Bureau. 1989. *Japan Statistical Yearbook*. Tokyo: Government of Japan.
- . 1998. *Japan Statistical Yearbook*. Tokyo: Government of Japan.
- Kameyama, Naoyuki. 1993. "Japanese-Style Employment Practices at a Turning-Point?" *Japan Labor Bulletin* 32, no. 6 (June 1).
- Kester, W. Carl. 1991. *Japanese Takeovers: The Global Contest for Corporate Control*. Boston: Harvard Business School Press.
- Kodama, Shoji. 1997. "Resurgent IBM [Japan] Ends Retirement Buyouts." *Nikkei Weekly*, March 10.
- Koji, Matsumoto. 1998. "The Japanese Corporate System Is Stable." *Journal of Japanese Trade and Industry* 17, no. 1.
- Koll, Jesper. 1997. Presentation given in the Economist Conferences, Summary Paper of the Fourth Roundtable with the Government of Japan, Tokyo, May 12–14.
- Kozo, Izuka. 1996. "Research and Development in Japan—Present and Future." *Journal of Japanese Trade and Industry* 5.
- Kuwahara, Masahiro Ken. 1982. "Worker Participation Within Undertakings in Japan." *Comparative Labor Law Journal* 5, no. 1 (Winter).
- Kuwata, Hajime. 1997. Presentation given in the Economist Conferences, Summary Paper of the Fourth Roundtable with the Government of Japan, Tokyo, May 12–14.
- Lake, David. 1990. "Borrowing for the Future." *Business Tokyo*, October.
- Lazonick, William. 1991. *Business Organization and the Myth of the Market Economy*. Cambridge: Cambridge University Press.
- . 1992. "Controlling the Market for Corporate Control: The Historical Significance of Managerial Capitalism." *Industrial and Corporate Change* 1, no. 3.
- . 1997. "Organizational Learning and International Competition: The Skill Base Hypothesis." Working Paper no. 201. Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.
- . 1998. "The Japanese Financial Crisis, Corporate Governance, and Sustainable Prosperity." Working Paper no. 227. Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.
- Lazonick, William, and Mary O'Sullivan. 1997a. "Corporate Governance and Corporate Employment: Is Prosperity Sustainable in the United States?" Working Paper no. 183. Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.
- . 1997b. "Finance and Industrial Development. Part I: The United States and the United Kingdom" and "Finance and Industrial Development. Part II: Japan and Germany." *Financial History Review* 4, nos. 1 and 2.
- . eds. Forthcoming. *Corporate Governance and Sustainable Prosperity*. Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.
- Maruyama, Yoshinari. 1992. "The Big Six Horizontal Keiretsu." *Japan Quarterly* 39, no. 2 (April-June).

- Ministry of International Trade and Industry. 1996. *White Paper on International Trade Japan*. Tokyo: Government of Japan.
- Mitsuhashi, Tadahiro. 1994. "High Technology and Japan in the 1990s." *Japanese Economic Studies* 22, nos. 5-6 (September-October/November-December): 160-192.
- Morishita, Kacru. 1996. "Japan's Financial Convoy System Approaches the End of the Road." *Nikkei Weekly*, July 8.
- . 1997a. "Scandals Put Corporate Culture on Trial." *Nikkei Weekly*, June 23.
- . 1997b. "Sharp Asset Devaluation Leads to Demise of Housing Loan Companies." In *Nikkei Weekly, Japanese Economic Almanac Nihon Keizei Shimbun*.
- Nakamura, Keisuke. 1997. "Worker Participation: Collective Bargaining and Joint Consultation." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Nakamura, Minoru, and Koji Yamada. 1996. "Financial Institutions of Japan." In Shigenobu Hayakawa, ed., *Japanese Financial Markets*. Cambridge: Gresham.
- Nikkei Weekly. 1997. "Birthrates at Record Low." *Japan Economic Almanac, Nihon Keizei Shimbun*.
- . 1998. *Japan Economic Almanac, Nihon Keizei Shimbun*.
- Nitta, Michio. 1995. "The Employment Practices and Employment of Young Workers in Japan: Past Experience and Present Situation." *Japan Labor Bulletin* 34.
- . 1997. "Business Diversification Strategy and Employment Relations: The Case of the Japanese Chemical Textile Industry." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Noguchi, Yukio, and David A. Wise, eds. 1994. *Aging in the United States and Japan*. Chicago: University of Chicago Press.
- Nonaka, Ikujiro, and Hirotaka Takeuchi. 1995. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.
- Odagiri, Hiroyuki. 1994. *Growth Through Competition, Competition Through Growth: Strategic Management and the Economy in Japan*. Oxford: Oxford University Press.
- . 1998. "Midsize Companies Now Playing Larger Role in Japanese Economy." *Nikkei Weekly*, June 8.
- Ogura, Seiritsu. 1994. "The Cost of Aging: Public Finance Perspectives for Japan." In Yukio Noguchi and David A. Wise, eds., *Aging in the United States and Japan*. Chicago: University of Chicago Press.
- Okina, Yuri, and Akiko Kohsaka. 1996. "Japanese Corporations and Industrial Upgrading: Beyond Industrial Hollowing Out." *Japan Research Quarterly* 5, no. 2.
- O'Sullivan, Mary. 1996. "Innovation, Industrial Development, and Corporate Governance," Ph.D. dissertation, Harvard University.
- . 1998. "The Political Economy of Corporate Governance in Germany." Working Paper no. 226. Annandale-on-Hudson, N.Y.: The Jerome Levy Economics Institute.

