

For Students in the Economic Development Policy and Management Program Prof. Shigeru T. OTSUBO

The purpose of this presentation is four-fold:

- 1) to introduce the macroeconomic development process of the postwar Japanese economy (the so-called "Miracle Recovery");
- 2) to explore the Japan-specific (mostly microeconomic) elements of a market system that supported her rapid development;
- 3) to show the need for adjustments in the 'Japanese-style market system' in the post-catch-up era; and
- 4) to demonstrate the evolution and revolutions in economic systems underlying a development process.

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- to demonstrate the **evolution and revolutions in economic systems** underlying a development process.

To start with, macroeconomic factors that supported Japan's strong post-war economic recovery such as high investment ratios backed by savings mobilization, technology progress, flexible labor supply, and favorable external conditions will be reviewed. Then, market practices of a long-term nature that were often referred to as elements of the 'Japanese-style market system' are surveyed. These elements include labor market practices, *keiretsu* business relations, a *main-bank* system, and business-government relations that feature detailed regulations and industrial policies. The long-run macroeconomic policies conducted by the Japanese government including the 'medium-term economic plans' will be introduced.

The post-WWII Japanese economic development was a process of catch-up to the other industrialized economies. Economic policies and corporate strategies were geared to this utmost mandate in our minds—to catch-up. This general goal was shared by all economic agents as a national consensus. Macroeconomic policies, particularly monetary policies, were conducted in order to provide funds to strategic sectors for economic development. The Japanese-style market system functioned fairly well in strengthening international competitiveness among the tradable-goods-producing industries. Although the domestic markets were heavily protected in the early stages of Japan's post-war development, the potential threat of global competition provided sufficient incentives for productivity growth as Japanese industries looked for export markets. On the other hand, investments in non-tradable sectors were not sufficiently funded. As a result, development of non-tradable sectors lagged behind. Elements of the Japanese post-war development system that were competition-restricting in nature functioned well during her catch-up process.

When the catch-up process was over, however, those competition-restrictive elements became harmful. With the energy crises of the 1970s, the Japanese economy went into an era of transition. In the 1980s, limited productive investment opportunities in the domestic market coupled with loose monetary policy in the face of the yen's rapid appreciation fueled speculative investments in securities and property markets, creating a financial bubble. After the bubble burst in the early 1990s, throughout the so-called lost decade, the Japanese economy has been coping with the mounting needs of fundamental structural reforms.

Where is 'Japanese-Style Development' heading now? Let us explore the evolution of Japan's (socio-) economic development system.

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Devastation during WWII (1941-1945)



- Human loss 1.85 million (2.8 million) deaths
- Material loss 25% of national wealth
- ●Industrial production dropped to 1/10 of the prewar level.
- Hyper-inflation with commodity shortage



Devastation during WWII

Japan was devastated during World War II (1941-45). The human loss mounted to 1.85 million (about 4% of the entire population) and 680 thousand injured or missing. The material loss mounted to about 25% of national wealth excluding military stock (Economic Stabilization Board report of 1949). Another estimate of the death toll was 2.8 million (Heibonsha Encyclopaedia, 1989).

Industrial production dropped just after the war to one-tenth of the pre-war level (24% of the pre-war level in consumer products and only 8% in industrial input products). An increase in budgetary expenditure such as veterans' payment and compensation for the war damage, together with a commodity shortage, caused hyper-inflation.

Successes and Failures in Japanese Economic Development

Phase I (1945-1960s) Catching-up process

- -- Post-war democratization
- -- Common goal
- -- Savings shortage & directed allocation
- -- Japanese-style Market system
- Employment practices
- Main bank system
- Corporate governance
- Gov't intervention & public policies

Phase II (1970s–'80s) Failure to reform & "bubble" economy

- -- "Front-runner" necessity for competitive market
- -- Failure to transform the system
- -- Expansive behavior by businesses/banks
- -- Macroeconomic policy to cope with yen's appreciation
- -- 'Bubble'

Phase III (1990s -) Long stagnation & beyond

- -- Excess capacity
- -- NPL and financial crisis
- -- Confidence crisis
- -- Deflation
- -- Expansive macroeconomic policy
 - Zero interest
 - Budget deficit
- -- Structural reform
 - Regulatory
 - Financial, etc.

Phases of the Postwar Japanese Development

Phase I: Postwar Reconstruction and Catch-up

Phase I of the economic development after WWII was from 1945 through the 1960s. A common purpose shared by business, household and the government sectors was to catch up with North American and European industrial economies. The collective and concerted actions coordinated by the government, often competition-restrictive, were effective in achieving this goal.

A major obstacle on the macroeconomic front was the shortage of savings. The government created a system to mobilize and direct funds to key industries for rapid economic development. On a microeconomic front, the so-called 'Japanese-style market system' was established, which emphasized building long-running relationships between economic agents. Stable relationships were built on a foundation including (1) the long-term employment system, (2) corporate governance built on cross-share holdings among businesses and with other financial institutions, and (3) the main-bank system. And together with active public policies/guidance, they played an important role in Japan's 'catching up' with industrialized economies.

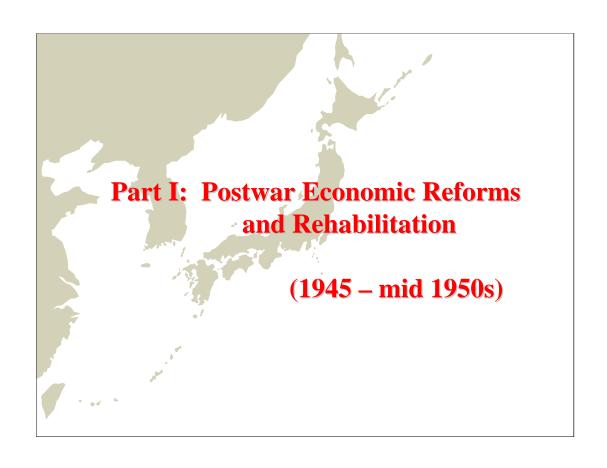
Phase II: Era of Transition and the 'Bubble Economy'

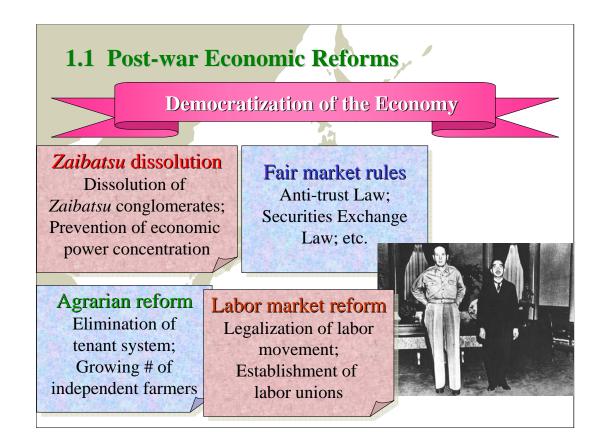
In phase II (early 1970s—late 1980s), the Japanese economy caught up with other industrial economies in the world. The clear, common goal had been achieved. Japanese business and household sectors should have changed their behavior from the one based on collective actions to the more autonomous one of coping with their own risks under a more competitive environment. However, we failed to change upon the celebrated success with our old system. Collective business practices and government interventions largely remained. With a lack of innovative investment opportunities and poor corporate governance, business firms and financial institutions rushed into speculation in financial and real estate markets, creating the 'bubble' economy. Expansive macroeconomic policies adopted in order to cope with yen's rapid appreciation in the middle of the 1980s also served to fuel the speculative bubble. Then, the 'bubble' burst in the face of restrictive monetary policies, first in the stock market in 1990, and then in the property market in 1991.

Phase III Lost Decade and Beyond

In phase III (the 1990s and on), the Japanese economy struggled with the aftermath of the burst 'bubble'. Excessive investment, excessive employment, and excessive lending and over-borrowing that had piled up during the bubble development period had resulted in excess capacity and mounting non-performing loans. The necessary stock adjustment of this 'excess', however, has been delayed in consideration of job security. This delay in adjustment resulted in long-lasting stagnation, persistent deflation, and financial crises, in spite of massive expansion of government expenditures and the money supply. This, in turn, created a public domestic debt overhang. In order for the Japanese economy to get out of this trap, a comprehensive strategy and bold structural reforms are indispensable. The Japanese economy is in the middle of a multi-pronged fight to (1) stop deflation, (2) reform the public sector and its budget, (3) resolve problems associated with non-performing loans and stabilize the financial system, and (4) to stimulate business sector confidence through regulatory reforms, tax reforms, and a conducive environment for technology development.

The Japanese society, facing a rapid aging of its now-declining population, is now also confronted with reform needs in its social security system.

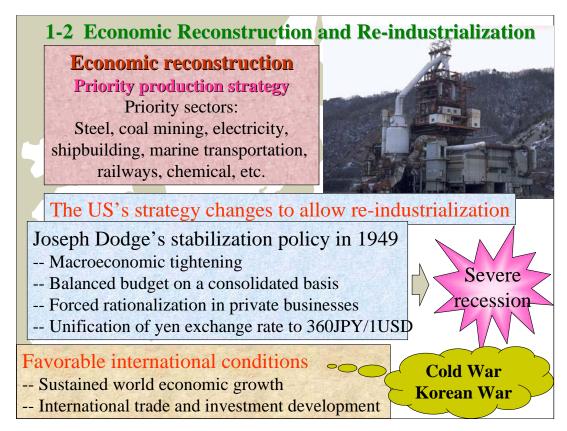




Postwar Reforms

The allied force (General Headquarters = GHQ) first tried to democratize Japan on both political and economic fronts. The GHQ believed that a concentration of economic power in a limited number of companies, financial institutions and landlords' hands, coupled with the lack of democratic forces such as labor unions, had been the hotbed of militarism in prewar Japan. Thus, the so-called 'economic democratization' reforms were carried out first.

- Zaibatsu dissolution (1945): Zaibatsu were big conglomerates of major companies and banks, often
 controlled by a share-holding company. The most powerful ones were Mitsui, Mitsubishi, Sumitomo, and
 Yasuda. To eliminate concentration of economic power, zaibatsu were dissolved and share holding
 companies were prohibited. Fair Trade Law and the Economic Power Excessive Concentration
 Elimination Law was enacted in 1947.
- 2. Fair market rules (1947): American-style market rules were imported. The most important laws were the Anti-trust Law and the Securities Exchange Law, enacted in order to secure market competition and transparency.
- 3. Agricultural reform (1945): The government purchased land from absentee landlords and all the tenant land in excess of one hectare, and sold them to tenant farmers at nominal prices. The percentage of tenant land dropped from 46% to10%. The number of Independent farmers increased.
- 4. Labor market reform (1945): Through an enactment of the Labour Union Law (1945), Labour Relations Adjustment Law, and Labour Standards Law (1947), the organization of labor unions was promoted and their labor movements were legalized.
- 5. Education reform (1947): The compulsory education was extended from 6 to 9 years.



Priority Production Strategy

In 1946, high inflation persisted despite a contingent measure restricting surplus purchasing power. To rapidly reconstruct the economy despite shortages of commodities and investment funds, the government in 1947 implemented a strategy to concentrate resources in priority industrial sectors such as steel, coal mining, electricity, shipbuilding, marine and railway transportation, and chemical fertilizer. Industrial production rapidly recovered from 31% of the pre-war level in January 1947 to 80% of that level, in April 1949.

Change in the US Strategy toward Japanese Recovery

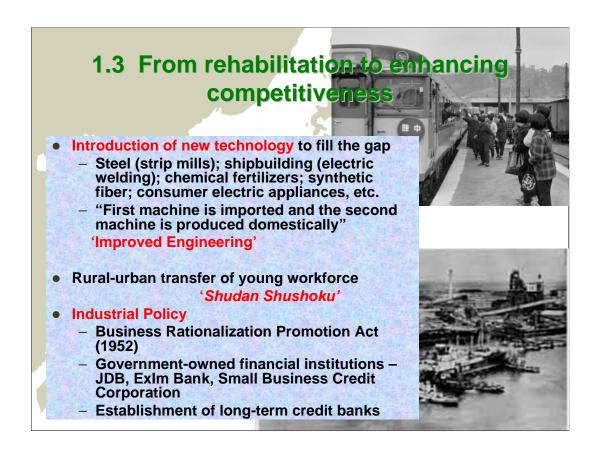
In the early stage of recovery, the GHQ's stance was to prevent Japan from regaining military power. As such, a full recovery of heavy industries was not necessarily permitted in the beginning. However, as the Cold War worsened, the US attitude gradually changed to allow Japan to re-industrialize and to become an independent economy. In 1949, a series of severe belt-tightening policies was conducted by Joseph Dodge, a US banker who came to Japan as an economic adviser to the GHQ. Policies included enforcement of a balanced budget, and reduction of both price subsidies and inflation, i.e. stabilization. As a result, the economy fell into a serious slump. In 1949, a fixed exchange rate of 360 yen per US dollar was introduced in order to spur Japan's international trade. This exchange rate was broadly perceived as overvalued given the weak competitiveness of Japan's business sector then.

In 1949, a major reform in the tax system was also carried out following recommendations made by a team of experts headed by Carl Shoup. This reform focused mostly on direct taxes such as personal income tax.

This tight policy package strengthened the business environment and in retrospect, provided the basis for economic development. However in the short run, it pushed the Japanese economy into a severe recession.

Favorable External Conditions

The Korean War, which broke out in 1950, resulted in high military demand and triggered rapid reconstruction of the Japanese economy. By 1952, Japan restored the real GDP level to a level comparable with that of 1935. After the Korean War ended (1950-53), the Japanese economy fully benefited from the sustained development of the world economy.



Domestic Factors

Domestic factors that enabled high growth included a high investment ratio supported by savings mobilization, migration of the younger-generation workforce from the rural area to cities by 'collective employment' (*Shudan Shushoku*, 1954-1975), and high productivity growth brought about by the introduction of foreign technology and 'improved engineering'. *Shudan Shushoku* increased workforce of 15-24 years of age in Tokyo by 1 million during 1955-1965.

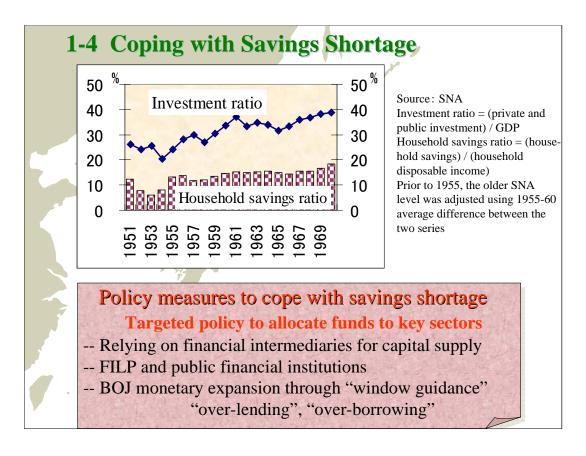
Industrial Development and Government's Industrial Policy

An expansion of business investment in the early 1950s shows that Japanese businesses shifted from phases of rehabilitation to one of strengthening international competitiveness through rationalization of production. Foreign technology was actively absorbed in key industries such as strip mills in steelmaking, electric welding in shipbuilding, and other technologies for chemical fertilizers and heavy electric machinery. New industries such as the automobile, synthetic fibre and consumer electric machinery also started to bring in new technology that promoted autonomous growth.

