

都留文科大学電子紀要の著作権について

都留文科大学電子紀要のすべては著作権法及び国際条約によって保護されています。

著作権者

- 「都留文科大学研究紀要」は都留文科大学が発行した論文集です。
- 論文の著作権は各論文の著者が保有します。
- 紀要本文に関して附属図書館は何ら著作権をもっておりません。

論文の引用について

- 論文を引用するときは、著作権法に基づく引用の目的・形式で行ってください。

著作権、その他詳細のお問い合わせは

都留文科大学附属図書館
住所: 402山梨県都留市田原三丁目8番1号
電話: 0554-43-4341(代)
FAX: 0554-43-9844
E-Mail: library@tsuru.ac.jp

までお願いします。

[電子紀要トップへ](#)

The High Economic Growth in Japan and Analysis of Its Influences on Japanese Society

中西 啓之

NAKANISHI Hiroyuki

Preface

The Netherlands won independence from Spain in 1581 by waging a war against their Spanish rulers. After that Dutch people developed their economy, scientific knowledge, democracy, modern citizenship, rational thought, and a splended culture including the artists such as Rembrandt.

Sixteenth century was the warring period in Japan. In 1582 the strong and creative General Nobunaga Oda was killed by his vassal Mitsuhide Akechi. But immediately after that he was also killed by Oda's vassal, Hideyoshi Toyotomi who was then able to unite the country. After the death of Hideyoshi in 1598, the hegemony moved to the Tokugawa family.

Japan's first encounter with Europeans occurred in 1542 and 1543. A Portuguese ship was blown ashore onto the island of Tanegashima in southern Japan. The Portuguese had some firearms with them, and these caused revolutionary change in military strategy during the warring state era. The contact with European civilization had great significance in the formation of a strong centralized feudal state. Knowledge of the existence of countries with large sailing ships and advanced technology including firearms became a strong motivation for unifying the country.⁽¹⁾

General Nobunaga had shown intensive curiosity in advanced European civilization and the firearms. Hideyoshi also succeeded a policy of introducing western civilization for a while, but after uniting the country, then began to repress Christianity. The Tokugawa family who became the rulers of Japan, not only prohibited the mission of Christianity, but also refused foreigners' entry and free trading and also prohibited Japanese going to foreign countries. In 1641 Dutch merchant was moved from Hirado, the Trading House, to Dejima, off Nagasaki. The isolation system was accomplished. Only the Netherlands was an open gate for our ancestors.

Japan is a rare country that accomplished modernization without having the experience of being a classical colony of western countries as opposed to the rest of history of Asia. She was isolated from foreign countries. Except for Dutch people for more than 200 years, this seclusion policy of the ruling Tokugawa family lasted in the period from 1630's to 1850. In 1853 Commodore Matthew C. Perry of the United States entered Uraga Bay, south of Yokohama leading a fleet of black ships (Japanese called them black ships, the four big iron ships at that time), and demanded Japan to open to foreign countries for trade and social

relations. This shocked the land. Japan was obliged to open the country due to the power of black ships, and it led the Tokugawa feudal ruling system to collapse and so the new Meiji Government was established.

The Meiji Government restored the authority of the Emperor and organized a nation of despotism on the one hand, and introduced various western institutions of politics, administration, military and technology on the other. This reformation was rapidly promoted by the Meiji Government. But the handicap of the 200 years isolation distorted Japanese society in various ways.

In the study by Prof. Kenichi Tominaga on the modernization comparing European countries and that of Japan, which analyzed it dividing it into three categories, that of politics, economy, and society, he mentions that although the modernization of the economy was established in Japan, those of politics and society were not satisfactorily achieved. In addition the modernization of the economy was rapidly promoted by the government.

This rapid modernization made Japan a quasi strong nation without it being western colony. Japan won military victories in the Sino-Japanese war of 1894-1895 the Russo-Japanese war of 1904-1905, and World War I. But in the 2nd half of the 20 century Japanese military power expanded during the economic recession in 1930's. This led Japan to invade Asian countries. Finally it led to the outbreak of the Pacific War and the subsequent defeat.

After 1868 Japan promoted rapid modernization and resisted becoming a colony of western countries, but the defeat of World War II brought an occupation by the United States Army. From 1945 to 1952 Japan was under the indirect ruling of the United States occupation. The Peace Treaty which was signed in September 1951 in San Francisco took effect in April 1952, and at the same time the Security Treaty between the United States and Japan also came into effect.

