Crumbling or Transforming?  
Japan's Economic Success and its  
Postwar Economic Institutions  

Hugh Patrick  

Working Paper No. 98

Hugh Patrick is the R.D. Calkins Professor of International Business and Director of the Center on Japanese Economy and Business, Graduate School of Business, Columbia University

Working Paper Series  
Center on Japanese Economy and Business  
Graduate School of Business  
Columbia University  
September 1995
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August 1995

The Japanese economy, the second largest in the world for some two decades, has become a mature economy in the 1990s. Its growth performance in the first half of the 1990s has been particularly poor; Japan is entering its fourth year of virtually zero growth, by far its worst economic performance in the past 50 years. This has been the consequence of the confluence of several major factors: inevitable cyclical slowdown following the business domestic investment boom of the late 1980s; the bursting in 1990-91 of speculative bubbles and the continued sharp declines in urban land and stock market prices; and the relatively sudden convergence of accumulated past pressures for economic structural adjustment, especially in simple, labor-intensive manufactures. The need for adjustment had been camouflaged by earlier oil crises and then by the domestic growth boom of the late 1980s.

The recession has persisted, with little recovery, into summer 1995 at a huge cost in terms of output (GDP) forgone. This has been due in large part to disastrous macro mismanagement, especially of fiscal and exchange rate policies; the government bureaucracy continuously underestimated the problems of inadequate demand, and gave too high priority to central government budget balancing. Moreover, it did not take adequate import-enhancing measures or implement other policies designed to prevent continued yen appreciation, and the yen overvaluation in the speculative bubble of early 1995. For some years now Japan has pursued an unwise set of policies for a country building up foreign (and foreign currency
denominated) assets and becoming the world’s largest creditor. The asset bubble was exacerbated by the collective belief, now shattered, that land prices would never decline deeply or for any sustained period. The bursting of the bubble has left huge amounts of bad or problematic loans financing speculative real estate projects that are not economically viable. This bad loan problem has created serious difficulties for the banking and the financial system more broadly, many still hidden and unresolved.

At the same time, these economic difficulties have made highly visible, and even accelerated, more profound changes in Japan’s economic structure and institutions. Agriculture -- still politically significant and heavily subsidized by government expenditures, high prices to consumers for rice and other agricultural products, and severe import barriers -- is of minor significance economically. Agriculture’s share of GDP in 1992 was 2.1 percent and 8.5 percent of employment, and both shares continue to dwindle (OECD, 1994). That is nothing new; the agricultural sector has been declining steadily for decades. The share of manufacturing, the engine of rapid postwar growth, while a still high 26.8 percent of GDP has been decreasing. As in other countries, services of all kinds - business oriented and consumer oriented - continue to grow absolutely and as a share of GDP. Within manufacturing, Japan’s loss of comparative advantage in labor-intensive production has accelerated, as productivity growth centering on very efficient export industries has steadily driven up the exchange rate.

During the high growth era following Japan’s postwar reconstruction -- from the mid-1950s to the mid-1970s -- a number of important economic institutions developed, flourished and contributed to the rapid growth process. As the economy has continued to grow, albeit less rapidly, and evolve over the past two decades, the very growth process created conditions
that undermined those economic institutions, making them less effective and in some respects not only inefficient but counterproductive. This has been a gradual process, but the economic tribulations of the 1990s have put great pressure on many of these institutions, in some instances challenging their persistence and even very existence. Will they crumble and fall apart, or will they be transformed and continue to be effective, albeit in some new ways?

The purpose of this paper is to provide an overview of the evolutionary change of three of the major postwar economic institutions: the large firm industrial relations system; the main bank system of large firm corporate finance; and the keiretsu systems of various forms of business ties among groups of firms. In following sections I consider the conditions and circumstances that resulted in the development and flourishing of these institutions; the subsequent developments of the economy that have made these institutions less effective and in some respects now clearly inefficient; how these institutions have responded; and, in a brief conclusion, speculate how they are likely to evolve.

Put simply, over time Japan’s economic success first supported, then undermined, these institutions. In my judgement, they will be transformed so as to continue to remain useful, not crumble away and disappear. While their formal structures - their architecture - will persist, the specifics of their operation must, and will, change to reflect new economic realities. Descriptive studies and analyses of these three economic institutions abound, particularly in their postwar historical context, so I do not describe these institutions in detail. Rather, the objective is to provide a broad overview and, by implication, raise issues for further research.
I. The High Growth Era and the Flourishing of Economic Institutions

From the Meiji Restoration in 1868 until the mid-1970s, Japan was an economic follower in terms of GNP per capita and technology level relative to the world technology frontier. It was an extraordinarily successful follower, the first in Asia to absorb and utilize fully the industrial revolution which began in England, spread to the European continent and the United States, then to Japan and, more recently, to other Asian economies.

Despite its prewar industrialization and early postwar reconstruction, Japan in the mid-1950s was still a follower economy. Its GNP per capita was on the order of Malaysia's, though unlike Malaysia it was natural resource-poor and had a substantial industrial base. Its technological level and its capital stock per worker were quite far behind the United States. Importantly, Japan had tremendous human capital -- many experienced managers and production engineers, and a work force trained to European levels of formal education.

Japan’s two decades of rapid economic growth - the high growth era - was not a miracle. It was a result of the synergistic interactions of available and improving human capital; rapidly growing business investment financed by equally rapid increases in savings and the private saving rate; huge (and highly profitable) importation of foreign technology; growth-oriented managers and entrepreneurs; supportive government policies; and favorable international economic environment. This sweeping characterization, while correct, makes it sound all too easy and straightforward. Large industrial enterprises, the engines of growth, had to overcome many obstacles. Labor-management relations initially were typically hostile and strikes frequent and bitter. Workers needed on-the-job training in order to utilize effectively the firm-specific requirements of new technologies being imported and adapted.
Constrained in their ability to raise capital and produce components internally, facing dramatically growing demand for their products, and seeking lower-cost labor and short-run cyclical buffers, large enterprises -- especially in assembly industries -- built stable supplier relationships with subcontractors. The growth opportunities for firms far exceeded their internal financing capabilities; they needed assured and stable mechanisms for long-term as well as short-term finance. Patrick and Rosovsky (1976) provide a contemporary overview of Japan’s rapid growth performance in chapter 1, and subsequent chapters provide more detailed functional analyses.