Government policies supported business development. The Business Rationalization Promotion Act of 1952 provided a special depreciation scheme for modernizing equipment in key industries. Government created financial institutions such as the Japan Development Bank, the ExIm Bank, and the Medium and Small Business Credit Corporation. The long-term credit bank system was introduced in order to provide public funds and long-term loans to the business sector.

Return to the International Community

In 1951, the San Francisco Peace Treaty was co-signed with the major allied-force countries, and Japan regained independence. Japan joined the United Nations in 1956. Japan also joined the International Monetary Fund and the International Bank of Reconstruction and Development (the World Bank) in 1953, and the General Agreement on Tariffs and Trade in 1955. In the case of the IMF, first Japan joined as an Article 14 country that allowed restrictive foreign exchange transactions for balance of payment purposes, and later became an Article 8 country in 1964. In GATT, Japan initially joined as an Article 12 country with possible trade restrictions for balance of payment purposes. The Japanese economy was under BOP constraints up until the mid 1960s.



Fund Shortage and Increased Role of Banking (indirect finance)

During the reconstruction phase of the postwar Japanese development, the biggest macroeconomic challenge was a shortage of funds for investment or <u>a shortage of savings</u>. In the early 1950s, the household saving rate was around 10% according to the System of National Account (SNA) data. The figure was slightly higher in household surveys (than in employee households). Like many other developing economies, Japan faced the risk of falling into the "savings shortage trap" where a shortage of savings leads to a shortage of industrial funds, which in turn leads to a limited production capacity, to stagnant income, and finally comes back to aggravate the savings shortage.

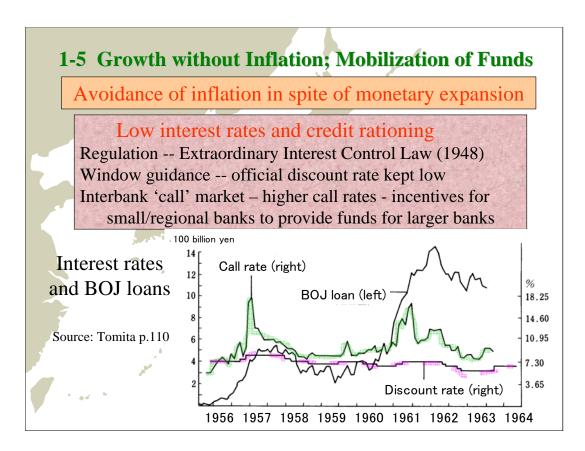
In order to cope with this shortage, Japanese government adopted targeted policies and directed funds to key industries for dynamic economic growth, rather than relying on a market-oriented allocation of the limited funds.

First, the government relied on financial intermediary institutions to supply industrial funds, rather than relying on capital markets. To this end, three big long-term credit banks were established (along with large commercial banks) in order to provide long-term credit to these key industrial sectors. (Refer to the slide for the Main-bank System on page 36.)

Second, the government introduced the fiscal investment and loan program (FILP) in order to channel public funds to key industries through newly established public financial institutions such as the Japan Development Bank and small business loan corporations. The major sources of funds were postal savings and, at the initial stage, collateral funds established with earnings from the sales of products supplied by the US government as commodity aid.

Third, the Bank of Japan (BOJ) supplied high-powered money to the private sector by providing loans to private financial institutions through 'window guidance'. Commercial banks borrowed money from the BOJ and actively lent to business sectors, resulting in low capital ratios ('over-lending'). Business sectors borrowed heavily from financial institutions, again resulting in low capital ratios ('over-borrowing').

Then, the social system was formed/geared for increased savings: long working days, a six-day work week, and poor social security provision.



Growth without Inflation

This type of monetary expansion could normally lead to rapid inflation. However in Japan, overall inflationary pressure did not emerge. This was the case as the long-term credits provided were immediately used for real business investment, leading to an expansion of production capacity in a very short period.

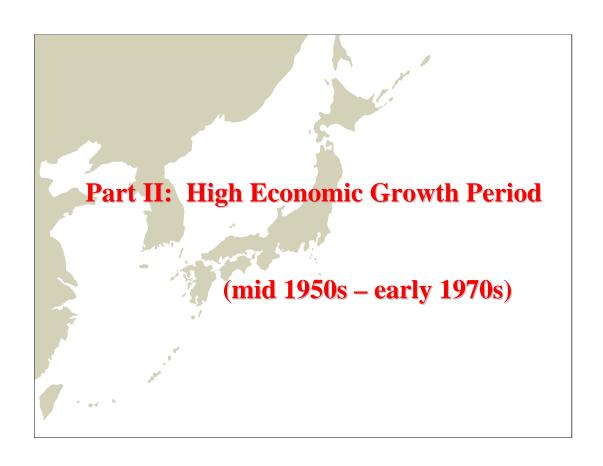
'Over-lending', or a persistently low capital adequacy ratio, ought to increase bankruptcy risks of financial institutions. However, the government policy protected the banking sector from bankruptcy and from cut-throat competition. Banks that faced financial difficulty were merged with healthier banks before their collapse. This policy scheme was often labeled as a 'convoy system', with the Ministry of Finance acting as commander-in-chief. As such, from the 1950s to the early 1990s, no major bankruptcies in the banking sector occurred in the Japanese economy.

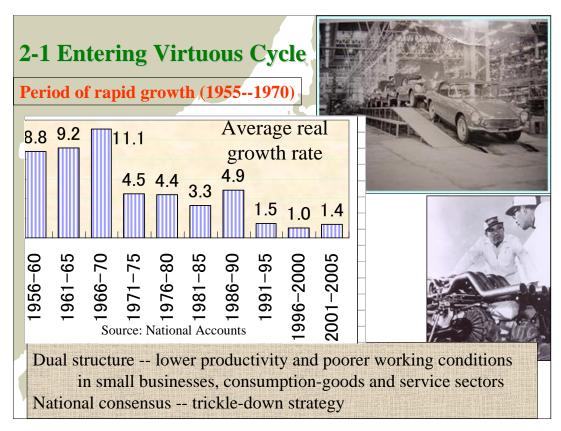
Artificially Low Interest Rates and Concentration of Funds

Interest rates were controlled at levels lower than potential market rates (open financial markets were underdeveloped). The 'Extraordinary' Interest Rate Control Law, enacted in 1948 to control increases in interest rates during the post-war hyper-inflation, survived 40 years and kept deposit and loan rates at low levels. Together with this interest rate regulation, the official discount rate (the rate of BOJ loans to commercial banks) was also kept at a lower level.

Artificially low interest rates amidst a shortage of savings naturally bring about excess demand for loans, that in turn calls for credit rationing. 'Window guidance' was adopted to compel commercial banks to provide funds to key industrial sectors, and to restrict an extension of the loan supply when monetary policy had to be tightened.

The only liberalized financial market was the inter-bank 'call loan' market where financial institutions dealt short-term money with each other in order to cover temporary shortages of funds. The 'call' rate was regularly higher than the official discount rate, and therefore regional banks and other small-size financial institutions had incentives to provide their surplus deposit to the call market rather than supplying loans to local and small businesses at less favorable terms.





Rapid-Growth Period and the 'Dual Structure'

The Japanese economy eventually entered an economic growth process with positively reinforcing feedback: demand expansion—production expansion—increases in income—consumption expansion—further income expansion—increases in savings—investment growth and an expansion of production capacity. The rapid growth period from the late 1950s to1960s was thus created. From 1955 to 1972, the Japanese real GDP grew by an annual average rate of 9.3%.

This virtuous cycle particularly benefited big businesses in heavy industries such as metal, chemicals, energy and machinery. Scarce funds were preferentially allocated to industries with a lower capital cost. On the other hand, although lower prices of capital goods as a result of the massive investment in machinery industries partly facilitated investments, small businesses and consumer-goods and services sectors suffered from shortages of investment funds.

This scheme was often criticized as having overly-favored key industries and big businesses. However, this strategy was generally accepted by most Japanese as a 'trickle-down approach' to raise incomes and living standards in Japan. In forming this consensus, government's medium-term economic plans, particularly the National Income Doubling Plan of 1960, contributed significantly.

Although it was generally a big success, this approach also created the problems associated with 'dual structure'. A world of difference in productivity, wages and in other working conditions emerged between the favored industries and those that were not. There was a big gap in competitiveness between heavy industries and big businesses on one hand, and consumer-goods and service-related sectors on the other. The cause of poor performance in the latter sectors was twofold: a shortage of investments and a lack of market competition. Even today, this continues to be a major challenge to the Japanese economy in the process of major structural reforms.

2-2 Demand and supply side factors for rapid growth

- Demand side
 - Shortage of production capacity investment demand
 - New consumer durables consumer demand
 - Increased Quality and undervalued exchange rate export expansion
- Supply side
 - Innovation seeds from overseas
 - Growth of working-age population and its migration
 - Increase in household savings
 - Rise in education attainment to enhance human capacity

National Income Doubling Plan (1961-70): great success

Demand- and Supply-Side Factors for this Rapid Growth

Demand-side factors:

- -- Due to rapid growth and the emergence of new products, the expansion of production capacity was always lagging behind that of demand. There was massive demand for fixed investment, and investment called for further investment.
- -- Household consumption started to drive the economy as consumer durables rapidly spread into households. First wave: monochrome TVs, washing machines, and refrigerators. Second wave: colour TVs, airconditioners, and automobiles.
- -- Demand for Japanese exports grew thanks to higher international competitiveness due to gains in product quality, and to the undervalued exchange rate.

Supply-side factors:

- -- There were ample applicable seeds of product/business innovation that Japan gained from overseas due to the technological gap with industrial economies.
- -- The growth rate of the working-age population was high. There was a massive migration of young-generation workers from rural to urban areas.
- -- The household savings ratio rose to finance investment growth.
- -- Higher education attainment supported rapid growth in human capital.

In 1960, the Cabinet of Prime Minister Hayato Ikeda adopted the National Income Doubling Plan and projected an annual growth rate of 7.2% between 1960 and 1970, aiming for a doubling of real GDP in this decade. The Japanese economy had in fact grown at a much faster pace.

2-3 Rapid growth as a "catching-up" process Catching-up process Goal of development Consensus formation Advantage of latecomers -- introduction of technology and process innovation -- lower business risks -- incentive for innovation and quality control through competition in foreign market

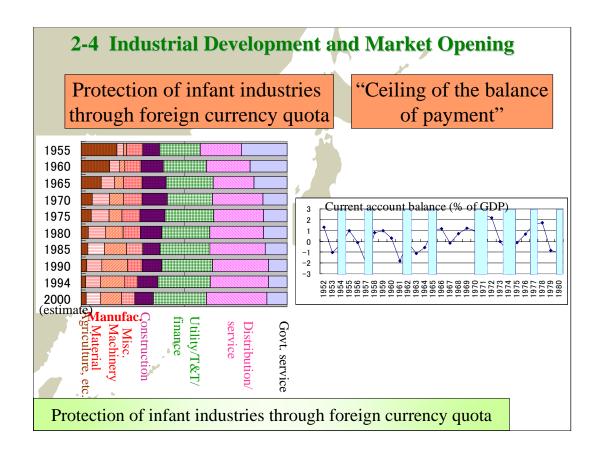
Advantage in Catching-up as a Latecomer

The fact that the Japanese economy was in the process of 'catching-up' with industrialized economies was a big factor that enabled sustained rapid growth. This 'catching-up' process came with the following "latecomers' advantages".

First of all, it facilitated technological progress. The import of foreign technology was given high priority in the allotment of foreign currency (limited foreign reserves). Manufacturing technicians and workers had sufficient technical skills and knowledge for them to utilize, emulate, and improve imported technologies ('improved engineering'). Manufacturing companies also had both the willingness and the ability to absorb such technical progress (Ohkawa and Rosovsky:1973, Chapter 9).

Secondly, foreign business was a good reference for the future development of Japanese business and consumer demand, so Japanese companies could effectively avoid market risks associated with new business operations.

Thirdly, for manufacturing companies, sales success in the markets of advanced economies was a powerful demonstration of their products' quality and competitiveness in the domestic market. Thus, they made massive efforts to export their products, which resulted in productivity enhancement, new technology development, quality control, and strengthening of non-price competitiveness that often offset increases in labor costs.



Export of Labor-Intensive Products

Since the end of World War II, Japanese tradable industries were highly protected from international competition. Imports, foreign exchange transactions and inward foreign direct investment were all tightly regulated. Trade barriers took the form of foreign exchange quotas as well as tariffs and other non-tariff barriers.

The trade structure then was to export labor-intensive manufacturing products in order to earn foreign currency revenue (foreign exchange) and then to import capital- and technology-intensive manufacturing products and raw materials.

Balance of Payments Constraint

Until the first half of the 1960s, a major constraint to Japanese economic growth was 'the ceiling on the balance of payment'. An expansion of the Japanese economy triggered an import boost and thus created and widened the trade deficit. The BOJ had to then tighten monetary policy in order to protect the value of the Japanese yen (the yen was at a fixed exchange rate). Monetary tightening, executed in the forms of a reduction in the loan supply to private financial institutions and an increase in the official discount rate, first effectively reduced banking credit extended to the business sector that highly relied upon bank loans, which put a brake on fixed investment, and thereby decelerated growth, thus leading to an improvement in external balance. Once the monetary policy was loosened, the Japanese economy rushed into the next expansion phase with a quick recovery in credit supply and investment.

2-5 Market Opening in the 1960s

Market opening on a scheduled, step-by-step basis

Foreign trade

1960: Trade Liberalization Program

"Positive list" ⇒
"Negative list"
Foreign currency quota ⇒
Automatic approval

Import liberalization ratio 1959 1966 34% 93% Foreign exchange

1960 Restoring yen's convertibility

1964
Accepting
IMF Code
Article 8

Inward FDI

1967~1970
Basic Program for
Capital Account
Liberalization

1970
Majority foreign
ownership was
allowed in
80% of
industries

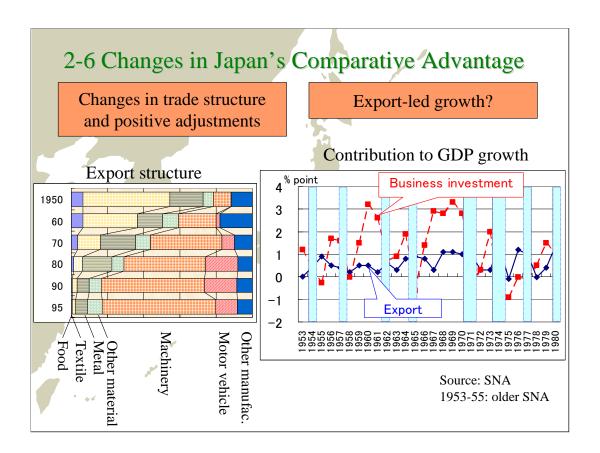
Market Opening during the 1960s

During the 1950s, as Japanese exports increased, industrialized countries gradually stepped up the pressure on the Japanese government to open its market. In the 1960s, the Japanese government initiated the process of market opening in a strategic (scheduled, step-by-step) manner.