Japan had been influenced by the European countries like Britain, France and Germany before the World War I, but since 1945 the United States played a huge role in rebuilding Japanese economy and Japan developed into one of democratic nations. But it has made Japan depend on the United States politically, economically and especially militarily. The existence of the big American military bases in Japan especially in the Okinawa islands shows this Japanese dependency on the United States.

During the occupation of Japan by the United States, a New Constitution was instituted, and other important reformations were performed in the field of agriculture, education, police and administration, public finance institutions. The period of rapid economic growth continued from 1955 till the first oil shock in 1973. Japan had the second largest gross national products in the world in 1968. Industrialization and urbanization which had accompanied the economic development changed the life style of Japanese people. Cars and electric appliances spread almost to every household. Japanese people's lives were enriched by the civilized richness. National education, medical progress, the establishment of public hygiene and social security have been promoted by central and local government. But as the handicap of the long isolation had made distortions of modernization before the World War

, the rapid growth of the economy after the War produced new social problems like air pollution, collapse of local communities, high rents and high real estates, clouding transportation which is called commuting hell.

In this short paper, I am going to mention the characteristic of the socio-economic development of Japan, especially since the end of the 2nd World War, and I will compare it to the experiences of European countries.

1 . Outline of Japanese Economic Development after the Second World War

Japan had been destroyed and defeated in the Second World War. Japanese industrial production had fallen to about 30% of its prewar level caused by the destruction of US bombardment and the dissipation of national resources in the long war of attrition. Nevertheless 23 years after the War, Japan had established status as the second largest industrial nation in the world. This status yet continues now in 2001 after the War. Professor Naomichi Hayashi shows how it has been built up by dividing the development process of the Japanese economy into six periods.⁽²⁾

The First period was from 1945 to 1950. In this period under the occupation of US forces democratic reforms which included the implementation of a New Constitution, rural land reforms, dissolution of Zaibatsu (financial cliques), education reform etc. were installed. At the same time, rapid inflation advanced, because Japanese government institutions expended by the bank note to dissolve the huge deficit which was accumulated by the military spending during the war.

The Second period was from 1950 to 1954. The Korean war which broke out in June 1950 produced special demand for the Japanese economy. The bulk purchase of strategic materials for the US army made huge markets and Japanese industrial product increased rapidly. The total sum of special procurements for the Korean war from 1950 to 1955 amounted to \$3.55 billion. This was about 44% of foreign currency received by Japan as payment for exported goods. Japan could develop its economy with the special procurements and large monopoly capital, which had been dissolved by reforms after the War, again its connected power was restored.

The Third period was 19 years, from 1955 to 1973, during that period the Japanese economy had grew rapidly. The average growth rate of the GNP (real base) be able to find among advanced countries at this same time. In 1968 the GNP of Japan sprang to second place in the capitalist world, after the USA. The high and rapid growth of the economy in this period changed various features of Japanese society. The major aim of this paper is to analyze how the economy's high growth gave these influences to people's lives, local and urban communities, land and housing, and environmental circumstances etc.

The Fourth period was from 1974 to 1982. The 1st oil crisis in 1973 and the 2nd in 1978 gave serious instability to the Japanese economy as well as other countries. In 1974 the growth rate of the GNP dropped to minus 0.5%. It was the first experience for Japan when the economic growth rate marked a minus figure. Since 1974 Japan has not been able to mark

such high and rapid growth of the economy as in the 1960's, so this period after 1974 is called "the age of low growth" in Japan. But in the late 1970's, the Japanese economy shifted from heavy industries like iron, shipbuilding etc., to that of electronics or mechatronics. This reform of industrial structure succeeded and Japan could maintain her higher economic growth than western countries by increasing exports in this period.

The Fifth period was from 1983 to 1990. Japan established the status as one of the largest economic countries with the high growth of 1960's and maintaining a relatively high level since 1974. Exports from Japan increased and foreign currency was accumulated. After 1983, the Japanese currency account balance of payments surpluses increased explosively, and remained at levels of double-digit billions of dollars. In 1985 the meeting of the Finance Ministers and the Secretaries of Treasury from the G5 was held at the Plaza Hotel in New York. The Plaza accord of the G5 decided to intervene cooperatively in the exchange market and to induce a fall in the value of the dollar. The yen was revalued from 242 yen to 180 yen to the dollar in a year. From November 1986 to April 1991. Japan enjoyed a large scale and long-lasting period of continuing prosperity. But at the same time in last 80's the bubble economy began. The prices of stock and land rapidly advanced far beyond the real conditions of the economy. During this period, Japan's financial organs advanced colossal funds for real estate companies, which dreamed of making huge speculative profits. So the prosperity of this period was referred to as the "bubble boom".