- . Forthcoming a. "The Innovative Enterprise and Corporate Governance." *Cambridge Journal of Economics*.
- . Forthcoming b. *Contests for Corporate Control: Corporate Governance and Economic Performance in the United States and Germany*. Oxford: Oxford University Press.
- Sakae, Sakamoto. 1996. "BOJ Autonomy and MOF Dissolution." *Journal of Japanese Trade and Industry* 6.
- Sako, Mari. 1997. "Shunto: The Role of Employer and Union Coordination at the Industry and Inter-sectoral Levels." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Sako, Mari and Hiroki Sato, eds. 1997. *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Sato, Hiroki. 1996. "Keeping Employees Employed: Shukko and Tenseki Job Transfers—Formation of a Labor Market within Corporate Groups." *Japan Labor Bulletin* 35, no. 12 (December 1).
- . 1997a. "Human Resource Management Systems in Large Firms." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- . 1997b. "Keeping Employees Employed." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Schaede, Ulrike. 1994. "Understanding Corporate Governance in Japan: Do Classical Concepts Apply?" *Industrial and Corporate Change* 3, no. 2.
- Scher, Mark J. 1995. "Japanese Cross-Shareholdings: Corporate Governance or Anti-Governance?" Paper presented at the Annual Meeting of the Association for Japanese Business Studies, Ann Arbor, Mich., June 2-4.
- Seike, Atsushi. 1996. "The Pensionable Age and Extension of the Mandatory Retirement Age." *Japan Labor Bulletin* 35 (October).
- . 1997a. "Getting Older." In *Nikkei Weekly, Japan Economic Almanac*. Nihon Keizei Shimbun.
- . 1997b. "Ageing Workers." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Seike, Atsushi, and Haruo Shimada. 1994. "Social Security Benefits and the Labor Supply of the Elderly in Japan." In Yukio Noguchi and David A. Wise, eds., *Aging in the United States and Japan*. Chicago: University of Chicago Press.
- Sheard, Paul. 1994. "The Main Bank System and the Governance of Financial Distress." In Masahiko Aoki and Hugh Patrick, eds., *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*. Oxford: Oxford University Press.
- . 1998. "Japanese Corporate Governance in Comparative Perspective." *Journal of Japanese Trade and Industry* 17, no. 1: 7.
- Shimizu, Yasumasa. 1997. "Foreign Firms Take Head Start on 'Big Bang.'" *Nikkei Weekly*, July 28.
- Shimizu, Yoshinoru. 1992. "Problems in the Japanese Financial System in the Early 1990s." *Hitoetsubashi Journal of Commerce and Management* 27.

- Shimokawa, Koichi. 1994. *The Japanese Automobile Industry*. London: Athlone.
- "SMEs Survive Hollowing Out of Industry: Production More Balanced Between Japan and Overseas." 1996. *Focus Japan* 23 (July-August).
- Smith, Roy C. 1993. "Why Japanese Companies Finance Abroad." In Ingo Walter, ed., *Restructuring Japan's Financial Markets*. New York: New York University Press.
- Sprague, Jonathan, and Murakami Mutsuko. 1998. "Running on Empty." *Asiaweek*, May 1.
- Strom, Stephanie. 1997. "Crusader Takes on the Postal Piggy Bank." *New York Times*, November 18, D4.
- Sugeno, Kazuo, and Yasuo Suwa. 1997. "Labour Law Issues in a Changing Labour Market." In Mari Sako and Hiroki Sato, eds., *Japanese Labour and Management in Transition: Diversity, Flexibility, and Participation*. London: Routledge.
- Suzuki, Yoshio, ed. 1987. *The Japanese Financial System*. Oxford: Oxford University Press.
- Suzuki, Yukio. 1995. "Adapting to Change: The New Dynamism of Japanese Industry." *NRI Quarterly*, Winter.
- . 1996. "Japan's Resurging Industrial Competitiveness." *NRI Quarterly*, Autumn.
- Suzuki, Yumiko. 1996. "Corporate Pension Plans Reeling as Potential Costs Outstrip Assets." *Nikkei Weekly*, October 7.
- . 1997a. "Fair or Foul: Public Investment Mushrooms." *Nikkei Weekly*, March 17.
- . 1997b. "Japan Plots New Course to Care for Old Folks." *Nikkei Weekly*, July 14.
- Takanashi, Akira. 1998. "Shaky Employment Practices in Japan." *Labour Quarterly Issues* 38 (Winter).
- Takatsuki, Akitoshi. 1996. "Money and Banking in Japan." *International Management* (International University of Japan), Fall.
- Takayama, Noeyui. 1994. "Household Asset- and Wealthholdings in Japan." In Yukio Noguchi and David A. Wise, eds., *Aging in the United States and Japan*. Chicago: University of Chicago Press.
- Teranishi, Juro. 1994. "Loan Syndication in War-Time Japan and the Origins of the Main Bank System." In Masahiko Aoki and Hugh Patrick, eds., *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*. Oxford: Oxford University Press.
- Tett, Gillian. 1996. "We Are Not a Bangladesh." *Euromoney*, April.
- . 1997. "Japan's Life Insurers Struggle for Credibility." *Financial Times*, May 16.
- . 1998. "Japanese State Lending to Companies Up Sharply." *Financial Times*, June 16.
- "Toyota Expands Venture Fund to Companies Outside Group." 1997. *Nikkei Weekly*, June 16.
- U.S. Bureau of the Census, Department of Commerce. 1976. *Historical Statistics of the United States from the Colonial Time to the Present*. Washington, D.C.: Government Printing Office.