<u>Trade liberalization</u> was conducted by changing the foreign currency quota for the import of restricted commodities (FA, fund allocation) to an automatic approval (AA). In 1960 the government adopted a comprehensive plan to liberalize foreign trade that changed a ground rule from 'restriction as a rule, openness as an exception' to the contrary. The ratio of liberalized import lines rose from 34% in 1959 to 93% in 1966.

With regard to <u>foreign exchange transactions</u>, the yen regained convertibility in 1960. In 1964, Japan accepted the IMF Code Article 8 that ruled out foreign exchange restrictions for the purpose of balance of payments stability.

As to <u>capital flows</u>, the law on foreign capital of 1950 stipulated that inward FDI should be allowed only if it contributed to an improvement in balance of payments. In reality, the majority of inward FDI applications were not approved as they were perceived to bear risks of harming the Japanese business sector. In 1967, a basic program for capital liberalization was adopted. This program was implemented by 1970, again in a step-by-step manner. By 1970, majority foreign ownership was allowed in 80% of Japanese industries.



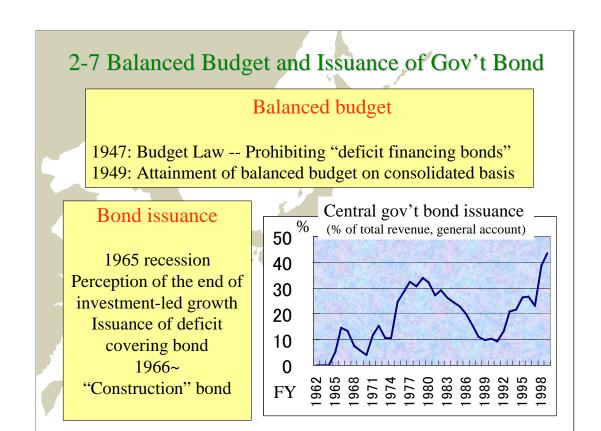
Changing Comparative Advantage

As wages went up in the Japanese labor market, labor-intensive manufacturing products such as textile products gradually lost their price competitiveness. On the other hand, price increases in capital-intensive and technology-intensive products were mostly avoided as wage increases in these sectors were largely offset by healthy productivity gains. Their prices relative to those of foreign products showed a declining trend, thanks in part to yen's fixed exchange rate. Thus, the structure of comparative advantage in Japanese manufacturing sector had completely shifted. Capital- and technology-intensive products were also products that faced elastic demand (high income elasticity). As a result, the structure of Japanese exports changed dramatically.

Given this rapid shift in comparative advantage, industries such as textiles, coal mining, shipbuilding, and after the first oil crisis, aluminum, exited or slimmed down substantially. Positive adjustments were made in expanding industries. The chemicals industry, originally concentrated on production of fertilizers, shifted its focus to basic chemicals, and then to 'fine' chemicals. Cement and other related industries moved to production of synthetic materials such as 'fine' ceramics. Textile industries turned themselves into multinational fashion industries.

Export as an Engine for Growth?

Looking at the developments in GDP components, exports or external demand had not necessarily played a major role quantitatively in Japan's economic growth, at least until the first half of the 1960s. On the macro front, business investment had been the major engine for Japan's growth. The contribution of export expansion—'trade (export) as an engine for growth'—was made through its microeconomic effects instead, by stimulating innovation and productivity growth in Japan's manufacturing sector.



Balanced Budget to Bond Financing

The hyper-inflation after the war was partly attributable to the Japanese government's massive budget deficit and its direct financing by the BOJ. In order to control inflation and to prepare for a self-reliant economic reconstruction, the 1947 Budget Law prohibited the issuance of bonds to finance the current deficit—the so-called 'deficit financing (covering) bonds'. Initially, there were loopholes in budgeting due to the existence of special accounts. Since the FY1949 budget, Japan's national budget was balanced on a consolidated basis (that is, including special accounts). Until the first half of 1960s, the budget was kept neutral to the macroeconomy.

The recession in 1965 turned out to be the first post-war economic slump against which monetary loosening was not effective. A serious question was raised regarding whether the post-war rapid growth process driven by business investment had ended. Pessimistic views predicted persistent shortages of final demand unless it was supported by government demand. In 1965, due to a shortage of tax revenue, the government was forced to issue deficit financing bonds, enacting an extraordinary law to allow it. Since then, in order to fill gaps in final demand while conforming to the Budget Law, the Japanese government has continued to issue bonds under the name of 'construction bonds', to finance development of social overhead capital. The size of bond financing (deficit financing by bonds) continued to be small until the mid-1970s.

2-8 Role of Economic Planning 14 economic plans officially adopted Economic plans in a free market economy 'Indicative-type' rather than 'Command-type' Sharing of information between the government and the public (business and household sectors) -- Medium-run development scenario the government assumes, including target economic growth rate and other indicators -- Medium-run economic policy stance and policy priority, including allocation of funds for investment in social overhead capital -- Economic behavior of household and business sectors that the government deems desirable

Economic Plans

To what extent did the government's economic plans contribute to the success in Japan's post-war development?

The Japanese government first adopted the 'Economic Self-Reliance Five-Year Plan' in 1955. Then economic plans of five- to ten-year duration were created in sequence. The 'Doubling National Income Plan' adopted in 1960 with the target year of 1970 was often regarded as the most successful plan. The plan that aimed at doubling national income in real terms in ten years was executed successfully by building confidence within Japanese business and household sectors, thereby attaining such rapid economic growth.

Up to the present day, there have been 14 officially adopted economic plans. Although their planning periods were five to ten years, all of them were replaced by revised plans before the end of the original plan period. This was partly because of deviations of actual economic conditions from the assumed economic framework during the plan period, and partly because new administrations preferred to adopt their own new plans when they took office. Even before the enactment of the first official plan, there were discussions among government sections, businesses, consumers and academia that contributed to the national consensus building on development strategies.

Nature of Economic Plans in a Market Economy

Economic plans in the market economy were geared to communicate government's views on the future of Japanese economy to the public, and to form a national consensus. Japanese economic plans usually consisted of the following ingredients: i) medium-term development scenario that the government assumes, including an economic framework such as targeted rates of economic growth and inflation; ii) medium-run economic policy goals and policy priority, including allocation of investments in social overhead capital in the plan period; and iii) private sector's actions that the government considered desirable. As such, these plans were of an 'indicative-type' rather than those of 'command-type' widely seen in central planning economies. Acceptance of those suggested actions was optional rather than compulsory.

Examples of Adopted Economic Plans								
	10							
Name	Plan period	Major purposes	Growth target /actual growth					
1.Economic Self- Reliance Plan	1956 ~1960	Economic self-reliance Full employment	4.9% 8.8%					
3.Doubling National Income Plan	1961 ~1970	High growth Higher living standard	7.8% 10.0%					
5. Economic and Social Development Plan	1967 ~1971	Balanced and fulfilled economy/society	8.2% 9.8%					
7.Economic and Social Basic Plan	1973 ~1977	People's welfare International relations	9.4% 3.5%					
8.Economic Plan for 2 nd Half of the 1970s	1976 ~1980	Stable development Fulfilled people's living	6%+ 4.5%					

Economic Plans that Played a Significant Role

During the rapid growth period, economic plans generally contributed to a consensus formation. The typical case was the Doubling National Income Plan. Subsequent plans such as the 'Economic and Social Development Plan' (1967—1971) and the 'New Economic and Social Development Plan' (1970—1975) addressed problems that emerged as a result of this rapid growth, such as pollution, income inequality, and rapid urbanization and concentration. These plans shed light on the importance of balanced economic development.

Although the plan was very short-lived due to the dramatic changes caused by the first oil crisis, the 'Economic and Social Basic Plan' (1973—1977) focused on people's well-being and international aspects of development. With the energy crisis, pessimistic views on Japan's growth potential prevailed. The 'Economic Plan for the Second Half of the 1970s' (1976—1980), by (1) advocating potential annual growth rates of 5 to 6%, (2) emphasizing the needs of structural reforms and (3) adopting energy-saving initiatives in order to regain growth potential, contributed to Japan's overcoming of the oil crisis.

Compared to these plans, subsequent plans were less effective in setting/forming national consensus. In a post catch-up era, government plans should be limited to government's own reform agenda such as regulatory and budgetary reforms.



3-1 Socio-Economic Transformation

Employment share	1955	1970
Primary industry	41.3%	19.7%
Secondary industry	24.9%	35.3%
Tertiary industry	33.8%	45.0%

- Labor market labor surplus to labor shortage
 - Wage increase productivity-differential inflation
- Infrastructure
 - Tokaido bullet train; Meishin super highway
 - Physical transportation modes motorization
- Negative side
 - Underdevelopment of social overhead capital (infrastructure) for better living
 - Overpopulation in urban areas and depopulation in rural areas
 - Environmental degradation
- Public pension system extended to self-employed

Socio-Economic Transformation

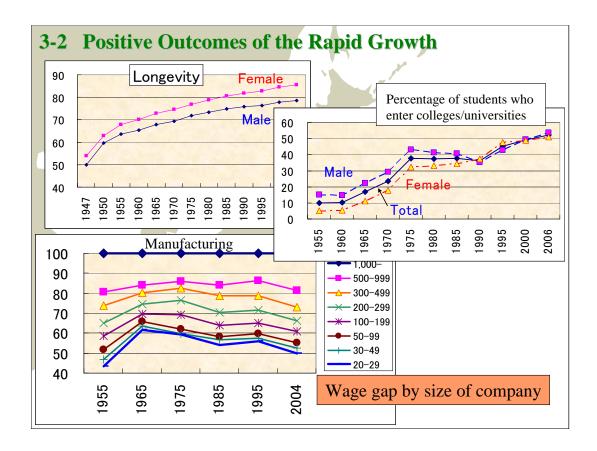
During the rapid growth period, Japanese society underwent various changes. From 1955 to 1970, the share of primary industry in total nominal GDP decreased from 19.2% to 5.9%, while that of secondary industry increased from 33.8% to 43.1%. In terms of employment share, primary industry declined from 41.3% to 19.7%, secondary industry from 24.9% to 35.3%, and the tertiary sector from 33.8% to 45.0%. Changing conditions in the labor market, from excess supply to labor shortage at around 1960, resulted in wage increases even in the less productive sectors and smaller companies. A shrinking wage gap in spite of the persistent gap in labour productivity caused the so-called 'productivity-growth-differential' inflation. The consumer price index constantly increased from the beginning of the 1960s, while wholesale prices were relatively stable.

Regarding people's livelihood, a spread of consumer durables caused substantial changes in consumers' lives ('consumption revolution'). A sense of 'middle class' was shared by a large part of Japanese society.

Economic infrastructure was actively developed as seen in the opening of the Tokaido bullet train between Tokyo and Osaka in 1964, and a super highway between Komaki (near Nagoya) and Nishinomiya (near Kobe) in 1965. Motorization proceeded with increases in auto sales and highway construction.

On the downside of the rapid growth, some significant distortions developed. Most notably were (1) a delay in development of living-related infrastructure, (2) urban overpopulation and rural depopulation as a result of labor movement from rural to urban areas, and (3) environmental degradation. With the advent of four major pollution-related diseases, the government took anti-pollution measures such as the enactment of the Basic Law for Anti-pollution Measures in 1967 and the establishment of the Environmental Agency in 1971.

As for social insurance, the National Pension System started. The coverage of public pension and health insurance was widened to all people including self-employed and unemployed by the late 1960s.



The rapid growth raised the income level and people's living standards. For example:

Lifespan lengthened

Thanks to increases in income, education on nutrition, vaccination and other medical care improvements, people's health condition dramatically improved. Average life span of the Japanese was lengthened from 60 years for males and 63 years for females to 71 and 77, respectively, between 1950 and 1975. It continued to lengthen after the end of the rapid growth, and now stands at 78 for males and 85 for females.

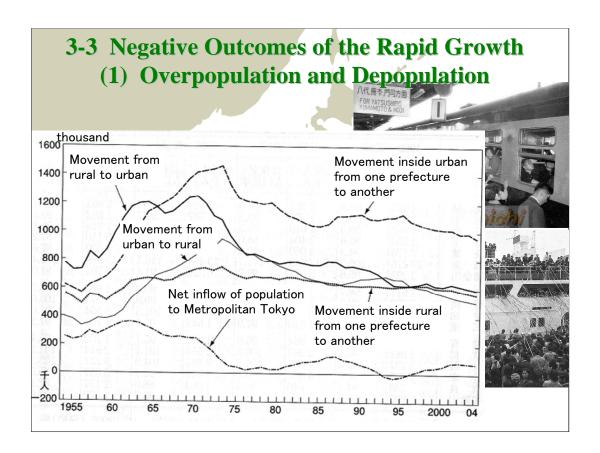
Education attainment improved

Higher education had become far more accessible to ordinary people. The percentage of young people who enter universities/colleges (including junior colleges) jumped up from 10% (male: 15%, female 5%) in 1960 to 38% (male: 43%, female 32%) in 1975. University enrollment ratio stagnated from 1975 to 1990, but it started to rise again in the 1990s, this time mainly due to a significant increase in female students' enrollment. Now the gender gap in university enrollment has almost disappeared.

Income gap narrowed

After WWII ended, Japan's economic development strategy initially focused on recovery of key industries and of large size enterprises.

Small businesses and non-manufacturing sectors were left behind in terms of productivity, wages and working conditions. The productivity gap continued to widen during the rapid growth period. Nevertheless, overall labor shortages as a result of the rapid growth eventually pushed up the wage levels even at small and non-manufacturing companies. The wage gap by company size narrowed sharply from 1955 to 1965, but that trend reversed afterwards.



Dark Side of the Rapid Growth

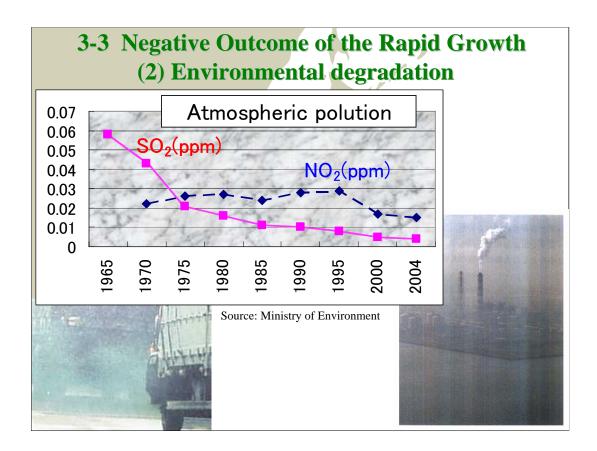
The rapid economic growth also brought about significant problems in society, such as (1) over-population in metropolitan areas and depopulation in rural areas; (2) weakening of social cohesion such as regional community and family relationships; and (3) environmental disruption such as air and water pollution, noise, increase in waste, and land subsidence. Here (1) and (3) will be discussed.