The Sixth period has been since 1991. In January 1990 the bubble economy suddenly burst. The direct occasions of this collapse was a raising of the official rate of interest by the government. Since this period the Japanese economy has entered into a longterm depression. This period can be divided into the first half from 1991 to 1996, and a second into the last half from 1997 to today. The economic growth rates of GDP in this period from 1992 to 1994 were between zero and 1 percent. It was a first experience for Japan since the World War, for three years such low growth had continued. In 1995 and 1996 signs of recovery had been shown. The growth rate in 1996 increased to the level of 4.3%. But In 1997 the consumption tax rate was raised from 3% to 5%. This caused serious recession, because it decreased demand of consumer. In addition, the bankruptcies of big financial and security companies in Japan continued in autumn 1997, and the currency crisis of Asian countries at the same time accelerated this recession. The rates of economic growth in both 1997, and 1998 were in the minus. Dismissal of employees was spread and the rate of unemployment increased rapidly. In 2000 it reached the level of 4.7%. This is the worst record after World War . This rate still may seem lower than that of the other advanced countries, but this is owing to the special calculation method in Japan. Japan has accomplished economic growth in the past decades and has become one of richest countries in the world. But the long term recession and increase of unemployment causes the various difficult social problems like crime, uncertainty of poor aged people's lives, and young people's disassociation etc.

2 . Japan's High Economic Growth-1955 ~ 1973

From 1955 to 1973 Japan made surprising economic growth. In the 1960's, the average real growth rate of the Japanese economy was 11.1%. This figure is far higher than that of any of the western countries. According to Table 1, the real growth for France was 5.8%, 5.6% for Italy, 4.8% for West Germany, 4.1% for the United States, and 2.8% for United Kingdom.

Dr. Naomichi Hayashi lists following nine factors which explain the high economic growth.

- 1) Japanese government policy encouraging economic growth.
- 2) Low wages and poor social welfare.
- 3) Influx of dollars.
- 4) Oligopolistic competition and indirect financing.
- 5) Sharply elevated labor productivity through the introduction of foreign technology.
- 6) A Switch from coal to petroleum as an energy source.
- 7) Advantages of coastal location for industries.
- 8) Dramatic changes in population dynamics.
- 9) Rapid enlargement of the consumer market.

I almost agree with this analysis. At the same time I would also like to stress the high speed of Japanese economic growth.^(3) Table 2 shows how the structure of employment changed in four countries. It is a common tendency for all capitalist countries that employees of primary industry (agriculture, forestry, and fisheries) decrease with development of industry. But, as we compare the changing speed of Japan with those of European countries, we are surprised to find that Japan was far more rapid than any other country. It took fifteen years for Japan's primary industry employees to decrease from 38.8% in 1953 to 19.8% in 1968. This was in the first half of the high economic growth period.

In America it took forty years, from 1900 to 1940, for its decrease. In 1900, the first year of 20th century, the rate of primary industry employees to that of all industry was 40.2%, and it changed to 17.5% in 1940. It was half century earlier than Japan that the rate of the primary industry employees occupied about 40%, and it took three times the time to decrease from about 40% to about 20%. In 1920, the rate of primary industry employees became 30.4% in America, and in 1930 it became 26.7%. In this period from 1920 to 1930, life style of American people showed similar characteristic to that of Japan in the 1960's. Electric appliances for example radios, newspapers, movies, and cars spread. Urban life style became usual and young people began to have new sense of value.

In Germany, the industrial revolution began in the middle of the 19th century. And in 1895, the rate of employees in primary industry showed 39.9%. After the German people had experienced two World Wars, in 1955, the rate of primary industry employees became 18.4%. It took about 60 years to decrease, four times of those in Japan. In France, the speed was slower. It took approximately 110 years for its decrease. This shows, in France, the industrial revolution occurred in the first half of 19th century, but at the same time she has been an agricultural country for a longer period of time.