- . 1997. *Statistical Abstract of the United States, 1997*. Washington, D.C.: Government Printing Office.
- Watanabe, Shigeru. 1996. "Corporate Finance." In Shigenobu Hayakawa, ed., *Japanese Financial Markets*. Cambridge: Gresham.
- Wood, Christopher. 1992. *The Bubble Economy: Japan's Extraordinary Speculative Borrowing of the '80s and the Dramatic Bust of the '90s*. New York: Atlantic Monthly Press.
- Yahata, Shigemi. 1996. "Small and Medium-Sized Enterprise (SME) Moving Offshore." *Japan Labor Bulletin* 35, no. 5 (May).
- Yamamoto, Yuri. 1997. "Insurer Performance Mixed in Deregulation." *Nikkei Weekly*, June 16.
- Yashiro, Naohiro. 1997. "Pension Remedy Should Treat Fundamental Ills." *Nikkei Weekly*, June 16.
- Yokota, Kazunari. 1997a. "Plan to Oversee Banks, Insurers Draws Criticism." *Nikkei Weekly*, July 14.
- . 1997b. "Bank Failure Boosts Calls to Use Public Funds." *Nikkei Weekly*, November 24.
- . 1998. "Wary Savers Pull Funds Out of Weaker Banks." *Nikkei Weekly*, February 9.
- Yokoyama, Kiho. 1997. "Sharp GDP Shrinkage Deepens Worry." *Nikkei Weekly*, September 15.
- . 1998a. "Bankruptcies Soar, Showing Wide Shakeout." *Nikkei Weekly*, January 26.
- . 1998b. "Second Year of Record Joblessness Blamed on Stalled Japan Economy." *Nikkei Weekly*, February 2.
- . 1998c. "January Bankruptcies Hit Postwar Record." *Nikkei Weekly*, February 23.
- Ziemba, William T. 1991. "The Chicken or the Egg: Land and Stock Prices in Japan." In Warren Bailey, Yasushi Hamao, and William T. Ziemba, *Japanese Financial Market Research*. Amsterdam: North-Holland.

Acknowledgments

The research for this paper was funded by The Jerome Levy Economics Institute, the Center for Global Partnership of the Japan Foundation (Grant REP93 ACR-3649N), and the National Science Foundation (Grant INT-9417276). The research was carried out at the Faculty of Economics, University of Tokyo, where the author was a professor from April 1996 through March 1997, and at the Euro-Asia Centre, INSEAD, where the author is developing collaborative research projects. I thank Ronald Dore and Mary O'Sullivan for their detailed comments on earlier drafts. Catherine O'Sullivan provided valuable research assistance.

About the Author

William Lazonick is university professor and co-director of the Center for Industrial Competitiveness at the University of Massachusetts Lowell. He is a Levy Institute research associate and holds an appointment at the Euro-Asia Centre at INSEAD (European Institute of Business Administration). He also is affiliated with STEP (Studies in Innovation, Technology, and Economic Policy) Group in Oslo and chairs the Politics and Enterprise Group at the Center for European Studies at Harvard University. Lazonick has written extensively in the area of comparative industrial development and international competition, focusing on western Europe, the United States, and Japan. His books include *Competitive Advantage on the Shop Floor* (Harvard University Press, 1990), *Business Organization and the Myth of the Market Economy* (Cambridge University Press, 1991), and *Organization and Technology in Capitalist Development* (Elgar, 1992). His Levy Institute publications include Public Policy Brief No. 37, *Investment in Innovation*, written with Mary O'Sullivan. Lazonick received a B.C. (bachelor of commerce) from the University of Toronto, an M.S. in economics from the London School of Economics, and a Ph.D. in economics from Harvard University.