Economic and business information was in very short supply, and uncertainty about Japan’s economic future high. Markets were imperfect. The domestic and international environment seemed risky. No one in the late 1950s expected the dynamic growth of the 1960s. The Ikeda 1961 ten-year income doubling plan (implying an annual growth rate of 7.2 percent) was initially viewed as too high; in reality the economy averaged more than 10 percent annual growth. The nature and benefits of foreign technology were unclear, and the licensing costs at the time seemed high. It was difficult for lenders to evaluate the economic and business merits of new projects and business plans proposed by enterprises. Moreover corporate debt-equity ratios continued to be very high, far above prewar experience.

The institutional developments of the high growth era were designed to reduce transactions costs, uncertainty and risk, to ensure stable supplies of labor and finance to large companies, and to enhance information flows and develop trustworthy, long-term relationships among firms doing business with each other. These institutions made possible a series of positive-sum games for the participants, from which all benefitted.
The most important component of the industrial relations system has been the so-called lifetime employment system, under which all regular workers -- blue collar, clerical, and management-track -- have essentially been guaranteed employment by the firm from initial hiring (typically immediately after completing school) until mandatory retirement between ages 55 and 60. In a rapidly growing economy this was a rational, efficient arrangement. High-quality new entrants were perceived to be in increasingly short supply. More importantly, with the presumption that the employee would remain with the firm for 30 to 35 years, it was advantageous for both company and employee to invest in training to develop skills, in substantial part firm-specific. Wage increases were based substantially upon length of service in the firm as well as position; in effect workers were paid below their marginal labor productivity earlier in their career, and reaped the rewards of having developed skills later in their career. Workers were promoted based on seniority. However, because the number of positions were always fewer as an employee moved up the firm’s hierarchy, the selection process has always been highly competitive, based on performance (merit) rather than politics, nepotism, or other extraneous criteria used by planned economies, which also have had lifetime employment systems. Koike (1988) and Dore (1989) provide representative descriptions and analyses of Japan’s industrial relations system.

The final element in this tightly knit, synergistic industrial relations system was enterprise unionism in which the union is co-terminus with the firm. With permanent employment and the lack of labor mobility among large, high-wage firms, the long-run interests of workers and their union were tied to the success of the firm. Strikes hurt the company and benefitted competitors, and so were very costly for workers. On the other hand,
labor-saving technological innovations enhanced productivity and wages over the longer run, and any displaced workers were retrained and re-assigned, rather than being laid off, so were seen as a benefit rather than a threat.

It is important to note that this industrial relations system applied primarily to large firms, and primarily to male employees. Japanese society, and hence the companies, expected women to marry and to have children, and in doing so to resign from the firm -- which they did. While this system covered less than 30 percent of private sector workers, it did set the norms for behavior by medium-sized and small firms as well.

The main bank system for large firm corporate finance developed in the early postwar period in response to the difficulties for potential lenders in obtaining good information about firms and their projects and in monitoring their performance and behavior. The government authorities regarded as premature the development of a capital market in which firms relied upon bond and stock issues as major sources of corporate external finance. Individual savers preferred holding time and savings deposits, in part because they had few alternative financial instruments to choose from, and in part because they were risk averse.

The main bank takes responsibility for monitoring the borrower. It typically is the largest single lender, but for portfolio diversification reasons is unwilling to be the sole lender. Similarly, for oligopolistic bargaining reasons, the firm is reluctant to rely on a single lender. The main bank organizes a de facto syndicate of lenders to its client. Under circumstances of financial and business distress, the main bank takes the lead in bringing about a restructuring and incurs a disproportionate share of the losses that inevitably are a part of the restructuring. The main bank is compensated predominantly by preferential access to
the company's fee business (foreign exchange, custody arrangements, etc.) and to its
transactions deposits, as well as employee and subsidiary company deposits. The main bank
system is described and analyzed in considerable detail in Aoki and Patrick (1994); see
particularly the overview chapter by Aoki, Patrick, and Sheard, and the individual chapters by
each, as well as others participating in this World Bank-sponsored study.

The third economic institution considered here is the keiretsu, or groups of affiliated
business enterprises. This generic term has been used loosely, and at times misused. There
are at least four types of keiretsu. Probably the best known are the so-called financial
keiretsu, sometimes termed horizontal or inter-industry keiretsu. They are the Big Six, with a
bank at the center (sometimes together with a trading company), and prewar zaibatsu ties: the
rather close-knit Mitsubishi, Mitsui, and Sumitomo groups, and the somewhat looser Fuyo,
Dai-ichi Kangyo, and Sanwa groups. Members of each group give preference to each other in
business relationships, but since they are in different industries and the group comprises a
small share of the total number of large-scale enterprises, the overwhelming proportion of
their business as sellers and buyers is with non-group companies. Financial keiretsu
facilitated information creation and exchange, reduced agency costs of reciprocal monitoring,
reduced transactions costs and costs of financial distress and re-organization, and in the 1960s
undertook joint entry into new industries where scale was significant or risks were high.
Through extensive cross-shareholding, they effectively insulated self-perpetuating
managements from shareholder control (Gerlach 1992).

Probably more important economically have been the vertical keiretsu of supplier-
buyer arrangements and relationships in manufacturing, epitomized by auto assembly, with its
very large number of parts and components, and characteristic of other assembly industries as well, especially consumer electronics. Over time, supplier-buyer relationships were developed, based on repeat business and considerable trust, which made supplier investment in product-specific equipment and parts R&D innovations less risky and mutually beneficial, and the just-in-time production system possible. Toyota Motor Company is archetypical of vertical keiretsu, but such groups characterize all the Japanese car assemblers. Smitka (1991) and Asanuma (1989) provide descriptions and analyses of the benefits of this intermediate, independent but not arms length, rather tightly controlled form of vertical business organization, which has turned out to be superior in many instances to either vertical integration or arms-length spot markets.

Distribution keiretsu are a third form. They refer to the distributions networks of consumer goods manufacturers with a wide range of related products. The manufacturer maintains a network of wholesalers and small, nominally independent retailers, who sell the company's products -- in some instances only the company's products, in others giving it strong preference in shelf space and other marketing measures. Prototypical examples are Matsushita in consumer electronics and Shiseido in cosmetics. Toyota and other car manufacturers follow this practice in requiring automobile sole dealerships.