In any capitalistic country, primary industry employees have decreased with the development of economy. But in Japan, the change had been very rapid in the period from 1955 to 1973. Japan achieved the change in a mere 15 years, while it took 110 years in France, and 60 years in Germany. This characteristic is shown not only in Japan but in other countries in Asia. In Korea, or China and other Asian countries, the rapid and high economic growth has been realized since the 1970's, after Japanese high economic growth in the 1960's had ceased in 1973.

In Japan, since the 1950's, primary industry employees have decreased. In 1955 the rate of primary industry employees to all workers was 41%. But, in 1998, it has decreased to 5.2%. This means that many young people have moved from rural areas to urban areas. Already, since before the 2nd World War, decrease of primary industry employees began. But, the speed of it was especially rapid in the period of high economic growth. This caused large scale movement of population from rural areas to urban areas, and for this movement the three large metropolitan areas of Tokyo, Osaka, and Nagoya were formed. In the 1950's the population of the three metropolitan areas was 20 million. It became over 60 million in 1990. About half of all the Japan's population was concentrated in these areas. In these three metropolitan areas, Tokyo and its three neighboring prefectures (Chiba, Kanagawa, Saitama) are the largest, Their land area is only 3.1% of the all Japanese territory, but in this space 31.88 million people, more one-quarter of the total population are living. In Tokyo there are headquarters of big businesses including big banks, massmedias, central government offices, Diets. It is the place where central nervous systems of politics, economy, and culture in Japan are concentrated.

Table 1 Average Annual Increase of Economic Indicators During 1961 - 1970 in Major Capitalist Countries

	Real Economic Growth Rate	Industrial Production	Plant & Equipment Investment	Labor Productivity	Labor Wage	Labor Cost	Export	Import	Wholesale Price	Consumer Price
Japan	11.1	14.1	15.2	11.1	12.2	1.1	17.1	15.9	1.3	5.9
USA	4.1	4.5	3.9	3.1	4.1	1.0	7.7	10.2	1.5	2.8
United Kingdom	2.8	2.8	4.7 ¹⁾	3.2 ¹⁾	6.4	3.2 ¹⁾	6.7	5.7	3.1	4.1
West Germany	4.8	5.8	5.7	6.0 ¹⁾	8.1	2.0 ¹⁾	11.0 ¹⁾	10.8 ¹⁾	2.0	2.7
France	5.8	6.0	9.1 ¹⁾	6.4 ¹⁾	8.1	1.6 ¹⁾	10.1	11.7	3.0	4.0
Italy	5.6	7.1	5.2 ¹⁾	6.4 ¹⁾	8.7	2.2 ¹⁾	13.8	12.5	2.6	4.0
Canada	5.2	6.4 ¹⁾	5.4 ²⁾	4.3 ¹⁾	5.1	0.8 ¹⁾	11.1	9.6	2.1	2.6

Source: Bank of Japan, <Comparative Economic & Financial Statistics, Japan and Other Major Countries> 1971 Cited from "The Japanese Economy Today" by Naomichi Hayashi (in 1996)

Table 2 Period of Primary Industry Labour Reduction from about 40% to about 20%

Japan	38.8 (1953)	19.8% (1968)	decreased 19% over 15 years
America	40.2 (1900)	17.5% (1940)	decreased 22.7% over 40 years
Germany	39.9 (1895)	18.4% (1955)	decreased 21.5% over 60 years
France	37.9 (1856)	17.8% (1965)	decreased 20.1% over 109 years

Source: History Statistics by Macmillan & Bank of Japan (Comperative Economic & Financial Statictics) By Hiroyuki Nakanishi "Japanese Local Government autonomy" in 1997, Page 209.

This concentration in Tokyo has caused various urban problems, such as housing, transportation, environment, and lack of social facilities. On the other hand, as young people moved from rural area, depopulation in farming village caused serious rural problems, like lack of agriculture successors, and the ruining of farm-land and foresties. Especially, as high economic growth collapsed traditional Japanese families and communities, we are facing new social problems like difficulty of caring for the elderly people and bringing up children. I am going to analyse how these new social problems have occured in the following sections.