Over-Population and Depopulation

The rapid growth period was also a rapid population movement period. The substantial shift of the industry structure from agriculture to manufacturing and services drove farmers to urban areas to seek job opportunities and urban life. Agricultural employment halved from 13.3 million (33% of total employment) in 1960 to 6.7 million (2.6%) in 1975. It has continued to decline and as of 2005 only 2.9 million (4.7%) are engaged in agriculture, a majority of whom engage in other jobs and farm only "part-time". In particular, to fulfill the labor demand expansion in manufacturing, sons and daughters of farmers were systematically sent to big cities in large numbers.

Over-population in the metropolitan areas unavoidably caused the congestion phenomena, such as traffic jams, poor housing conditions, a shortage of urban infrastructure, terrible commutes, and environmental pollution. Depopulation in the rural areas resulted in more reliance on food imports, further budget dependence of the local government on the central government, and a higher risk of natural disaster due to devastated fields and forests.

The rural-to-urban migration calmed after the economic growth rate slowed, but the inflow of population into the Tokyo metropolitan area has been consistent.



Environmental Degradation

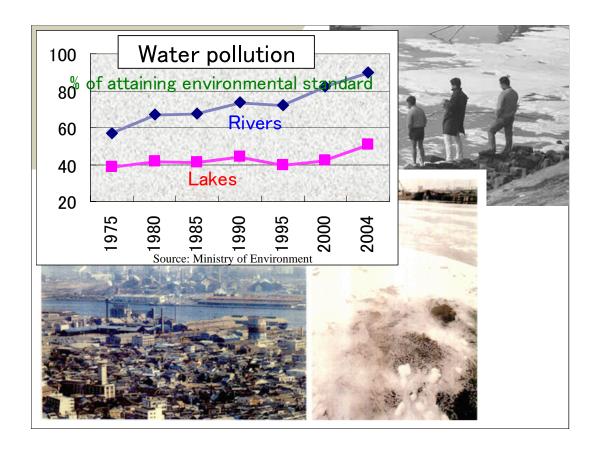
The development strategy that put emphasis on industrial growth caused serious environmental degradation in many parts of Japan.

Atmospheric pollution

Metropolitan and industrial areas faced serious problems associated with air pollution, beginning in the 1950s. Smoke covered the cities and the number of asthmatic patients increased in major industrial cities.

The government enacted a law to control air pollution in 1962 that mainly focused on smoke emission from coal fuel. However, it did not address the emerging industrial use of petroleum fuel that caused sulfa-oxide emission or the increasing emissions from automobiles. In 1968 this law was revised as the Air Pollution Prevention Law. It regulated SOx emission from factory chimneys. Factories were forced to build very high chimneys of 100 to 150 meters. Although this law was effective in reducing SOx exposure around the factory chimneys, it also created air pollution in a wider area. In 1970, the law was substantially amended in order to allow prefectural governments to (1) set stricter standards than those set by the central government, (2) introduce direct punishment against violators, and (3) widen the coverage of regulation from specific regions to nationwide.

Now the level of SOx emission has decreased to 1/10 of the level in 1965. However, NOx emission that mainly comes from automobiles is still at a high level.

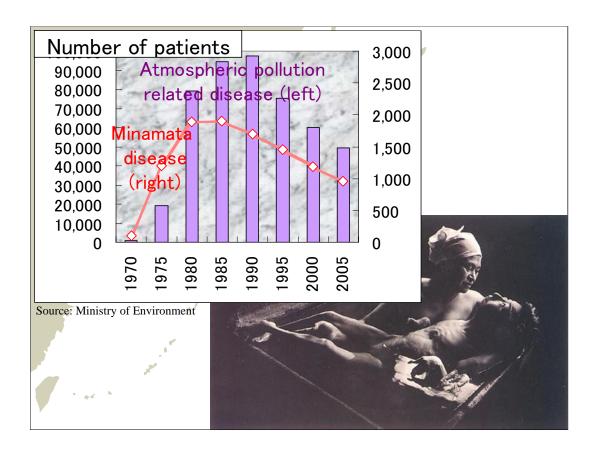


Water pollution

Water pollution was also a serious environmental problem. The water quality generally deteriorated in lakes, rivers, seas, and underground water. Emissions of harmful substances from factories caused very serious human diseases that often were fatal. The most prominent example was the Minamata disease, caused by Methylmercury contained in drained water from chemical factories that killed and disabled many people in Kumamoto in the 1950s and Niigata in the 1960s. Accumulated slime created by water drained from pulp/paper factories and contaminated rivers and coastal waters.

Not only industrial but also household emissions aggravated the situation of water pollution.

Although two laws were enacted in 1958 in order to protect water quality from factory emissions, they were largely ineffective. In 1970, a far more potent Water Pollution Prevention Law that introduced a strict liability principle to water pollution was enacted. Thanks to this law and technological developments, the quality of water has been improving since then.



Diseases Caused by Environmental Degradation

Environmental pollution caused serious diseases in various regions in Japan. Even confined to officially recognized cases, the estimated number of patients of diseases related to air pollution such as asthma in Yokkaichi City, Mie, surpassed 100 thousand in 1988.

A symbol of Japan's pollution disease, Minamata disease. The number of officially recognized Minamata patients reached 1,924 in 1984. There was a far larger number of patients requesting official recognition. In March 1978, the number of recognized patients was 1,348, while 5,385 patients were filing for recognition.

3-4 Gaps between Manufacturing and Non-Manufacturing Sectors

Manufacturing sector -- productivity growth Non-manufacturing sector -- stagnant productivity

preferential financial and foreign exchange allocationdifference in market competitiveness

Manufacturing

Non-manufacturing

Catch-up process
Japanese-style market system

International competition Regulation and protection

Manufacturing vs. Non-Manufacturing Sectors

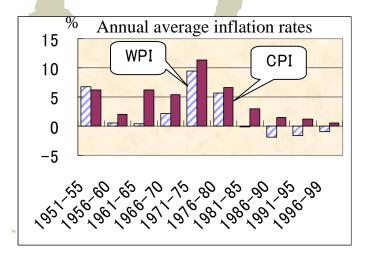
During the catch-up period, Japan's tradable sector built a strong comparative advantage in manufacturing, taking advantage of (1) the Japan-specific employment practices, (2) joint development of parts/components through a supplier network called "keiretsu," (2) the long-term management strategy supported by the mainbank system, (4) the corporate governance structure, and (5) the effective protection from foreign capital through cross share-holdings.

This successful system of development unavoidably restricted market competition by effectively preventing entries and even exits. In the tradable sector, however, tough international competition effectively offset the disadvantages associated with this weaker domestic competition. As tariff barriers and quantitative restrictions effectively protected the domestic market until the late 1950s, actual or potential pressures of international competition mainly came from export markets. Even in the domestic economy, the markets of the tradable sectors were very competitive during the industrialization period (Aoki and Okuno: 1996, p.13). Although the elements of competition were not provided through a typical neoclassical market mechanism consisting of many mutually unidentified participants, competition among 'visible' participants whose names and faces are known to each other was often tougher than that with many 'invisible' participants.

In contrast to the success in the tradable sector, the non-tradable non-manufacturing sectors of the Japanese economy lagged behind as they were effectively isolated from global competition. Moreover, the government's market interventions, excessive regulations, fiscal and financial subsidies, and protection of domestic markets from imported services and foreign direct investments, hindered sound competition in these sectors. Thus, productivity growth was not seen in non-tradable non-manufacturing sectors.

Relatively low productivity growth in the non-tradable sector and resultant mild inflation

BOJ's accommodative monetary policies effectively stimulated corporate profits, investment, employment, and consumption



Stable WPI with CPI Inflation during High Growth Period

Certain non-tradable sectors grew, nonetheless, thanks to diversified demand structure. Relatively vibrant non-tradable sectors were distributions (retail/wholesale trade), leisure services, business services, and housing and urban development.

Productivity growth in non-tradable sectors was generally slow, particularly relative to that in the tradable sector. As a result, mild inflation in consumer prices emerged. As labor union movements became coordinated across sectors, wages in less productive non-tradable sectors tended to increase with increases in wages in tradable manufacturing sectors. It imposed a higher unit labor cost in non-tradable sectors and these increased costs were passed to their product prices as those markets were heavily protected. Thus, while manufacturing producers' prices did not show any rising trend (only cyclical fluctuations), consumer prices consistently rose at a rate of about five percent per year.

Mechanism of Economy-wide Growth

The BOJ provided ample money in order to support rapid growth in the Japanese economy starting in the 1950s. Beginning in 1965, the government began to issue bonds every year, sold to the syndicates of private financial institutions. Under tight financial market regulation, the bond interest rates were set substantially lower than long-term market rates. Therefore bonds were not attractive instruments for the financial sector. The BOJ ended up purchasing them from the financial sector within one year of issuance. Thus a very accommodative monetary policy was created.

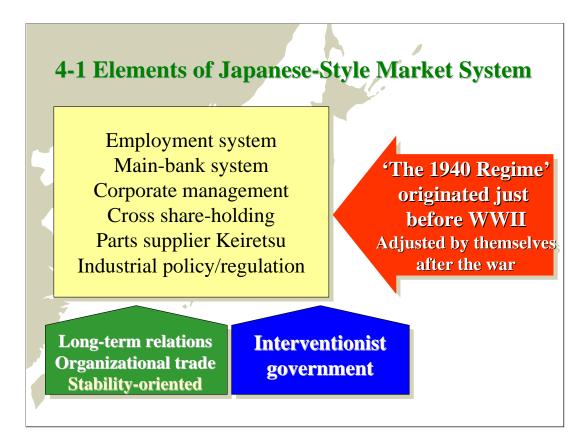
This accommodative monetary policy and resultant mild inflation assured profits for manufacturing companies and thus attracted new investment while enabling job creation in non-manufacturing sectors that supported the expansion in manufacturing sectors. In this way, strong economy-wide macroeconomic growth was preserved.

Annual growth of total factor productivity

	1955-70	1970-80	1980-95
Manufacturing	6.0	2.1	2.3
Light manufacturing	2.7	1.7	0.2
Materials	9.2	-1.9	0.6
Machinery	11.9	7.6	5.5
Non-manufacturing	4.2	0.3	0.3
Construction	2.7	-2.9	0.3
Finance/utility/T&T	6.4	1.8	0.7
Distribution & service	e 3.3	-0.1	0.2

Sector	/ Period	1955-70	1970-80	1980-95	
		(annual rate %)			
Manufactu	r				
	Production growth	14.2	4.4	3.5	
	TFP growth	6.0	2.1	2.3	
	Contribution of capital	6.0	2.8	1.6	
	Contribution of labor	2.2	-0.5	-0.4	
Nonmanufa	acturing				
	Production growth	10.9	5.0	3.6	
	TFP growth	4.2	0.3	0.3	
	Contribution of capital	4.6	3.7	2.6	
	Contribution of labor	2.1	1.0	0.7	
Light manu	facturing				
Ligitt illalia	Production growth	8.5	3.8	0.6	
	TFP growth	2.7	1. 7	0.0	
	Contribution of capital		2.8	1.3	
	Contribution of labor	1.2	-0.8	-0.9	
Materials	Contribution of labor	1.2	-0.6	-0.9	
Materials	Due divertiese essevette	19.6	2.8	2.7	
	Production growth	9.2	-1.9	2.7 0.6	
	TFP growth Contribution of capital		4.7	1.8	
	Contribution of capital	7.2 3.2	4.7 -0.1	0.3	
Machinery	Contribution of labor	3.2	-0.1	0.3	
Machinery	Due divertiese essevette	21.7	9.6	6.6	
	Production growth TFP growth	11.9	9.6 7.6	5.5	
	Contribution of capital		7. 6 2.6	5.5 1.9	
	-	6.2 3.6			
	Contribution of labor	3.0	-0.7	-0.8	
Constructi	on				
	Production growth	11.7	2.9	2.5	
	TFP growth	2.7	-2.9	0.3	
	Contribution of capital	5.9	4.3	2.1	
	Contribution of labor	3.2	1.4	0.1	
Finance/U	tility/transport/Telecor	m			
	Production growth	12.4	4.9	3.9	
	TFP growth	6.4	1.8	0.7	
	Contribution of capital	3.3	2.2	2.3	
	Contribution of labor	2.7	0.9	0.9	
Distribution	n/Service				
	Production growth	9.9	6.1	3.8	
	TFP growth	3.3	-0.1	0.2	
	-		- 0	2.8	
	Contribution of capital	5.0	5.2	2.0	





Elements of Japanese-Style Market System

In the development of Japanese industries, certain institutional schemes and business practices played an important role. Typical elements of the Japanese-style economic system and business practices included long-term employment and related labor market practices, such as in-house training, the dominant role played by the banking sector in corporate finance (via direct financing), corporate governance controlled by managers supported by a main-bank system, cross share-holdings among companies, and a close relationship between government and business with regulations and other kinds of market intervention such as 'guidance'.

Origins for the System

These elements of Japanese-style market system are often believed to be deep-rooted in Japan's traditional culture. Others think that this framework was designed after WWII for a quick recovery from the devastation of the war. In fact, many of the elements of the Japanese economic system originated from just before WWII, when there were national mobilization policies in preparation for the war. The system survived the war and was built into the Japanese economy with substantial adjustments after the war.

System with Long-Term Relationships

Whether the 'Japanese-style' market economy was a rational system or not continues to be debated. It was characterized by its *long-term* nature. That is, it included stable long-term engagements of economic agents, often implicit both in intra- and inter-company relations. Some elements of the system were exclusively Japanese, while other aspects were commonly shared with other market economies.

Although the long-term relationships embedded in the Japanese-style market system contributed positively to her economic development, it was exclusionary (anti-competitive) in its nature. New and potential entrants to markets, particularly foreign businesses (and foreign governments), continue to criticize this exclusivity.

In Need of Change after the 'Catch-Up' Process

The Japanese system apparently worked effectively during its 'catch-up' phases of development. However, after having 'caught up', it is now believed that new progress must come from autonomous risk-taking behavior by businesses and individuals. In this regard, the Japanese-style system of development based on consensus and cooperation that once functioned so successfully has become an obstacle. The system was (and still is) in need of change.

Development of Japanese-style Market System = The 1940 Regime

The 1940 Regime [Yukio Noguchi (2002)]

- Main-bank system
 - 1941: syndicate loan group w/ the leadership of IBJ
 - 1942: examination departments in commercial banks
- Corporate governance 1939: dividend regulation
- Employment practice 1937: intra-firm labor unions;

1939: wage increase regulation (annual wage hike)

- Parts supplier *keiretsu* established during war-time
- Industrial policy 1941: regulation of industries
- Taxation relying on income tax 1940: withholding tax

. . . .

Corporate governance built on cross share-holdings Substitute for -- Autonomy of corporate managers Zaibatsu -- Long-term management perspective Prevention of -- Low capital cost of equity finance M&As 1987 1999 1995 Shares issued by business companies 29.7% Ratio of shares held by *stable* holders 28.7% 27.9% of which held by financial institutions 22.0% 20.1% 12.9% Shares issued by banks Ratio of shares held by stable holders 55.7%53.3%45.6%of which held by business companies 34.4% 32.9% 28.5% Source: NLI Research Institute (adjusted series for changes in disclosure rules)

Cross Share-Holdings

A separation of ownership and management of corporate entities was originally established in the United States. Japan, too, had separation of management from ownership, but in a Japanese style. A large portion of corporate equities was (and still is) held by other corporate firms including financial institutions, often known as 'stable shareholders'. This took the form of 'cross share-holding' among firms. Those (cross) shareholders were believed to be stable owners as they do not usually sell off the shares, try to take over the firms, or intervene in the management.