A fourth category are enterprise keiretsu, less studied but nonetheless significant. Typically one industrial enterprise is at the core, and other affiliated firms surround it in related industries. Enterprise keiretsu are analogous to conglomerates of firms in related industries, but without the same degree of central ownership and control. One important purpose is to internalize to the group, economies external to any single firm. For example,
urban commuter railroad companies such as Tokyu have built department stores at the central
terminal end of the line, housing or an amusement park at the other end, and developed land
and housing along the line. Manufacturing firms such as Hitachi, Toshiba, or Nippon Steel
are also at the core of their respective enterprise *keiretsu*.

Japan’s high growth economy was a producer, production-oriented system, into which
these economic institutions had become firmly embedded by the mid-1960s. Yet, despite its
biases in favor of producers over consumers and investors over savers, the system was
beneficial for virtually every Japanese because all shared in the rapid growth the system
generated. Real wages increased rapidly. The movement of labor from agriculture to
manufacturing was dramatic; some 90 percent of the children of farmers went into non-farm
jobs, leaving their gradually aging parents and grandparents to handle the farms. Recessions
were brief; GNP did not actually decline, and the slowdowns in output growth were modest.
The permanent employment compact meant that firms did not lay off temporarily redundant
workers; in effect, unemployment social security was privatized in effect. Income was
redistributed from high productivity growth sectors by means of wages and the labor market,
and of government policies protecting farmers and small shopkeepers. The result was
increases in relative prices with the costs borne by consumers. It was a system with many
costs, but the costs were hidden or tolerated as seemingly inevitable byproducts of rapid
growth.

Moreover, Japanese business, governmental and professional elites were generally
perceived as behaving with restraint in terms of their own material awards. Accordingly,
potential social tensions were muted, and Marxist concepts of class and class conflict never
took hold. In part as a consequence of Occupation reforms and early postwar reforms, income distribution was and continued to be relatively equal -- considerably more so than in the United States or Western Europe. Company president and senior management salaries were good but relatively modest. The central government bureaucracy was paid moderate salaries, below those in the private sector. Politicians have had access to a great deal of money but have used it mainly to finance the maintenance of their political machines, not to amass huge personal wealth. Japan’s elite are not perceived as having Swiss bank accounts or other hidden caches of wealth, nor do they engage in blatantly opulent consumption. While there are some very rich people in Japan, they have not been perceived as having achieved it in particularly illicit, corrupt, or immoral ways. Most wealth accumulation has been the consequence of ownership of land and to a lesser extent of family-owned companies, as well as cumulated saving.

II. Success Undermines Institutions Designed for a Different Era

Successful economic growth inevitably brings about profound structural change and changes in the economic environment for business. This process is typically gradual and evolutionary, though it may be punctuated by sharp, discontinuous events. These systemic changes in Japan have come to undermine the rationale and effectiveness of important elements of Japan’s industrial relations system, its main bank system, and the keiretsu systems.

The mid-1970s mark a major turning point for Japan’s economy. Japan achieved its century-long objective of "catching up with the West" in terms of civilian goods technology
level, GNP per capita, capital-labor ratios, and level of human skills. Then, however, rather than a gradual process of subsiding rates of growth, the economy quite abruptly shifted to a 4-5 percent growth rate during 1975-1991, a sharp decline from the 9-10 percent rate of the high growth era. The first oil crisis-induced recession in 1974 was traumatic; business became less optimistic about future growth prospects, and the increase in business investment slowed dramatically until the investment boom of the late 1980s. For an excellent study of the period from the first oil crisis to the “great yen appreciation” beginning in 1985, see Lincoln (1988).

One important systemic consequence was that Japan shifted from being a Schumpeterian economy, with ex ante private investment greater than ex ante private saving, to a Keynesian economy in which saving declined less rapidly and accordingly has been greater than investment. Japan has had a virtually textbook Keynesian economy of insufficient domestic private demand ever since 1974. The private saving surplus was absorbed domestically in the latter part of the 1970s by general government deficit spending, which rose to 6 percent of GNP. However, in 1981 decision-makers came to fear that continuation of deficits would be inflationary in the long run, and inaugurated a sustained and very successful effort to achieve a central government balanced budget. This resulted in a consolidated general government surplus of 3 percent -- an amazing swing in government saving in thirteen years. (The government sector excess of saving over investment reached minus 6.3 percent of net national product [NNP] in 1978, then swung sharply in the mid 1980s, to become a surplus in 1987, reaching 3.5 percent of NNP in 1991.) The depressing impact on domestic growth was offset, however, first by the export surplus emanating from
the undervalued yen (overvalued dollar) of the early to mid 1980s, and then by the business investment boom of the late 1980s. The negative effect of public sector surpluses has manifested itself only in the sustained recession of 1992-95, which was caused by inadequate domestic demand and vacillating and wrong-headed fiscal policy.

The Keynesian economic condition of a surplus of saving over investment has had profound effects since the mid-1970s. Financial institutions had ample funds from saving deposits; with slower paced loan demand growth, interest rates were low and credit rationing became a thing of the past. Moreover, Japan increasingly exported its excess saving by running a current account surplus, burgeoning to a peak of 4.0 percent of GNP in 1986 before declining in the late 1980s boom to 0.7 percent in 1990, only to rise sharply to a peak of 3.4 percent in 1992.

Internationally the 1970s was also a turning point. Until 1971 or so the United States tended to make the "small country assumption" about Japan: its economic size was too small for its domestic economic policies to have a significant effect on the United States or on world markets. But Japan’s economic success, its size, its growing share of world markets, its emerging current account surplus, and its undervalued yen combined to invalidate earlier assumptions. Japan was correctly perceived to be a "big country"; its domestic economic policies affected the U.S. and other economies. The U.S. became increasingly concerned about access to the hitherto protected, closed domestic market, for both imports and foreign direct investment.