3 . Pre-modern Social Strucure and Collapse of Traditional Families and Communities

Since 1868, Meiji-Ishin (Meiji-Restoration), Japan has changed from a half-feudal agricultural country to a modern industrial society. But before the Second World War, Japan had many pre-modern social systems, for example, tenant-farmers paid unbelievably high rent using rice (not money) to landlords who became gradually absent from villages due to the increaseing development of the capitalist economy. With about 40% of their production going to rent, peasants had no money to invest in improved modes of agriculture. Japanese pre-war agriculture lagged far behind western countries in productivity.

In addition there were pre-modern half-feudal human relations in families and communities especially in rural areas. Table 3 shows the class structure in the period from 1888 to 1935. In this Table the ruling class includes politicians of higher status, big landowners, bourgeois or capitalists, and other persons of higher income. In the period from the late 19th century to the 20th century, Japan's main industry was agriculture, and the status of landowners was very influencial to the society, both economically and politically. Only a few landowners had citizenship in rural areas, until the universal suffrage of males (without females) was instituted in 1925.

The rapid increase of workers in cities is also shown in Table 3. In 1888 the population of workers was only 136,000, but through the Sino-Japan war, the Russo-Japan war, and the

Industrial Revolution (from the late 1880's) this number increased to 2,440,000 by 1909. At the same time the number of peasants was 3,068,000. Although the amount of factory workers had increased rapidly, the amount of peasants was still more than that of workers. In 1920 statistics showed that the population of factory workers was 4,666,000, and had increased above that of peasants. The population of peasants was 3,802,000, some 81% of the factory worker's population at that time.

In 1935, the population of factory workers increased to 9,175,000, 47.1% of all working people. This shows the rapid industrial urbanization of Japan. On the other hand the population of peasants was 3,879,000, 19.9% of all working people, and that of farmers was 1,699,000, 8.7%. The total number of peasants and farmers shows 5,578,000, 28.6%. This number (peasants and farmers) is 60% of that of factory workers at that time. Although Japan had achieved rapid industrialization already before the 2nd World War, there were still many peasants and farmers in rural areas.

Before the 2nd World War, there had been traditional families and villages communities in Japanese rural areas. Traditional families were generally larger and embraced more than two generations, and the head of the family held power over the other members. Each member of the family performed duties such as, cultivating, caring for the elderly, and raising children. The status of women was not equal to that of men. Their roles were to assist the activities of men. They had responsibility to do housework, and in addition they worked the fields for cultivation. There was discrimination between rich or pedigree families and poor families. But the heads of the families associated to undertake tasks beyond the ability of the single family. This association, or self-help system was used in traditional villages communities for agricultural production and general duties. Japanese people have cultivated rice for more than one thousand years. Farmers managed water streams that were essential for the cultivation of rice co-operatively. They managed common forests to produce wood for energy. They held festivals, when they completed rice planting, or harvesting. Heads of families participated in meetings, held regularly to manage and control the affairs of the community. The traditional self-help system was one of the ruling systems, that had been successfully applied over one thousand years until the end of the 2nd World War. Each village member knew of all matters in the community and all activities of inhabitants. When a member died or got married, all attended the festivities.

The land reform and other democratic innovations after the 2nd World War destroyed the pre-modern feudal systems and human relations. Landlords were obliged to deliver their land to the peasants who had cultivated it and paid high rent. The universal suffrage including females was established in 1946. After these reforms the period of high economic growth continued.

In Japan rapid changes in the fields of agriculture, education, administration of home affairs, and economics led to the new modernization of Japan. But the Revolution in China made America change her policy toward Japan. At first America sought to destroy Japanese military power, and to establish a democratic country in the period from 1945 to 1948. But

when the success of revolution in China became sure, American began to demand Japan to be strong and to reconstruct the economy. Japanese government also performed such reorganization as rearmament and her encouragement of rapid economical development. Already mentioned, The Korean War and its special demand led to high economic growth which was the beginning of the collapse of traditional communities.

From the mid 1950's, when the productivity of agriculture increased, a portion of the agricultural population became increasingly useless. They left rural areas to seek employment in the cities. In the 1960's as the result of a decline in agriculture, not the increase of productivity, many lands were converted to factory sites, highways, and residential areas. The government broadly dictated that peasants should decrease their scope of farming. Many of the young generation fled from the rural areas to the urban areas. Many of these were teenagers and unmarried. They soon got married and created new families, but were unable to form new communities.

The rapid concentration of young people from rural areas into urban areas in the 1960's, (especially to Tokyo and Osaka) caused several serious social problems. I would like to indicate here three main problems.