Cross holdings of corporate shares originated after WWII, partly as a substitute for pre-war *Zaibatsu* conglomerates that were forcefully dissolved, and partly as a preventive measure against M&As by foreign multinationals.

Thanks to this common practice, Japanese businesses had been relatively free from the threats of adversarial takeovers and from interventions by shareholders. In addition, as the stable corporate shareholders did not usually request high dividend payouts, the capital cost of equity finance had been extremely low. As such, corporate profits were mostly re-invested in new equipment, and this in turn raised the value of the firms and created massive capital gains for these shareholders.

This tendency toward low dividends was formed during WWII, when high dividends to capital investment were deemed inappropriate (Noguchi,1995). In 1939, dividend regulation was introduced. When inward foreign direct investment was liberalized in the 1960s, this system was effectively utilized in order to protect Japanese firms from takeover bids by foreign multinationals.

Thanks to this practice of stable shareholdings, corporate managers had the luxury of pursuing their long-term goals. As the mandate of management was not dominated by short-term profits, Japanese firms were able to invest in equipment, research and development, and human resource development.

Downside

The downside was the possible moral hazard in management as managers were not subject to monitoring by participants in capital markets.

Corporate finance relying on banking sector

- Functions of the 'main-bank system'
 - Saving of costs associated with asymmetry of information
 - Screening and monitoring
 - Signaling to other financial institutions
 - Corporate governance
 - Insurance to corporate management risks
 - Information exchange

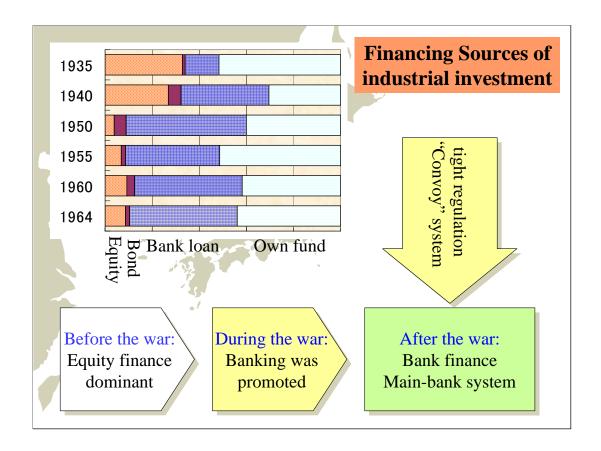
Main-Bank System

The Japanese corporate sector relied heavily on loans extended by financial institutions. Even today, when corporate financing through the capital market (i.e., direct financing) is growing, a substantial portion of business debt stock is still in the form of bank loans (i.e., indirect finance). (According to the Bank of Japan's flow of funds account, in 1997, non-financial corporations' aggregate outstanding loans amounted to 525 trillion yen, in which 407 trillion yen (77.5%) consisted of private bank loans as compared to corporate shares of 291 trillion yen and other securities of 83 trillion yen.)

Most firms have their *main banks*. A main bank for a firm is defined as the bank that has the largest share in total bank loans extended to that firm. Moreover, main banks often arrange bond and equity finance for the firms, and regularly monitor their corporate management and business plans/projects.

Functions of Main Banks

From a microeconomic point of view, the regular collection of borrowers' information by main banks was good therapy for the problem of information asymmetry between lenders and borrowers (i.e., the 'monitoring' function of main banks). This saved the cost of information collection and the risks associated with lending for non-main banks. In case management performance of a borrower firm temporarily worsened and the risk of bankruptcy arose, its main bank was expected to step in and rescue the firm with contingent loans and/or a loan rescheduling. A main bank dispatched top managers and extended advice for its rehabilitation (the 'insurance' function). When a decision was made by a main bank to finance a firm's project(s), other banks were pleased to provide additional loans as the main bank guaranteed the profitability of the project(s). In case of difficulties, the main bank was expected to assume the burden of a corporate bailout (the 'signaling' function). The main-bank system had played a role of corporate governance in the Japanese post-war system of development. In post-war Japan, where shareholders and capital markets did not assume the monitoring role due to the existence of 'stable shareholders' created by cross share-holdings, main banks took that role.



Equity Financing to Bank Financing under the 'Convoy System'

As a matter of fact, before World War II, corporate firms relied more on capital markets for their financing of investment. Commercial banks then often lacked the capacity to evaluate borrowers' repayment capabilities and associated risks. As the war became imminent, the government tried to provide a larger portion of available funds to military-related industries by seeking more direct control over fund flows. The authorities denounced stock markets for their speculative and disorderly nature, and encouraged markets of financial intermediation by banks. The authorities believed that financial intermediation by banks was much more controllable. Therefore, the seed of the main-bank system was formed in WWII, when the Japanese government took steps to make banks the key financiers of the economy. In 1942, examination departments were introduced into commercial banks by government regulation and began their regular monitoring of borrowers. This scheme was thought to be the origin of the main-bank system established after the war (Noguchi, 1995). The main-bank system facilitated Japan's economic growth by allocating funds to growing industries. Tight regulation of the financial sector by the Ministry of Finance, or the so-called 'convoy system', kept this sector 'orderly' and preserved a stable main-bank scheme. The main-bank scheme helped businesses to develop long-term plans by regularly providing loans and serving as a lender-of-last-resort in case of financial difficulties. Thus, the main-bank scheme played an important role in Japan's corporate governance as it kept corporate management prudent and long-term oriented.

Downside

The downside was that this scheme unavoidably weakened competition among financial institutions in terms of their fighting for corporate customers/borrowers. Main banks also often influenced borrowers' finance decisions and hindered the sound development of capital markets in Japan.

Labor market practices based on long-term employment

- Japanese-style employment practices
 - Long-term or 'life-time' employment
 - Wage increases and promotions based on seniority
 - On-the-job training (OJT)
 - Intra-company labor unions
- Rationality of long-term employment
 - Accumulation of company-specific skills and technology
 - Smooth transfer of skills from one employee to another
 - Smooth introduction of new technology
 - Saving of workers' transition costs of changing jobs
 - Less need to monitor workers

Japanese-Style Employment Practices

The Japanese labor market had been characterized by its so-called 'Japanese-style employment practices.' These practices consist of long-term employment (or 'lifetime' employment), a seniority-based wage system, promotions in internal labor markets, intra-firm labor unions, and long-run on-the-job training (OJT). Intra-firm labor markets were formed with equal opportunity given to all newly-recruited workers, with a slow promotion process (in selecting winners), and with active 'visible' competition among the participants. This kept young workers motivated.

Reflecting these employment practices, labor adjustments were performed mainly through lengthening/shortening working hours, wage adjustments, and intra-firm job transfer, rather than through layoffs. This prevented the rate of unemployment from rising even during recessions. Labor unions were organized as intra-firm organizations. The union membership was usually extended to both white- and blue-collar workers.

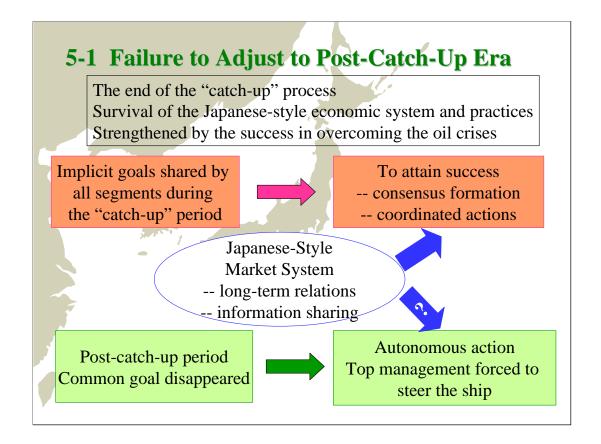
Development of These Practices

Before WWII, Japan's labor market was more like that written in an economics textbook. Although some big businesses had introduced long-term employment practices for their core white-collar workforce, manual workers (blue-collars) were most likely hired in spot markets. In 1937, in order to secure labor-employer cooperation in serving the nation, intra-firm unions encompassing both white-collar and manual workers were organized. These practices survived throughout the post-war development period as they had systemic advantages, such as a high level of worker morale, cooperative behavior among workers, firms' positive attitudes toward long-term human resource investment and OJT, and employees' positive attitudes toward technological innovation.

Advantages

From microeconomic viewpoints, these practices were effective means to (1) overcome difficulties associated with asymmetry of information regarding employees' abilities and work ethics, (2) promote workers' faith toward their companies through 'reputation' and 'hostage' mechanisms, (3) settle conflicts of interest in intra-firm negotiations, and (4) facilitate transfer of skills among workers.

Part V: The Evolution of the Japanese Development Model *** End of Catching-Up Process Bubble Economy (1970s – 1980s) ** Lost Decade and Beyond (1990s -)



End of 'Catch-Up' Process

The catch-up process seemed to have reached its successful conclusion by the end of the 1960s, at least as indicated by the level of per capita GDP (PPP). However, the economic system that brought about the successful 'catching-up' did not itself evolve, or adjust to the new needs in the post catch-up era. The traditional process of consensus formation played a significant role again at the time when Japan faced the first oil crisis of 1973-74. In order to cope with the quadruple price increase of imported oil and the resultant stagflation, economic agents implicitly agreed, as directed by the government, to accept tough industrial and employment adjustments and not to rely on accommodative macroeconomic policies for recovery. Eventually, the Japanese economy overcame high energy prices by energy-efficient manufacturing processes and products, and this, in turn, strengthened the international competitiveness of Japanese products. The Japanese economy weathered the second oil crisis of 1979, again without significant inflation or commodity shortages. In retrospect, however, this resulted in a survival of the modality of consensus formation, collective actions, and government leadership that was no longer suitable in the post catch-up era.

After the catch-up process was over, exogenously given goals for business and technology development no longer existed. Companies had to create their own goals and management strategies suited for their new targets. The elaboration of explicit goals and strategies by top management had become indispensable.

Manufacturing: adjustments to changing environment

- -- persistent appreciation of yen
- -- industrialization of Asian economies

Long-term employment

-- survived, taking advantage of OJT

(after bubble burst)-- increased shareof part-time ortemp workers

Parts-supplier "keiretsu"

-- survived, taking advantage of information sharing-- strengthened bargaining power of suppliers

(after bubble burst)
-- transforming into
a more market-oriented
network

Main-bank system

-- lowering of bigBusinesses' relianceon bank loans

(after bubble burst)-- consolidationin the bankingsector itself

Manufacturing (Tradable) Sectors in Transformation

The manufacturing sector, confronted with stiff global competition in the face of the rise in Asian nations and the yen's appreciation since the 1970s, constantly sought to maximize the rate productivity increase. This sector thus chose to preserve the effective parts of the existing system and to transform other elements. In other words, they were keeping what worked, and changing what didn't.

Labor Market

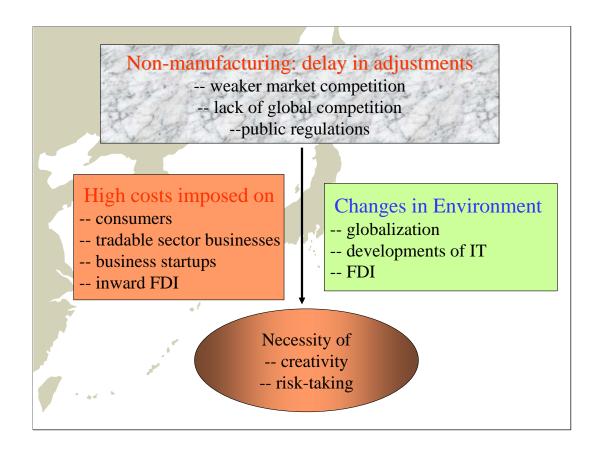
Many of the long-term employment practices survived because they are effective human resource management practices. The manufacturing sector tended to rely heavily on company-specific technology, and therefore more long-term, on-the-job skill development continued to be an effective option. After the burst of the bubble, however, the share of part-time and/or temp workers has been increasing with deregulations in Japan's labor market.

'Keiretsu

The parts supplier 'keiretsu' network system substantially changed due largely to the strengthened ability of parts suppliers to develop new products. With advantageous information sharing, the 'keiretsu' scheme survived. However, the nature of subcontractors' dependency on their 'parent' companies had largely changed. In many industries, final-assembly producers were no longer capable of designing new products without cooperation from parts suppliers. Backed by technological advantages, many suppliers could abandon their former customers if the terms of the transaction seemed disadvantageous to them and if they could find other partners. Parts suppliers' competitiveness was fostered by stiff competition with other suppliers in the same keiretsu network and by potential competitive pressure exerted by suppliers outside the keiretsu. This has been a typical form of 'visible' competition in the Japanese-style market system. Visible face-to-face competition was often tougher than textbook-style competition among anonymous players. This induced massive efforts to raise productivity, and to shorten delivery time. With the advent of more independent suppliers, parent companies started to source their parts from firms outside keiretsu if it was more cost efficient. Thus the parts supplier *keiretsu* transformed itself into a more open, market-oriented system.

Main-Bank System

By the 1970s, major manufacturing companies were no longer dependent on specific financial institutions for their investment funds. In the 1980s, capital market instruments (equity finance, CP, etc.) had regained strength in corporate finance in Japan. Financial institutions often lost their best customers and frantically sought new borrowers. They found new customers typically among construction, real estate and non-bank financial sectors. Although the business activities of these new customers involved substantial risks, banks tended to lack information to evaluate these risks properly. As a result, those new loans were backed by real estate collateral. Market values of real estate collateral were based on a very optimistic future assessment, and this, in turn, fueled the bubble formation.

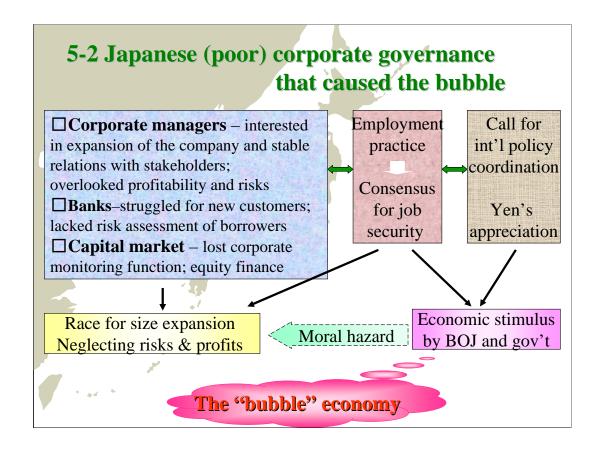


Delay in Adjustments in Non-Manufacturing (Non-Tradable) Sectors

In addition to the lack of international competition, a slower pace of economic growth after the end of the catch-up process limited the space for market competition in the non-manufacturing (non-tradable) sectors. The traditional Japanese market system and public regulations continued to restrict competition and protected matured or declining sectors.