Not only had Japan become a big country with a big economy (second largest in the world), Japanese companies had become large, strong, and in several sectors major global
competitors. They could cope with the inevitable foreign pressures for Japan to liberalize trade, investment and portfolio capital flows; and in important sectors firms benefitted substantially from increased participation in the world economy. Their credit ratings rose accordingly. At the same time, in a slower growth environment large firms became more cautious and risk-averse; and some industries and firms did much better than others as comparative advantage evolved.

An important systemic change was the ending of the government-based Bretton Woods fixed exchange rate system in 1973, replaced by a market-based system of flexible exchange rates among the major currencies (yen, dollar, deutsche mark). In terms of longer-run averages, exchange rates have responded to the fundamental economic forces of trade and current account flows, long-term capital flows, differential rates of inflation, and domestic macroeconomic policies. In the short-run exchange rate volatility has increased as a result of episodes of dollar or yen overvaluation, currency speculation, divergent macro policies, and market perceptions of the implications of movements in all the relevant short-run and long-run variables. Japan’s experience in the past two decades is exceptional in at least three respects.

First, Japan’s cumulative current account surplus since the early 1980s has now made Japan by far the world’s largest creditor nation. Second, Japan’s productivity gains have occurred not simply in manufacturing, but particularly within export-oriented industries. As a consequence, the purchasing power parity for Japanese traded goods increased from approximately 300 yen to the dollar in 1971 (when the fixed exchange rate was 360 yen) to an estimated 110 yen in 1994 -- while the purchasing power parity of non-traded goods and services was on the order of 200 yen. This productivity gap contributed to the yen
appreciation. Third, an extraordinary gap has emerged and persisted between high prices in Japan and world prices in tradable goods and services, notably in manufactures where tariff and other government barriers are low, as well as in agricultural products (not just rice) where high protection persists. These price discrepancies expose the constipated nature of Japan’s distribution systems and supplier-buyer networks, which were designed to digest only established Japanese goods, not new goods and especially not those of foreign origin. These market blockages and distribution imperfections on the import side -- more than government protectionist trade policies per se -- have contributed in driving the yen to successive heights, exacerbated by the speculative yen-dollar bubble in spring 1995. At the same time, despite the ongoing recession, imports in the mid-1990s have been increasing dramatically, as extraordinary profit opportunities have generated new distribution channels and simplified or widened existing ones, and much lower import prices have attracted buyers. The recent absolute declines in prices of consumer manufactured goods as a consequence of an increasingly competitive environment have inaccurately been termed “price destruction” in Japan. It is more appropriately termed “price creation”, as global market competition replaces manufacturer administrative power in price setting.

Yen appreciation has had two major impacts. It has made clear the shift in Japan’s comparative advantage (as discussed below), bringing about a continuing increase in the volume of manufacturer’s imports, though less in value terms (and from a very low initial base), and an accelerating outflow of foreign direct investment in manufacturing to low labor cost countries, especially in Asia. And, since most Japanese foreign portfolio assets have been invested in dollar or other foreign currency financial claims, Japanese financial
institutions have taken huge foreign exchange losses, realized and unrealized, estimated to be on the order of $400 billion even prior to the early 1995 further appreciation.

Other major changes in the Japanese economy have been more gradual in their development and in their impact on economic institutions. Although it might be argued that, during the early 1960s, Japan had actual or dynamic potential comparative advantage in virtually every manufacturing sector (relative to agriculture and many business services), by the 1970s Japan was beginning to lose competitiveness in all standard, labor-intensive manufacturing -- first textiles, then consumer electronics, then simple auto parts, and on up the product ladder. However, evolving comparative advantage was obscured, and adjustment delayed, by the oil crises of 1973-74 and 1979-80, which worsened Japan’s terms of trade, resulted in yen depreciation, and provided renewed impetus to export-oriented production. Adjustment was further delayed by the overvalued dollar of the early to mid 1980s and the domestic growth boom of the late 1980s. Only in the 1990s has the degree of uncompetitiveness in labor-intensive manufacturing been fully exposed.

One of the most profound transformations in Japan, albeit gradual so that its implications have not yet been fully appreciated, has been the demographic transition of the past 100 years -- with the past 50 years the fruition of earlier trends -- from a high mortality, high fertility society to one of low death and very low birth rates, and great increases in life expectancy. Labor force growth, never rapid, has slowed dramatically and will soon turn negative. The absolute size of the working age population (15-64) peaks in 1996. The future is that of an aging society -- higher proportions of the total population 65 and over, rising average age of the labor force, and a shortage of labor. In the intermediate run, two other
offsetting forces are also at work: average working hours will continue to decrease (though the 1990s recession probably overstates the decline as of 1994) and labor inefficiently used in relatively unproductive activities will be better utilized. Japan's labor force is highly educated and has obtained job-specific skills through on-the-job training. To the extent skills are firm or industry specific, however, major changes in industrial structure will cause some micro difficulties in labor force adjustment.

III. How Have These Economic Institutions Responded?

The combined effects of economic growth and transformation in the past two decades have tended to undermine the economic institutions that served Japan so well in the first two decades of postwar growth. In the mid-1990s, as Japan enters economic maturity the combination of the cumulative effects of structural change, four years of zero-growth recession, and unanticipated exchange rate appreciation have heightened perceptions that Japan's economic institutions are not only in difficulty but constitute an increasing drag on the economy.

The Permanent Employment System

A sufficient condition for the permanent employment system is that the demand for labor services by the great majority of firms rises steadily, and that decreases in the demand for labor be modest and brief. In other words, output growth is greater than productivity growth. The system becomes much less attractive and less beneficial when cyclical declines in company sales are steep and sustained, and especially when a firm (and industry) loses
competitiveness over the longer-run to the point that domestic production declines. Firms have always recognized this, and have developed a variety of safety valves over the past two decades to reduce labor inputs and costs as the firm’s demand for labor services decreases. These include extensive overtime, under normal conditions, and use of contract workers, part-time workers, and female workers (especially in assembly operations) since their turnover rate is relatively high. Attrition -- not fully replacing regular workers who retire or otherwise leave the firm -- is a basic but very slow method of adjustment, cyclically and in the longer run.

But as the recession has persisted and increasing numbers of regular employees have become effectively redundant, none of these have been sufficient for many firms. Excess workers cannot be laid off and removed from a firm’s payroll; that would break the implicit but strong permanent employment commitment. No individual firm can do that without severe loss of reputation; it would make the recruitment of new employees much more difficult, among other things. Because all large industrial firms in any given industry maintain the system, domestic competition among them is not substantially altered by maintaining the permanent employment system. However, the implications for international competitiveness are two-fold. First, in the shortrun, by regarding labor costs as fixed, firms have an incentive to reduce prices in export markets in order to maintain production. In aggregate this means the yen remains stronger than otherwise, which tends to accelerate the longer-run structural adjustment process. Second, the inability to reduce labor costs flexibly once all existing safety values have been utilized delays the process of internal cost cutting, restructuring, and downsizing by firms.
The fundamental problem -- that most manufacturing firms now require fewer workers -- is long standing. It really began in the mid-1970s as the economy’s growth rate dropped by half. Firms began reducing their blue-collar labor force sooner and more effectively than either their clerical or management-track employees. Much of this has involved the substitution of part-time production workers, predominantly married women, for full-time employees. In 1980, for the economy as a whole, part-time workers comprised 10.1 percent of all employees and 7.2 percent of the labor force; by 1993 these numbers had increased substantially to 18.0 percent and 14.5 percent (OECD). Even so, large Japanese firms face two major employment problems. One is the excess supply of redundant 45 to 50 year old middle managers. The other is the excessive layering of white-collar workers, managerial and clerical, in what has become in many firms a rather bureaucratic, hierarchical, bloated system of management, with attendant high overhead costs and inefficiencies.

The problem of too many middle managers in large firms has received a great deal of news coverage and public attention; after all, they are college graduates, just like the media people, scholars, businessmen, and bureaucrats who are concerned about them. Moreover, the permanent employment system is deeply embedded in Japan’s management system. The current problem is the inevitable consequence of the slowness of firms some twenty years ago to reduce the number of new entrants into their management track as they began to grow less rapidly. Despite a great deal of rhetoric and hand-wringing, in fact very few middle managers have actually been laid off. Some have been bought off with early retirement packages. Others have been transferred to subsidiaries and affiliated firms, perhaps with higher-sounding titles but lower future wages. Some have been retained, but with a clear understanding not
only that they will not be promoted but that their wages will not rise. And some have been recruited by, or sent to, mid-sized or smaller family firms seeking professional managers. (This infusion of experienced talent may contribute significantly to increasing the managerial efficiency and productivity of those firms, and to the economy as well.) In general, firms have been solicitous of their managers’ welfare, and have borne the costs involved.

Accordingly, while the permanent employment commitment has been maintained in principle, actual practices have resulted in reductions of parent company managerial employees and wage costs. I do not expect the permanent employment system to break down. Rather, I interpret all the rhetoric as a way to alter the expectations about, and hence the conditions of, the implicit permanent employment contract. The message to newly recruited university graduates is: you are guaranteed employment until the firm’s standard retirement age, but it will not necessarily be with the parent firm; there is a significant probability that, unless you perform very well, you will be transferred at age 45 or so to a subsidiary or affiliated firm with lower wages and less prestige. The message to current middle-aged managers is: we will not fire you (this is not America) but regrettably, for reasons beyond our control, your future prospects with us are less bright than we had anticipated, and you have to share with the company the burden of the costs of keeping you on.

Adjustments have been taking place in other aspects of the industrial relations system as well. In reality, seniority wage increases have steadily become a smaller component since the mid-1970s, when the slope of the seniority wage curve achieved its steepest position. Merit has become a more significant element. No doubt this process will continue. Still, in my judgement the seniority promotion system is not significantly changed and will not be;
although juniors will not be promoted over seniors, promotion already has been based fundamentally on performance and merit. However, the pressure to reduce firm employment means the competition for promotion will become more severe. The enterprise union system will continue; it is useful to both management and workers. Nonetheless, the gradual decline in the private sector unionization rate, from 24.7 percent in 1980 to 21.3 percent in 1992 reflects changes in industrial structure, employment patterns (more non-union, part-time workers), and a low rate of union formation in firms newly entering the larger scale ranks.

The second challenge to the permanent employment system -- reducing the layers of management and numbers of white-collar support staff in order to cut overhead costs and inefficiencies -- is related to the problem of excessive hiring of management-track entrants years ago, but is distinct. Japan has an outstandingly efficient, lean production system and management of the production process, particularly in assembly industries. As in the United States, over time as firms grew they added layers of management beyond what, in retrospect, was efficient. Probably the ample (i.e., increasingly excess) supply of managerial talent at all levels within firms since the mid-1970s contributed. At any rate, overhead costs ballooned while production costs were being cut. Now firms realize they must re-engineer their white-collar operations. The issues and difficulties are the same as with the excess supply of middle managers: how to get rid of white-collar workers without formal layoffs.

There are three categories of positions to be eliminated. Managers are the most important and most expensive, and that is proceeding as described above. Reduction in the numbers of female clerical workers is much less of a problem since turnover continues to be high; normal attrition is a workable solution. Perhaps the most difficult group to reduce are
the predominantly male, non-management-track staff, permanently assigned to specific sections and serving as repositories of knowledge and expertise as management-track staff are rotated. Reductions are more difficult both because it may be less easy to transfer them to affiliated companies and because their specific expertise and historical knowledge are likely to be particularly valuable to the firm. Attrition, combined with early retirement buy-outs, appears to be the most likely solution. All this implies that compared to the U.S., re-engineering will take much longer in Japanese companies and ongoing costs of adjustment will be higher. This is the downside of the permanent employment system.

Some argue that the system will disintegrate, that firms will abandon making permanent employment commitments to newly hired employees. I think that unlikely. First, firms face a prisoner’s dilemma; no single firm can abandon the system without loss of reputation and attendant difficulty in recruiting new workers, the great majority of whom are risk-averse and place a high premium on job security. While there may be institutional mechanisms such as Keidanren or Nikkeiren through which large industrial firms might jointly agree to terminate the permanent employment system, such an outcome seems unlikely.

Second and more important, the sustained current recession with its extensive amount of labor redundancy masks the longer-run demographic reality of future labor shortages. Permanent employment as a firm-based institution deals with long-run shortages of qualified labor. Thus firms in the short-to-intermediate run will simultaneously be downsizing by attrition, early retirement, and transfer of employees, and competing vigorously in the new-entrant labor market to hire fewer people but from an ever smaller cohort. And, as an increasing number of women enter the labor force with career or at least lifetime employment
aspirations, tight labor markets will result in greater opportunities for, and increasingly efficient use of, female workers -- albeit from a quite low base in most white-collar occupations.