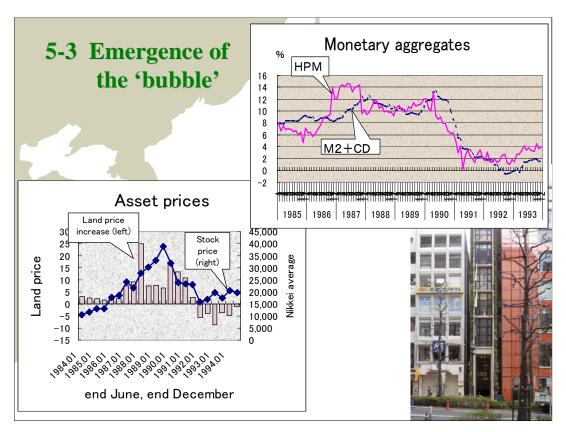
The lack of competition led to lower productivity in these sectors, which in turn imposed high costs on consumers and growing manufacturing industries.

Owing to the globalization of economic activities and rapid development of information technology, the Japanese economy had entered an era of a diverse, knowledge economy. Here, even the competitiveness of the nontradable sectors is determined by creative ideas and risk-taking innovative behavior.



Into the 'Bubble' Economy

In the second half of the 1980s, Japan developed a 'bubble' economy. Major factors that drove the Japanese into the speculative boom were competition among firms seeking an expansion of their company size, competition in the banking sector to expand the loan supply and other investments without due consideration of credit risks, and economic stimulus measures taken by the Bank of Japan and the government in the face of the Yen's rapid appreciation after the Plaza Accord. Many factors were attributable to the Japanese-style market system. The lack of sound corporate governance both in non-financial and financial entities, and the social consensus demanding job security as a result of the ingrained long-term employment practices can also both be blamed.



Social pressure to maintain job security

Japan's labor market practice (long-term employment) had led to a strong national consensus demanding job security and no firings or lay-offs. Under the practice of long-term employment and seniority-based internal promotion, companies were compelled to try to ever expand their size in order to offer a sufficient number of posts in their company hierarchy.

The government was expected to avoid recession to keep unemployment low. However, in September 1985, there was the signing of the so-called Plaza Accord which triggered a rapid appreciation of the yen. The yen's rapid appreciation was a threat to the Japanese economy that relied so heavily on exports to the US market. In order to avoid an economic slump, the government took fiscal stimulus measures, and the Bank of Japan took an extremely accommodative monetary policy. This stimulating policy stance was maintained even after the real estate and stock market booms began to emerge; this flooding of money supply thereby further fueled the bubble economy.

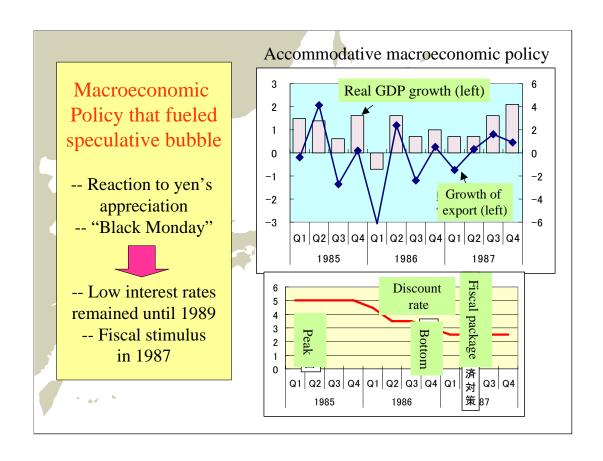
Emergence of the bubble

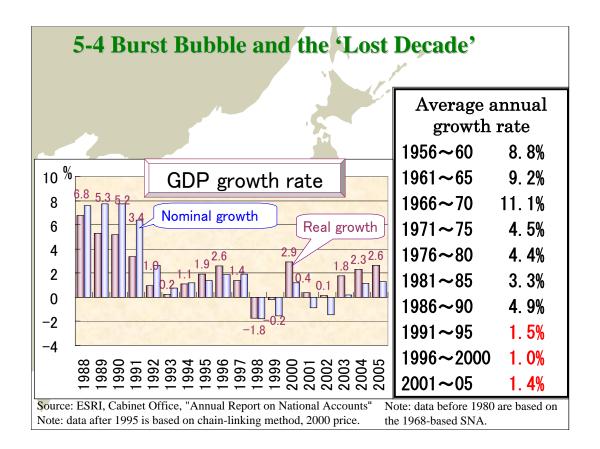
The two-digit rate of expansion of monetary aggregates fueled asset market inflation. Land prices rose by 50% on average nationwide during the second half of the 1980s. In Tokyo and other metropolitan business districts, land prices even tripled, peaking in early 1991. Stock prices in terms of the Nikkei average quadrupled to peak values at the end of 1989.

As Japanese became more and more optimistic regarding the future course of the economy, massive funds were poured into domestic and overseas business projects. The resultant build-up of 'excesses', such as excess capacity, excess employment, excess liability and excess loan supply, necessitated a long process of stock adjustments once the bubble economy collapsed in the early 1990s.

Financial institutions that were insensitive to risks

Japan's financial institutions were not sensitive enough to credit and other risks, as they had been protected by the 'convoy system' led by the Ministry of Finance. They found new customers in construction, real estate, and non-bank financial sectors, and provided loans to them with real estate collateral. This created a typical spiral increase in real estate values and loan supply.





Low rate of economic growth persisted after the bubble burst

After the collapse of the 'bubble' economy in early 1991, the Japanese economy rapidly fell into recession. It technically bottomed out in late 1993, but the recovery process was slow and fragile, with an average annual growth rate of only one percent plus throughout the 1990s and the early part of the 2000s.

Changes in employment practices

During this post-bubble period, the Japanese economy experienced negative growth in real terms in two different years. The unemployment rate that used to be only one to two percent until the early 1980s steadily rose to 5% in 2000. The share of 'non-regular' employees, such as part-time workers, fixed-term workers, and temp workers sent out by 'temp agencies,' had drastically increased, signifying a departure from the long-term employment practice.

End of the 'convoy system'

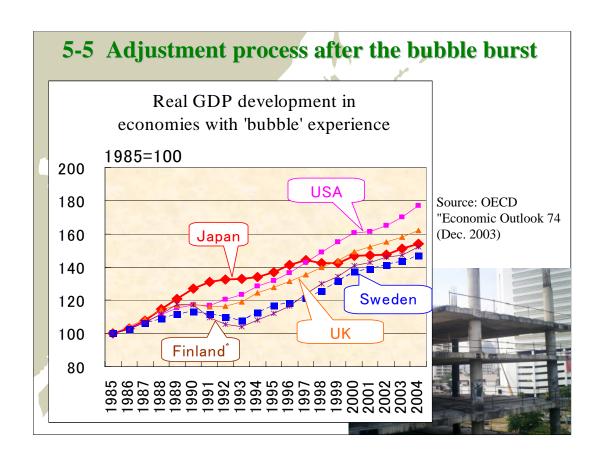
Corporate profits stagnated. As a result of the accumulation of non-performing loans and the plunge in the market values of equities, some major financial institutions (e.g. Hokkaido Takushoku Bank, Yamaichi Securities, both in 1997) went bankrupt for the first time in the history of post WWII development of the Japanese economy. This signified the end of the 'convoy system.'

Persistent deflation

The Japanese economy experienced persistent deflation starting in the middle of the 1990s (which has in fact just recently ended). This, too, was a phenomenon never before experienced in the post-war development of Japan.

'Lost Decade'

Thus, the Japanese economy suffered significant stagnation, and the decade after the bursting of the bubble is now called the 'lost decade' in post-war Japanese development history. It was only after 2002 that the economy entered a steady, albeit weak, recovery phase.

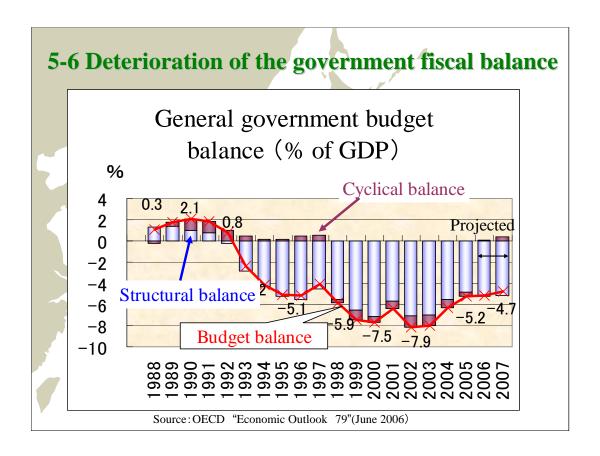


Comparative analyses of post-bubble developments

Speculative bubble formation and bursting occurred between the late 1980s and the early 1990s not only in Japan but also in the US and Scandinavian economies, and to a lesser degree, in the UK economy. In those countries, after the collapse, painful adjustments of excess capacity and redundancy were carried out often with rather drastic financial stabilization measures including temporary nationalization of major banks. Their real GDP shrank and unemployment rates jumped up during transition. Sweden and Finland went through a severe transition phase.

In contrast, in Japan a top priority was to maintain employment, and therefore drastic measures were avoided. Companies tried to hoard their employees. The government pumped massive amounts of money into the economy through public works and tax cuts. The Bank of Japan poured literally unlimited liquidity into the economy. Faced with failing borrowers and an accumulation of non-performing loans, banks, at least initially, continued to supply additional loans in order to let borrowers survive. They propped up their sick and hobbling customers, but with further burdening debt.

As such, in spite of the burst of probably the largest bubble among the aforementioned countries, the Japanese economy maintained slightly positive rates of growth in the first half of the 1990s. However, this strategy of preserving employment prolonged the following adjustment process and increased the total adjustment costs. With the bankruptcies of some major financial institutions in late 1997, the stagnancy of the Japanese economy continued into the 21st century.



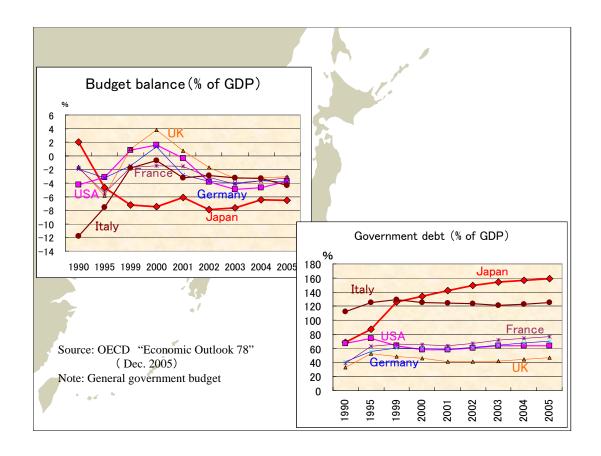
Macroeconomic policy

Policy options that Japanese had after the bubble burst were (i) traditional macroeconomic stimulus measures (fiscal and monetary), (ii) financial measures to restore the financial intermediary system, and (iii) structural measures to speed the disposal of 'excesses' built up during the bubble period and to develop new business sectors. In fact, the chosen policy mix was traditional macroeconomic stimuli, partly coupled with financial rehabilitation measures. The necessity of structural reforms was not fully recognized at least until the latter half of the 1990s.

Discretionary fiscal policy and 'structural' budget deficit

Japan adopted a discretionary fiscal policy, which is the utilization of measures like tax reduction and public investment, to stabilize the economy. The subsequent build-up of budget deficits shows the extent of this massive budgetary support for the ailing economy. The budget deficit can be broken down into two parts. One is the *cyclical* deficit that reflects the functioning of the automatic stabilizer such as tax revenues and unemployment benefits. The other part represents *structural* deficit. This latter part comes from intentional fiscal policies such as tax cuts and expenditure programs, and from institutional factors such as subsidies, education expenses, and social security and taxation systems.

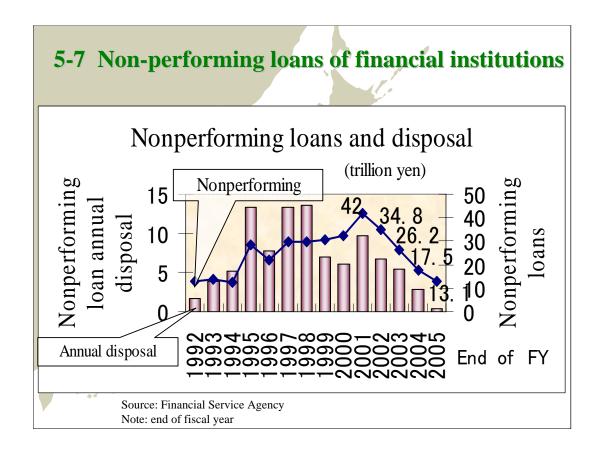
Since the bubble burst, the majority of Japan's general government budget deficit has been *structural*, which has expanded rapidly due to repeated economic stimulus measures taken in the 1990s.



Japanese budget balance in comparison to the other industrial economies

In the 1990s, most industrialized economies consolidated their budgets, and some even attained budget surplus. Japan, on the contrary, experienced a sharp deterioration of the budget balance, from a surplus in 1990, to a massive deficit of more than 7% of GDP by the turn of the century. As the social security account has maintained a surplus of about 2% of GDP during this period, the central and local governments have been in fact running a deficit worth about 9% of GDP.

Budget deficit has been largely financed by issuance of government bonds and by other kinds of borrowings. As a result, the outstanding government debt has reached 160% of GDP. Japan is now the country with the world's largest government debt.

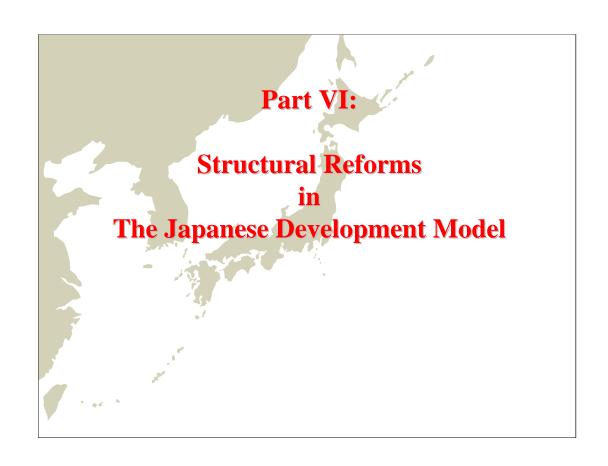


Non-performing loans

During the bubble period, financial institutions poured money into the real estate sector (more than 100 trillion yen), taking real estate itself as collateral for loans. When the bubble burst, the construction and real estate sectors failed to make a profit and quickly became unable to pay their debts. With plunging real estate prices, the liquidation of real estate collateral proved insufficient to cover loans. Thus, non-performing loans quickly accumulated on a massive scale.

Disposal of non-performing loans

The disposal of NPLs started in 1992. At the time of the adoption of the comprehensive economic package in the summer of 1992, Japan already recognized the gravity of its NPL problem, based on observation of other countries' earlier problems with NPLs. The package that the Japanese government enacted aimed at disposal of NPLs and recovery of the real estate market and asset prices. The package contained measures such as liquidation (sales) of real estate collateral, preferential tax treatment on NPL disposal, disclosures of NPLs by the lending institutions, and resolution of non-bank financial institutions such as housing loan companies. Some economists and politicians, learning from experiences of other countries, were aware at that time that an injection of public money would be necessary to dispose of NPLs in the banking sector, however, the general public was in no mood to support this recapitalization as the public believed that the banking sector itself was the major cause of the speculative bubble. Only after a series of bankruptcies at major financial institutions took place in 1997 and 1998 was public money injected into financial institutions, which enabled banks to finally dispose of NPLs to a large degree. The recovery of a sound financial system was a key factor in bringing the economy back in 2002 to the steady (although still weak) growth path.