While large-firm middle managers constitute the most publicized element in the need for employee adjustment, the more serious structural problem for the economy lies in labor-intensive small and medium manufacturing enterprises being competed out of existence by imports and company decisions to invest and produce abroad in low-wage countries. These employees do not have implicit permanent employment contracts to nearly the same degree, and many will be laid off. They will have to find new jobs or leave the labor force (retirement, married women withdrawal). The “three-D” jobs (dull, dirty, dangerous) recently done by foreign workers, legal and illegal, are once again being filled by Japanese. Once this reservoir is depleted, the unemployment problem for Japanese will become more serious. In contrast to large firms, the smaller firm labor market is much more flexible; worker turnover is higher, firm-specific skills are less substantial, and wage rates are more competitive. As in past downswings, many of the newly unemployed manufacturing workers will probably be absorbed in a variety of personal service businesses -- retail establishments, restaurants, and the like -- and in small family-owned businesses. The question is: will labor market flexibility be sufficient to absorb what is likely to be several million workers, much greater than unemployment in the past?

The best, and indeed the most effective, mechanism for labor re-allocation is steady, fairly rapid (3 percent plus) GNP growth. That will create the jobs into which workers in declining industries and sectors can be absorbed. The adjustment process will be eased by the
demographic reality of labor force contraction. Indeed, in the longer run, once the potential
growth gap is closed and labor is no longer redundant, the employment problem will become
reversed. Even slight declines in the labor force will then result in labor shortages, upward
pressure on wages, substitution of capital for labor (machines for workers), and more efficient
utilization, especially of female workers. In contrast, the near-term problem for the Japanese
economy is how to generate sufficient new jobs to absorb those who inevitably will lose their
jobs in uncompetitive manufacturing sectors. This transition process will be difficult, and
perhaps will generate considerable rhetoric. My hunch is that the government will provide
more programs of employment adjustment than in the past, and that the adjustment process
will proceed more smoothly than many expect.

The Main Bank System

The main bank system provided loans to large industrial corporate clients at a time
when information was scarce and poor, monitoring could be done more effectively by banks,
and rapidly growing firms had huge needs for external finance. Japan’s economic success and
slower growth weakened the rationale for the main bank system as it had existed. Firms had
become large, they had established track records, and information about them became much
more available. In the more moderate growth era of the past two decades, as business
investment opportunities became more modest and internally generated funds increased
(particularly depreciation cash flow resulting from the ever-rising capital intensity of firms),
firms needed smaller amounts of external funds. They were able to reduce substantially the
debt to equity ratios that had been very high earlier.
Even more important was the gradual liberalization of financial markets and the financial system beginning in the late 1970s. The government had maintained controls on interest rates, creation of new financial instruments, and competition within and especially across different categories of banks and other financial institutions. Market pressures forced liberalization upon a reluctant Ministry of Finance. The fact that some firms came to hold surplus short-term funds on which they wanted a market return invigorated a gensaki short-term free market which ultimately forced, through competition, deposit rates to be liberalized -- first large-scale CDS (the wholesale market) and, very gradually, smaller saving deposits and finally ordinary deposits (the retail market). The surge in government deficit financing not only dramatically increased the supply of government bonds, it led to a vibrant secondary market so that the basis for market-determined long-term interest rates was established. International pressure for Japan to liberalize finance, symbolized by the 1984 Yen-Dollar Accord, was a further, albeit relatively minor, contribution to the financial liberalization process. Probably its most important consequence was the Ministry of Finance decision to allow Japanese companies to issue Euro-currency bonds, with Japanese institutions the underwriters (and major ultimate purchasers), on terms substantially more favorable than in Japan.

The postwar development of a corporate bond market had been prevented by Ministry of Finance policy which was designed to ensure the leading roles of long-term credit banks and main banks in large firm corporate finance. Once firms became large and creditworthy, bond issue became a cheaper form of finance than bank loans. The Euro-bond market in particular became a major source of external finance for many companies, particularly in the
booming 1980s. The domestic market developed much more slowly, however, due to remaining restrictions; it was the first major case of financial "hollowing-out" (or, more correctly, lagging development) due to regulation. Corporate bond issue and equity issue (often in the form of convertible bonds) were direct competition to main bank loans.

Accordingly, the benefits of the main bank system were reduced and the costs increased. Companies needed less external funds, and increasingly they met those needs through the capital market. As firms became strong and information more readily available, in many instances monitoring became increasingly pro forma. Company-main bank relationships have not been terminated, but they have attenuated. Bilateral bargaining power has shifted from the main bank to the industrial corporation client. Preferential access to various form of fee business remains, but even those markets are becoming more competitive. The recent liberalization permitting interest payments on demand deposits reduces the attractiveness of access to corporate-related deposits.

With surplus funds and reduced loan demand by prime clients, the large city, trust, and long-term credit banks in the 1980s sought new customers. Some went to international financial markets, becoming major international players. Others focused increasingly on the domestic mid-market of medium and smaller firms hitherto financed predominantly by regional and local banks. And, in the late 1980s all moved vigorously into new real estate projects, which seemed safe since they were collateralized by rapidly rising urban land prices in an economy in which land prices had never substantially declined at any time during the postwar period. This collective myopia, and the speculative land bubble it engendered, proved to be a colossal mistake. When the asset bubble burst, banks became stuck with
non-performing loans in a real estate market of sharply declining prices, increasing unrented urban commercial office space as new projects have been completed, and tremendous decreases in rents. These losses, most still unrealized, continue to plague bank performance. The deep decline in stock market prices, off more than 50 percent from their peak, has sharply reduced the unrealized capital gains on bank stock portfolios, hitherto a source not only of Tier 2 capital but of realizable profits to offset realized loan losses. The combination of bad loans and sharp decline in unrealized capital gains has seriously weakened the banking system.

The seven major main banks -- Mitsubishi, Sumitomo, Sakura, Dai-ichi Kangyo, Fuji, Sanwa and the Industrial Bank of Japan -- have all suffered large losses, but well within their capacity to handle. Indeed, once the financial system gradually works off its loan losses, these banks will emerge relatively stronger than ever. However, will they continue to serve as main banks? Haven’t they lost their best industrial clients to capital market financing? And will they shed other main bank relationships where the borrower is perceived as weak, and hence, as having little future?

Despite affirmative answers to the last two questions, they do not mean the main bank system will evaporate. Rather, it will become more complex. With strong firms not borrowing much from banks, traditional relationships will be much looser but will not disappear. Some firms within the main bank group have relied more on bank loans than capital market funding, and their bank relationships will persist. However, the relationship is likely to become attenuated over time as the firm reaches the point at which it can rely more on capital market financing. The banks will continually have to find new firms with which to
establish main bank relationships, where their monitoring capabilities are beneficial to the borrower as well as the bank. Main banking is particularly useful for smaller, growing firms preparing to enter the stock market through initial public offerings (IPOs). Having a bank as existing stockholder and financier improves the terms of the offer for the issuing company; the main bank signals to the market its positive evaluation and support. In other words, the main bank function will persist, but for a new group of growing, smaller companies as its earlier clients graduate to the bond market. Its new main bank clients benefit not only from the reputation of having the backing of a prestigious main bank but from the bank’s broader and deeper experience with a range of economic conditions and operational issues, and its range of financial services, in addition to its loans. For example, smaller firms have issued Euro-currency bonds, something possible only because they are guaranteed by a bank. This benefits both the company, which obtains access to lower cost funds, and the bank, which earns fees and retains funds for other uses.

The Various Forms of Keiretsu

Traditional keiretsu forms of buyer-supplier relationships have come under pressure from four major sources. These are rising labor costs; decisions of manufacturing firms, especially in assembly industries, to produce abroad; increasing competition in domestic markets from new sources, domestic and foreign; and the search for new technological partners. The effects of these pressure vary, not only from firm to firm, but by type of keiretsu.
Distribution *keiretsu* have been under pressure both from rising labor costs and increasing competition, especially in consumer non-durables. For many products, sole-distributorship retail stores, often "Mom and Pop" operations, are too small to be efficient. Competition from discount stores (e.g., electronic consumer goods), department stores (e.g., cosmetics), and new forms of sales outlets makes it more difficult to sustain the price umbrellas inherent in sole distributor systems. To this is added the rapidly increasing volume of price-competitive imports made highly profitable by yen appreciation. Japan is in the midst of a distribution revolution in which traditional, established patterns are being undermined, and distribution channels widened. Distribution *keiretsu* will erode but will not disappear entirely. Perhaps the most important, and certainly the most visible, sole-dealership distribution *keiretsu* which persist are in auto dealerships; they are marginally eroding due mainly to U.S. pressure rather than market forces.

Probably the greatest market pressure is on the vertical *keiretsu*. Components and parts produced in Japan by labor-intensive methods are no longer price competitive, despite vigorous efforts by subcontracting suppliers as well as final assemblers to reduce costs. These vertical relationships are no longer economically efficient. Yet precisely because they are long-term and built upon mutual trust, they are difficult to terminate. They often embody sociological (non-economic) elements which solidify such relationships. Moreover, an assembler precipitously terminating supplier relationships suffers reputation losses.

Pressures on domestic vertical supplier-buyer relationships have been exacerbated by assembler decisions to shift production to foreign sites. This has proceeded farthest in consumer electronics, which have moved to low labor cost Asian economies. While auto
assemblers moved to North America and Western Europe mainly for market penetration reasons, subsequent yen appreciation has made production there less costly, especially in the United States, than in Japan. It is not that the vertical keiretsu will disappear; rather they are being transferred abroad and internationalized. A more complex sourcing strategy is emerging. Design-intensive, high-tech, high value added components will continue to be produced in Japan, and exported to overseas assemblers (both Japanese and local). First tier Japanese producers of medium-tech components will be encouraged to establish subsidiaries abroad, in order to benefit from lower labor costs and proximity to overseas assembly plants. And simple, standard labor-intensive parts and components will be produced abroad by local firms, both for local assembly plants and increasingly for export to operations in Japan. Thus, the internationalized vertical keiretsu will include both overseas subsidiaries of Japanese firms and local firms with which assemblers have established stable, long-term supplier relationships. All this will take time, however, in order to phase down or out established vertical relationships in Japan.

The relationships among the Big Six financial keiretsu members are gradually loosening. As each firm has become very large it has become increasingly autonomous. Some members are issuing bonds rather than relying predominantly on their keiretsu main bank for loan finance. Member firms now seldom set up joint ventures with each other to enter new lines of business. Rather, alliances are increasingly dictated by needs to access complementary and synergistic technologies, which are usually held by firms in related fields that are not members of the same keiretsu. In chemicals, defensive strategies have generated alliances among members of different keiretsu. These pressures certainly do not mean that
the financial keiretsu will disappear. Some benefits of membership will persist, even as others are reduced. The hand of history is always strong. Moreover, the costs of membership in these quite exclusive "clubs" apparently are low - though costs, like benefits, are far from transparent, which makes it difficult to assess their impact on the economy.

Enterprise keiretsu face the same pressures and challenges as the Big Six keiretsu. To the extent, however, that they are based on internalization to the group economies external to the individual firm, they will persist. Suppose a particular firm member is in an industry that has lost competitiveness, is making losses, and has poor prospects? How long will other members keep it alive, and at what cost? The quite rapid disappearance of Japan’s keiretsu-dominated aluminum industry, when the first oil crisis made it fundamentally uncompetitive suggests adjustment can occur relatively quickly.

IV. Conclusion

Japan’s postwar economy has gone through four phases: reconstruction (1945 - mid-1950s), high growth (mid-1950s - 1974), good growth (1974 - 1991), maturity (1992 on). In the high growth era a number of economic institutions developed and flourished in response to the needs for worker skill formation through on-the-job training, large amounts of company external finance to pay for their immense plant and equipment investment, and development of long-term business relationships where information was limited and spot markets were imperfect.