6-1 Japanese System in Transformation **Employment system** Main-bank system Major challenge Corporate management IT and globalization Cross share holding **Mega-competition** Parts supplier Keiretsu Aging of labor force **Change of values** Industrial policy/regulation reform OMarketization, competition, choice, diversity, own risk OCohabitation and competition of systems based on comparative advantage

Rationale of the system

The Japanese-style market system consisted of (i) an employment system utilizing long-term employment, seniority-based wage structure, on-the-job training and intra-firm labor unions, (ii) a main-bank system, (iii) corporate management by managers promoted from employees, (iv) corporate groups united by cross share-holding, (v) a long-standing trade relationship between parts suppliers and assembly producers or between manufacturers and distributors, the so-called *keiretsu*, and (vi) long-term relationships between the government and business sectors through industrial policy and public regulations.

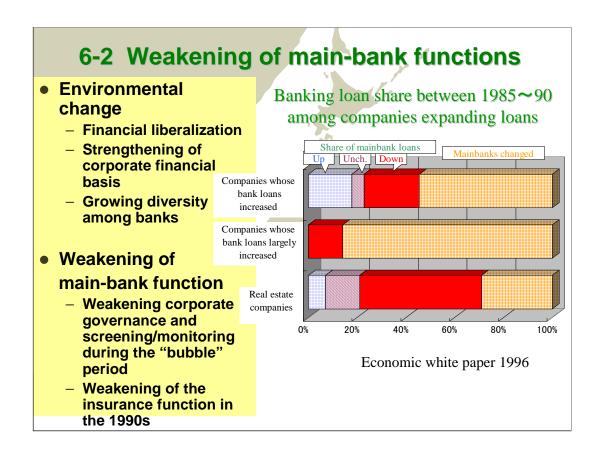
It was believed that the aforementioned deep, longstanding relationships would mitigate the problem of asymmetric information, such as agency problems between employers and employees, and between bankers and borrowers. It also brought about a long-term perspective in corporate management and facilitated long-term strategic investment. However, in the post catch-up era, this same system appears to have helped bring about problems such as the *bubble* economy of the late 1980s and the persistent low growth throughout the 1990s and beyond, even to present day.

Changing environment and challenges to the system

The major challenges to the Japanese-style market system are: (i) changes in the industrial structure and business environment, brought about by an advancement of information and telecommunication technology, which calls for more flexible and timely management and transactions; (ii) the ongoing process of globalization and mega-competition; (iii) the aging of the population and workforce; and (iv) changes in people's values. These evolving factors have undermined the effectiveness of the traditional system, and call for a systemic change for further economic development.

Structural reforms and a system evolving for the future

Japan's ongoing structural reform combines a transformation of the economy into a more market-oriented system with less government interventions/guidance, while still utilizing the advantages of the traditional Japanese system. Key words for this reform have been 'marketization', 'choice', 'competition', 'diversity,' and 'own risk.' There is still great potential for taking further advantage of information sharing. The government, redefined from its earlier role, needs to create institutions to coordinate with this evolving system and ensure it fully integrates into this new paradigm. In reality, the pace of change differs and there is not a complete and total break with the past. Various systems, some of which are more market-oriented and others which rely more on institutional trade relations, will continue to co-exist with dynamic competition among them.



6-3 Declining cross share-holdings

- Lack of corporate discipline during the "bubble"
- Weak capital market governance due to cross share-holding
 - Weak discipline imposed by capital market
- Rapid weakening of cross share-holding

		1987	1995	1999		
	Shares issued by business corporations					
-	ratio of stable holders	29.7%	28.7%	27.9%		
	(of which) held by FIs	22.0%	20.1%	12.9%		
	Shares issued by banks					
	ratio of stable holders	55.7%	53.3%	45.6%		
	(of which) held by companies	34.4%	32.9%	28.5%		

Nissei Research Institute (adjusted for change in disclosure rules)

6-4 Weakening of Japanese-style employment practices

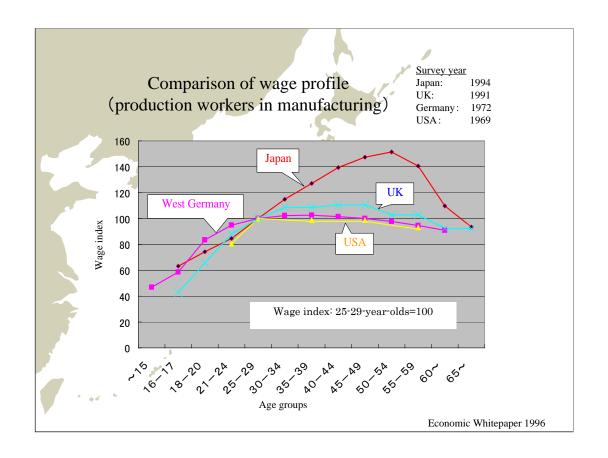
- Aging of workers leading to higher wage cost
- Development of "external" labor market
 - Dependence on part-time and other irregular workers
 - Development of temp services
- Lowering of growth of corporate size
- Changes in industry structure, globalization and IT
 - Manufacturing industries: skill transfer through OJT, process innovation, and team work
 - Knowledge based industries: higher speed and risk of innovation, leading to more flexible recruitment from external labor market and ability-based wage determination

Disadvantages of the Japanese-Style Labor Market System in the Post Catch-Up Era

There are issues both embedded inside and lurking outside the Japanese-style employment system that spell trouble for Japan's future labor situation: (i) differentiation between regular employees and spot or part-time employees, i.e., a problem in terms of distinct benefits, as part-time workers are not privy to retirement packages and they may face future earnings shortages; (ii) potential undermining of the system due to changes in consciousness or values of younger-generation workers; (iii) the absolute necessity of a company to continuously grow, in order to be able to maintain the Japanese-style employment scheme, particularly the seniority-based promotion system; and (iv) rigidity of personnel (human resources) and resultant inflexibility in adapting new business opportunities and introducing new technology.

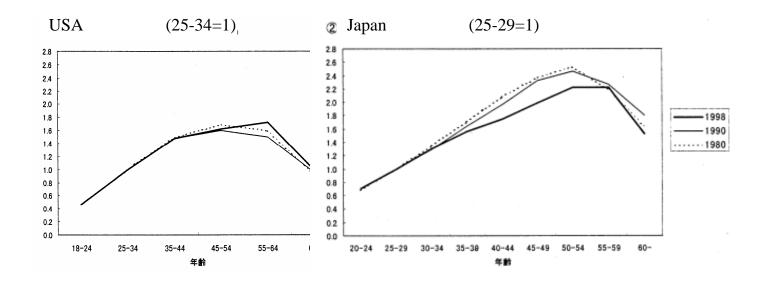
The inability to downsize due to Japan's aversion to layoffs has made technological advances not only unnecessary but also unwelcome, and this has become increasingly debilitating as the share of knowledge-based industry, such as IT and life-science industries, has expanded rather quickly. In the traditional manufacturing sector, company-specific technology is highly important, and technology transfer through on-the-job training and process innovation had built Japan's competitive edge. In the knowledge-based sectors, however, competitiveness is determined by technology, and the frontrunner is on the cutting edge. As companies are compelled to employ professionally-skilled workers directly from an external labor market, compensation must be based on the abilities and skills of individual workers. The seniority-based wage system becomes an obstacle that chokes away companies' growth potential. To facilitate the quick restructuring of companies and branches, it is imperative that organizations be as flexible as possible.

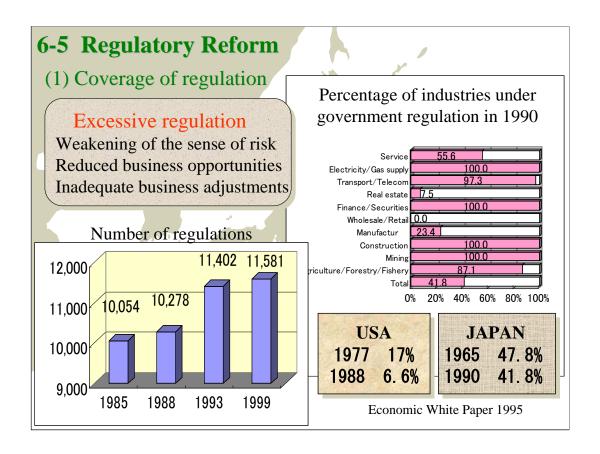
Anecdotally, there have been many occasions when Japanese-style employment practices have been revised. However on a macro level, the old system still dominates. Schemes such as the seniority-based wage systems and corporate pension schemes still contribute to the long-term employment system. A likely scenario in the future would be that, while traditional employment practices will survive among many manufacturing companies where company-specific technology, long-term job training, and skill transfer are crucial, more flexible systems will come to prevail among IT and service industries. Thus both the traditional and new employment systems will coexist according to industry needs.



Wage profile to change

Seniority-based compensation has been seen as a strong incentive to stay in the same company in Japan. A cross-country comparison of wage profiles by age groups shows that Japan's relative (indexed) wage level is a little lower than those in other countries at younger age groups, while it is significantly higher from the 30s through the 50s. If the wage profile in the majority of countries reflects labor productivity by age, then Japan's wage level has been kept artificially lower than that warranted by productivity when workers are young, then artificially higher when the workers become older. However, Japan's wage profile has been changing in the 21st century, albeit at a slow pace.





Regulatory Reform

Excessive government regulation on businesses and financial institutions tended to weaken their sense of risk or discouraged risk-taking behavior, dulled the threat of competition, and delayed their adjusting to changes in the business environment.

'Economic regulations' and 'social regulations' have numbered more than 10,000 for many years, according to data produced by the Management and Coordination Agency. At the turn of the century, that number was actually increasing. But that is not necessarily to say that Japan was going in the wrong direction. In fact, as regulatory reform proceeds, regulation tends to be unbundled into several regulations, particularly in the case of partial deregulation. In Japan's financial sectors, ambiguous regulations were changed to more specific regulations, and in the process, the number of regulations increased.

An estimate using input-output table data showed that in 1990, 42% of Japan's production was under some kind of regulation (permission, approval, registration, etc.). Apparently, this figure overstated the amount of regulation because of limitations in data collection (if any part of an industry was under regulation, then the entire industry was counted as regulated). Still, a comparison with US regulatory reform revealed that Japan had not yet achieved substantial reform (as of 1990). In the US, the percentage of regulated industries (on an output basis) declined significantly during the Ford, Carter, and Reagan administrations' regulatory reform period.

Despite a long period of renewed regulatory reform that started after the bubble burst, no significant drop in regulation was observed in Japan until the late 1990s.

(2) Costs Associated with Regulation Price differential Consumer price level High-cost structure NY 100 vs. Tokyo 141 (1998) High-cost pressure on Slow adjustment to tradable industries Changes in environment Manufacturing: Developed various new products Lack of innovation and Non-manufacturing: almost new business opportunity no new services developed Price Gaps between Home and Abroad = Price Gaps between (unregulated) Tradable and (regulated) Non-Tradable Sectors Price Gaps in Tradables Created by Border Protections (tariffs, etc.)

The costs associated with regulation

- 1) Regulation brings about a high-cost structure. This leads to price differentials between regulated and not-as-regulated markets, and in Japan's case, the price differential was between Japanese and overseas markets. In 1998, consumer prices (in aggregate) were 41% higher in Tokyo than in New York City (data source: Economic Planning Agency). A high-cost structure imposes a cost burden on tradable sectors and weakens their international competitiveness.
- 2) Regulation weakens regulated industries' incentives to adjust to changes in the economic environment. Tightly regulated industries tend to perform worse when the economic environment worsens.
- 3) Regulation restricts opportunities and weakens business' capacity for innovation. The Japanese manufacturing sector has developed and commercialized various new products, such as the fax, VCR, and lap-top computer. The non-manufacturing sector, on the other hand, has merely imported new services developed in foreign countries (with an exception of rental video shops).

(3) Economic effects of the 1990s' regulatory reform

(Annual average)

Demand expansion

*				
Sector	Period	Effect		
Telecom	96-97	6.86		
Cable TV	96-97	0.30		
Satellite TV	96-97	0.24		
Retail	96-97	3.12		
Farmland	96-97	0.68		
Electricity	96-97	0.32		
Temporary ersonnel svcs.	96-97	0.03		
Airline	96-97	0.17		
Total	11.85 (tril. yen		

Consumer surplus expansion

	Sector	Period	Effect
	Telecom	96-97	7.10
S	hare brokerag	96-97	0.26
	Car exam	96-97	0.49
	Airline	96-97	0.24
	CBond	96-97	0.08
	Oil products	96-97	1.78
	Electricity	96-97	1.07
	Gas supply	96-97	0.05
	Total	11.33 tril. yen	

Economic Planning Agency (1999) "Total" includes items other than those listed

(4) History of Japan's regulatory reform up to the 1990s

1980s

- Late 1970s -- aimed at lowering paperwork costs
- 1981 -- Administrative Reform Committee, proposed privatization of NTTPC and JNR
- The first half of 1980s -- US-Japan financial sector consultation, start of financial liberalization
- 1989 -- US-Japan Structural Impediment Initiative, discussed regulatory reform, business practices, etc.

1990s

- 1993 -- "Hiraiwa Report" proposed liberalization as a rule
- 1995 -- Regulatory Reform 3-Year Plan
- 1998 -- Economic Strategy Committee

History of Japan's regulatory reform up to the 1990s

Japan's regulatory reform process started at the end of the 1970s, mainly aiming to recreate a compact government and to reduce 'red-tape' costs. In 1981, the Second Temporary Council of Research on Public Administration System ("Daini-Rincho") was established. It emphasized private sector vitality, international harmonization and people's welfare, and advised various administrative reforms. Among others, it advocated privatization—or at least partial privatization—of three public corporations (NTTPC—a telecom company—in 1985, Japan National Railway in 1987, and Japan Tobacco Monopoly in 1985).

In the early 1980s, Japan's trade surplus ballooned and international calls strengthened for Japan's market opening and regulatory reforms. The Japanese government tried to shift export-led growth to domestic-demandled growth on both macroeconomic and microeconomic fronts.

Interest rate liberalization began in the second half of the 1970s, induced by an expansion of national bond issuance and by the globalization of financial services. In 1984 the Joint US-Japan Ad Hoc Group on Yen/Dollar Exchange Rate, Financial and Capital Market Issues started and promoted financial sector regulatory reform. In 1989, Japan and the US initiated the Structural Impediment Initiative (SII), under which they discussed Japan's market opening from the context of changes in regulation and business practices.

After the bubble burst, when the economy was stagnating and the yen was appreciating, regulatory reform came to be seen as the key to revitalize the economy, by (1) overcoming business' and household sectors' lack of confidence, (2) lowering high business costs, and (3) enhancing business opportunity in the domestic market.