However, many institutions particularly suitable for and supportive of rapid growth were of lesser benefit as Japan caught up with the West, became an economic and
technological leader rather than follower, achieved high levels of income, technology, and capital, and as growth moderated. Moreover, Japan rather dramatically shifted in the 1970s to a virtually textbook example of an economy in which private saving outstripped private domestic investment, surplus saving was lent and invested abroad, and Japan accumulated, like the United Kingdom and the United States earlier, a huge creditor position with the rest of the world. Gradually, Japan has become a mature economy, with a high standard of living, an aging labor force, and long-run growth rate prospects little different from the United States or the European Union.

Many features of the earlier economic institutions are counterproductive and inefficient for a mature economy. This paper has examined three major economic institutional innovations of the rapid growth era, their current status, and their future prospects. The central finding is that the architecture, the basic structure, of these institutions persists and will continue to do so, even as major components and elements erode and are altered in response to changing economic realities.

The overall structure of the large firm industrial relations system of permanent employment, seniority wages and promotions, and enterprise unionism will persist. However, permanent employment is no longer a guarantee of a position until retirement at the parent company; many workers, especially managerial-track, henceforth have to expect mid-career transfer to subsidiaries or affiliated companies. This is a profound change. Its implications are unclear. Competition among employees to remain with the parent company will be more severe. Some will respond with greater work effort and demonstrations of loyalty to the firm; others, particularly those willing to take more risk (and presumably the more able), will have
less-close ties to their employer, and are more likely to be open to other job opportunities.

Firms not only will continue the seniority component in wages, they will seek ways to reduce the regular worker component (those to whom permanent employment is guaranteed) in their labor force. More contract and more part-time workers will be used. Some in-house overhead activities (advertising, legal services, etc.) will gradually be shifted to outside suppliers. Production and its management may be transferred to other firms on an OEM basis. For example, it is estimated that some 40 percent of Toyota’s domestic car assembly is done under contract with Daihatsu, Hino, and other marginal assemblers. This suggests that, rather than going bankrupt or being merged into stronger firms, large but only marginally competitive firms have been and will continue to stay alive by paying lower wages and lower dividends.

The benefits of the main bank system have dissipated for large, successful industrial corporations with strong balance sheets. They do not need the main bank monitoring services, and can obtain lower-cost capital through issuance of bonds, equities, and commercial paper. This does not mean that main bank relationships are terminated; rather, they become much looser and less intense, and bilateral bargaining power shifts from the bank to the firm. Having effectively lost an important part of its client base, main banks are seeking new clients for which their monitoring capabilities are still valuable, and which appear sufficiently attractive for the main bank to take on the responsibility for rescue and restructuring in the event of adversity. The mid-sized firm market is the obvious target, especially firms preparing to go public. A main bank confers superior reputation as well as the full range of financial services, and hence is able to attract such clients from their traditional, smaller bank
financiers.

The term *keiretsu* is broad in scope and meaning. Certainly traditional long-term business relationships and ties are loosening as economic circumstances change. The *keiretsu* systems will not disappear, but it is unclear how much they will change, and in what way. Much is industry specific. Distribution *keiretsu* may persist as a substantial market-entry restricting device in a few industries such as automobiles. The Big Six financial (or horizontal) *keiretsu* will continue in form but intra-group business dealings, never large in manufacturing but significant in insurance and other financial services, will continue to decline relatively. Many group members have outgrown the group. For example, Mitsubishi Corporation, the trading company, has deals with Honda in the Philippines and Isuzu in Thailand as well as Mitsubishi Motors in Malaysia. The search for new technologies and technology synergies brings about new, non-*keiretsu*, alliances. Vertical *keiretsu* -- long-term buyer-supplier relationship, particularly strong in assembly industries -- will continue as a dominant form of economic organization, but they will shed some traditional, labor-intensive, low technology domestic suppliers, and will become international in scope, incorporating suppliers (both Japanese owned and indigenous) in other countries.

In the longer run, say a decade hence, the Japanese economy will be significantly different. The trend growth rate will be on the order of 2.5 to 3.0 percent, probably about the same as the United States. The manufacturing share of GDP, now relatively large, will decrease and will be more narrowly focussed into relatively high tech, skilled-labor and capital-intensive industries. Agriculture, already a small source of GDP and even employment, will decline further. The share of business, professional and consumer-oriented

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services will increase. Japan’s import pattern will change dramatically. It will become a major importer of labor-intensive consumer goods and a huge market, just as the United States has been, though not of the same size. Much of Japan’s manufactured goods imports will come from China and Southeast Asia, and sourcing from overseas subsidiaries of Japanese firms invested and producing abroad will be significant.

Japan’s economic institutions will not crumble away; they will be transformed. This is the typical evolutionary path of an economy’s institutional heritage as the economy and the business environment change. History matters -- or in the current jargon, path dependency is important.

My thanks to Larry Meissner, James Morley and Margaret Pasquale for their comments on an earlier version of this paper.
END NOTES

1. By “mature economy” I mean an economy with large amounts of human and physical capital, and a high level of technology; the economy is (more or less) on the global production frontier of best known practices. Its future growth rate is constrained, a la long-run equilibrium growth models, to the rate of technological change, labor force growth, and (in some models), the rate of substitution of capital for labor. A mature economy does not have to decline; it can grow forever. In this context, a declining economy is one which, once having reached the world production frontier, has then fallen away from it; it has lost the capacity to create and absorb technology as well as before.

2. In the chaotic early postwar period, workers placed high priority upon job security and this became a high priority for their unions. Moreover, large firms have continuously paid higher wages than small and medium-sized firms. Since large firms in principle hired only new entrants, a worker leaving a large firm could obtain only a lower-wage position in a smaller firm. The large wage differential by firm size was initially due to capital and labor market imperfections; over time it became a mechanism whereby firms were able to select the “best” entrants into the labor market, at all levels (blue collar, clerical, and management track).

3. “Hollowing out” is an ambiguous term. In my view, the fact that Japanese labor-intensive manufacturing firms shift production to low labor cost countries is not hollowing out; it represents the economically efficient response to the loss of competitiveness (comparative advantage) whereby resources are shifted to higher value added domestic production. “Hollowing out” more appropriately refers to the relocation of activities abroad in response to poor government policies, whether domestic regulatory restrictions (as in the case of financial services) or a sustained period of currency overvaluation as a consequence of macroeconomic policies.