In 1993, an advisory group to the government of Japan released the so-called 'Hiraiwa Report,' advocating that economic regulation should be liberalized as a rule, while social regulation should be minimized under the principle of 'self responsibility.' In March 1995, the government adopted a comprehensive action plan for regulatory reform (which was subsequently revised in 1998). It addressed 1,091 lines of regulations and set a concrete time schedule to dismantle them.

- (5) Characteristics of regulatory reform process in Japan up to the 1990s as compared to that in the US and UK
 - Japan has tended to avoid "trial and error" process
 - Even in the US, the airline case was exceptional
 - Privatization in UK lacked competition scheme
 - Price cap system in UK
 - "Bottom-up" in the US, "top-down" in Japan/UK
 - Japan's regulatory body was also an administrator of industrial policies
 - US, UK: independent regulatory commission
 - Checks and balances with industrial policy administration, competition offices and local government
 - Empirical analyses had not been utilized

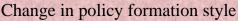
EPA team conducted CGE-model-based analyses in late 1990s

Characteristics of Japan's regulatory reform (up to the 1990s)

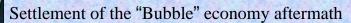
- -- Because the Japanese government tended to avoid the trial and error correction process, it took a long time to consider new schemes and persuade all stakeholders. However, in the case of network industry reforms where innovation proceeded rapidly, reform delay could turn out to be a fatal mistake. The UK's privatization process of its national public utilities was a good example of the trial-and-error way from which Japan can learn. Also, the UK's setting of the price-cap scheme was a typical trial-and-error process.
- -- In the US, deregulation processes were often triggered by new entrants taking advantage of legal or administrative loopholes, without prior consent by incumbents and regulatory authorities. A typical case was MCI's entry in the long-distance telecommunications market. In Japan, such loopholes were hard to find and businesses tend to avoid a struggle with regulatory agencies, with notable exceptions of door-to-door parcel delivery service and lower pricing by a few taxi cab companies.
- -- In the US and UK, semi-independent regulatory commissions carry out actual regulatory administration, while separate government organizations cover industrial policies and regulatory design. The judicial sector, antitrust authorities, and—in the US—state governments were also involved. In Japan, both regulatory administration and industrial design, among other things, were directed by a single government agency, the Ministry of International Trade and Industry (MITI). And while a separate authority, the Fair Trade Commission, was in charge of governing competition, it did not exert visible influence. A concentration of both planning and execution (and monitoring) functions caused conflicts of interest and made the process non-transparent.
- -- In Japan's regulatory reform process, empirical/scientific assessments of existing regulation and their reform have seldom been utilized. In the late 1990s, some cost-benefit analyses and CGE-model-based analyses were beginning to be carried out.

6-6 PM Koizumi's economic reform measures

(2001 - 2006)



- -- Strengthening the role of Cabinet for policy formation
- -- Weakening the influence of the MOF
- -- Weakening the voice of the Liberal Democratic Party



- -- Banking reform, esp. disposal of NPLs
- -- Budget consolidation, esp. reduction in public works

Measures to cope with depopulation and aging

-- Reform of social security, health and disability insurance

The Koizumi Cabinet reforms

Former Prime Minister Junichiro Koizumi conducted a series of major reforms of the Japanese economy between April 2001 and September 2006. Some were successfully carried out while others met with only nominal success. The continuing agenda of his reform initiatives was then inherited by the next cabinet of PM Shinzo Abe. Koizumi's reform efforts can be classified into three categories: (i) reform of the policy formation process itself; (ii) cleaning up the aftermath of the 'bubble economy' of the late 1980s and subsequent long-term slump; and (iii) forward-looking reform of the Japanese economic and social structures and institutions.

Transformation of policy formation process

Japan's policy formation process inside the Administration used to be rather ambiguous and lacked clear leadership. Policy proposals were regularly originated from the ministries in charge, through massive negotiations with other ministries and particularly with the powerful Ministry of Finance. Then they were intensively discussed within the leading Liberal Democratic Party through a complicated procedure, and finally they had to be approved by the General Affairs Committee of the LDP with the consensus of all the members—and all of this before the bills could be submitted to the Diet. The ruling party LDP's leadership was broken into factions which controlled various political campaign's financing and recommended candidates for ministers in the Cabinet to the PM. Therefore, the decision-making relied heavily on the balance of power among these LDP factions.

PM Koizumi substantially altered this regime through his initiatives to increase prime ministerial leadership. He did this by strengthening the power of the cabinet, via (1) establishing the Council on Economic and Fiscal Policy to be chaired by himself, the PM, (2) expanding cabinet staff, (3) weakening the MOF in policy formation, and (4) strengthening control over LDP factions.

Clearing the 'bubble' aftermath

The 'bubble' economy of the late 1980s and subsequent extended slump left the Japanese economy with major problems, and the Koizumi Administration confronted the long-lasting remnants of the burst bubble. First, the government aggressively pursued the disposal of accumulated non-performing loans, more or less getting rid of them. Second, the Koizumi administration attacked the massive budget deficit, halving the 'primary' deficit from the 2002 peak level. However, the stock of the general government's debt continues to be large relative to the size of the economy (in excess of 160% of GDP).

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Delegation of authority from public sector to private sector

- -- Privatization of the postal service/postal savings
- -- Reform of state-owned financial institutions
- -- Privatization of public highway corporations
- -- "Marketization test" of public businesses
- -- Regulatory reform, esp. creation of special zones

Delegation of authority from central to local government

-- 'Trinity reform' of function, revenue,

and intra-gov't transfers

-- Promotion of merger of municipalities

Private sector reform

- -- Strengthening of the Fair Trade Law to bar collusion
- -- Regulatory reform, esp. creation of special zones
- -- Corporate governance reform, facilitating M&A



Reforms to cope with rapid aging and depopulation

Japan is now one of the most rapidly aging economies in the world, where the age-dependency ratio has been rapidly increasing. Japan's population hit its peak in 2004 (at 127.8 million) and started to decline in 2005 for the first time in its history. The population share of the ages 65 or over, that stood at 17.3% at the turn of the century, is expected to climb up to 22.5% in 2010, 27.8% in 2020, and 35.7% in 2050.

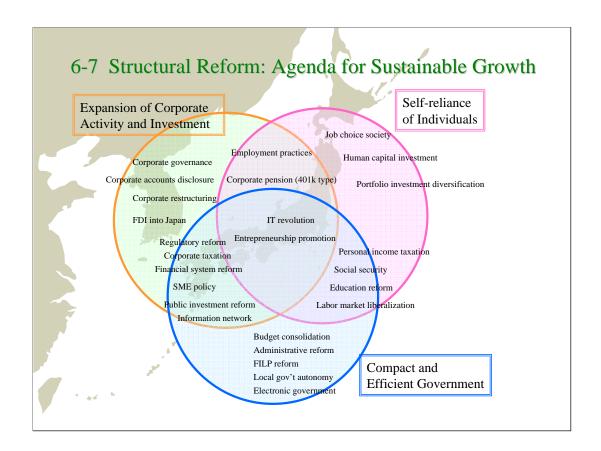
The social security reform has been conducted, including public pension, health insurance and nursery care insurance. However, as the speed of aging has been very rapid, further reforms are needed.

Initiatives to shift authority from the public sector to the private sector

Another major Koizumi reform initiative was to shift functions and resources from the public sector to the private sector. Some major privatization programs were conducted, however as seen in the Postal reform which is to be completed in 2018, they were often nominal and subject to future political environments.

Initiatives to shift authority from the central government to local governments

Another major category of reform was 'decentralization', i.e. a shift of authorities/functions and budgetary resources from the central government to local governments. The 'trinity reform' of (1) shifting functions/authorities to the local government, (2) shifting the tax base from the central to local governments, and (3) reducing transfer taxes and categorical grants to local governments was designed in order to weaken central government leadership and strengthen local autonomy. As this set of reforms is still underway, strong leadership is necessary to attain the initial objectives.



Building Institutions of Coordination:

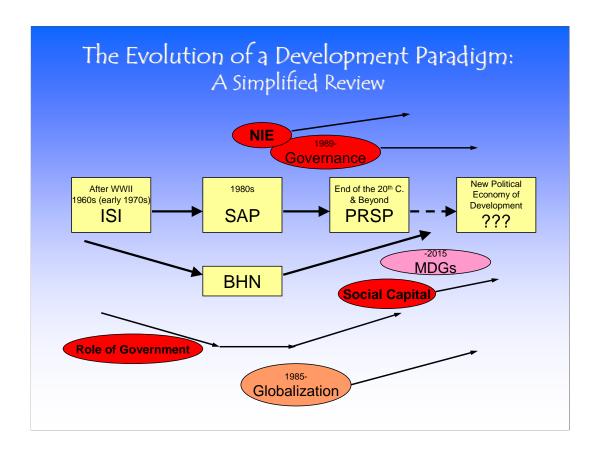
From Interventionist Government to Coordinator Government

The necessity for basic structural reform, or marketization, extends to a wide range of the Japanese economy. Three sectors of the economy have their own reform agenda: i) business and financial sectors must reform themselves to enhance business and investment opportunity; ii) individuals or the household sector must accept the discipline of self-reliance; and iii) the government sector must transform itself into a compact and efficient government respecting/utilizing market forces and utilizing decentralization in a strategic manner.

Changes in business and the government sectors must be compatible with (and accompanied by) those in the household sector. Self-reliance of individuals involves shifts in lifestyle, from the traditional reliance on the business community to self-decision-making and risk-taking in choosing jobs and careers that require investments in the individual, by the individual. Self-responsibility should be nurtured in the business sector, as opposed to relying on protection through regulation. The banking sector should stand on its own without the MOF-led 'convoy' system'.

Generally speaking, in the business sector, various reforms have already been started to get out of the long stagnation of the 1990s. As for the government sector, some reform initiatives have started in the areas connected to business, such as regulatory reforms and partial tax reforms. However, for public sector-specific reform areas such as administrative reform and government decentralization, the process has been much delayed. Budgetary reform had just begun under the Koizumi administration. As for the household sector, it will take a long time for the majority of people to change their lifestyle and way of thinking.

As the majority of the reform efforts and new initiatives should be happening in the cross-sections of the three sectors, the building of <u>'institutions of coordination'</u> or, in other words, nurturing the <u>'social capital of intra- and inter-sector networks'</u> is imperative. The role of the government should be redefined in precisely this context. That is, a change from 'interventionist government' to 'coordinator government' is now most urgently called for.

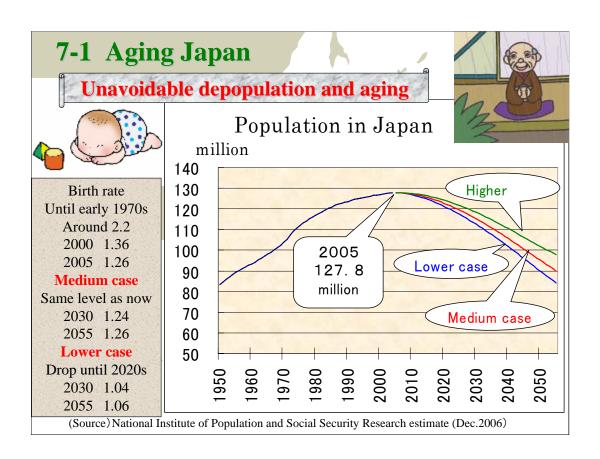


The New Institutional Economics (NIE) that international development finance institutions started to utilize in the 1990s has two major principles: 1) institutions define economic performance, and 2) institutions can be analyzed by microeconomics (of incentive structure). Therefore, it is in a way a fusion of traditional institutional economics and neo-classical economics. (Neo-classical economics is the one that provided the basis for 'structural adjustments' in the 1980s.)

This new "economics of institutions" is essentially about: 1) reducing transaction costs and 2) facilitating information flows. Roles of the public sector are captured in the treatment of ownership by the government and coordination that reduces transaction costs and ensures proper information flow (North). Herein lie the roots of the good governance arguments. The NIE also defines the timeframe of the economics of institutions (Williamson). While governance as a 'play of the game' (improving management) has a time period of 1 to 10 years, governance as 'rules of the game' (fixing the institutional environment) has a time frequency of 10 to 100 years.

These theories are all relevant when we talk about 'institutions of coordination.' Public-Private Partnerships (PPP) and the power structure of related institutions such as decision-making bodies, regulatory bodies, and partners should be developed in an adaptive manner and given a sufficient amount of time.





Depopulation and rapid aging

According to the 50-year projection created by the National Institute of Population and Social Security Research released in December 2006, in the standard case, Japan's population begins to decrease after its peak of 127.8 million in 2005, and falls to 90 million by 2055. This scenario assumes the birth rate (average number of babies born per female) to be virtually unchanged from the current level of 1.25. In a more pessimistic case, assuming a further drop in the birth rate to nearly one, the population would be 85 million in 2055.

At the same time, the aging of the population is set to further accelerate. According to the standard scenario, people 65 years and older, now 20% of total population, would reach 40% in 2055, and those under 15 years old, now 14%, would be a mere 8%.

The government of Japan is deeply concerned with this depopulation phenomenon, as it would create a shortage in the labor force and place a heavier burden regarding social security contributions on the working generation. Therefore, various measures have been taken to encourage couples to have more children. So far, the effect seems to be limited and the trends of depopulation and aging appear unstoppable.

Cases of economic development under depopulation						
Nation	Western Europe	Japan	Ireland	Hungary		
Time	Late 14th c.	1730~1800	Late 19 th c.	1980~		
Decline	70~80 mil→ 40~50 mil	32 mil. → 30 mil.	2 mil. In 10 years	0.3% decline annually		
Reason	Black death	Famine Late marriage Less birth	Famine Immigration	Lower birth rate		
GDP	-0.3%	0.2%	0.7%	0.6%		
GDP Per capi	0.4% ta	0.3%	1.6%	0.9%		
Impact	Labor scarcity	Agricultural technology	Change to livestock farming	Marketization Investment		
V		Source: Economic planning Agency (2000)				

Will depopulation bring about economic decline?

It is generally believed that, with depopulation, an economy decelerates or shrinks. However, during the 2^{nd} millennium, a few cases were seen in which economies grew despite population decline.

In Japan in the 18th century, the population decreased due partly to famine in Tohoku and epidemic diseases at an initial stage of urbanization, and partly as a result of late marriages and a smaller number of babies born to couples in large cities. However, thanks to agricultural technological progress and development of new fields, farm production increased.

In Ireland in the 19th century, depopulation set in as a result of famine and outgoing immigration. Labor scarcity encouraged an industrial transformation from labor-intensive agriculture to land-intensive livestock farming, bringing about higher productivity.

In Hungary, the population has been both decreasing and aging since the 1980s, due to a lower birth rate, but thanks to catching up technologically and the introduction of the market economy, the growth rate has been on the positive side.

In Western Europe in the 14^{th} and 15^{th} centuries, the black death wiped out nearly half of the population. The resultant farm labor shortage widened the per capita farmland, and per capita output increased significantly.

Lessons from these cases

These examples suggest that a society under the process of depopulation does not necessarily have to experience economic and social decline. If the social system is reformed, industry structure transformed, new technology introduced, and thus productivity heightened, economic development can be attainable even in this challenging environment.