Firstly I would like to mention environmental problems such as air and water pollution and the civic movement against it. The high growth of the economy caused various kinds of pollution, because Japanese companies did not care to keep air, water and soil clean. Many people were damaged by this pollution. In the late '60's civic movements against pollution spread all over the land. These movements had important roles in preventing pollution, and helped to make new local governments.

Secondly the collapse of families and communities caused difficulties in raising children, and caring for the elderly. In Japan the concentration of the urban population has been so rapid that the public services available to children and the elderly were not satisfactory. This caused serious social problems.

Thirdly as a result of rapid social change, educational failure has occurred. This has been called the crashes of classes. Newspapers often informed the suicides of elementary school students who had been constantly bullied. The number of children who don't attend school increased.

I will discuss these three problems in the following section. Hence, As I already discussed, a large number of the population moved from the rural areas to cities. It was a vast movement of the population indeed. It caused the collapse of traditional families and communities. It changed old pre-modern human relations, but it also destroyed the effective use of self-help systems. We have not yet succeeded in creating a modern co-operation alternative.

Table 3 Class Structure in the Period from 1888 to 1935 (The population of working people unit: 1000)

	1888	1909	1920	1935
1 . Ruling Class (Capitalists)	85 13	422 198	553 306	799 525
2 . Middle Class (Farmers)	2,328 1,493	3,291 1,660	3,451 1,509	4,371 1,699
3 . Ruled Class (Peasants) (Workers)	3,878 2,955 136	6,518 3,068 2,440	9,899 3,802 4,666	14,298 3,879 9,175
Total (1 , 2 , 3)	6,291	10,231	13,903	19,463

Note : 1 . "Ruling Class" includes higher politicians, big land-owners, capitalists etc.

2 . "Middle Class" includes public workers, farmers, fishermen, merchants, craftsmen etc.

3 . "Ruled Class" includes peasants, lower merchants, factory workers etc.

source : Figurs used in this Table were taken from "Nihon no Kaikyū Kosei" (Class Structure of Japan) by Ryūken Ohashi (1971) published by Iwanami Shoten (in 1971).By Hiroyuki Nakanishi "Local Government Autonomy", Page 83.

4 . The High Economic Growth and New Social Problems

The high economic growth caused big changes for Japanese lives. In the period from 1955 to 1973, the number of cars (including all kinds of cars) which were produced in one year, increased from 70 thousand to 7 million and 80 thousand. It became 101 times greater in 18 years (in 1997 it amounted to 10 million and 97 thousand). The number of televisions which were produced in a year, increased from 30 thousand to 14 million and 410 thousand. It became 465 times greater in 18 years. Products made from oil increased from 7 million and 300 thousand kiloliters in 1955 to 260 million and 24 kiloliters in 1973. It showed an increase of 35.6 times.

Cars, televisions, electric products like refrigerators, plastic products spread all over the country. This popularization of industrial products changed basic life styles. The time for houseworking was reduced by the electric appliances. Using cars for individual moving made people go distant places. Everyone has been able to get information from all over the world by watching television. We cannot deny that this popularization of civilization has improved Japanese lives. But on the other hand, new social problems have occurred.

The high economic growth has created new social problems. It caused an unbalanced industrial structure. The main industries of high economic growth were such as, the iron & steel, electric power, shipbuilding industry and chemical industries etc. Technological development and cheap labour cost made it possible to have a competitive power. Japanese industries could occupy markets in the country and make profits by exporting these products. Thus these industries grew rapidly.

On the other hand, agriculture, forestry, and fishery plummeted. Of course it is a common tendency that according to the development of industry, the primary industry usually falls. Already as I mentioned, in Japan it progressed so rapidly that it caused the outbreak of several new social problems at the same time. The rapid concentration of population from rural areas to urban areas has caused serious difficulty for housing, transportation, and environmental problems in urban areas. On the other hand in rural areas, the rapid decrease of young people has made it difficult to continue cultivation, and it led to the collapse of villages communities. I would like to discuss following three problems from the above new social problems.

Industrial Pollution

Industrial pollution has been a negative problem of Japanese high economic growth. Here I would like to mention about four major industrial pollutions in the period from 1950's to the early 1970's. Table 4 shows the four industrial pollutions.

The first is the Minamata disease in Kumamoto Prefecture. It was in 1956 that this disease was reported publicly. This horrible disease makes patient's extremities paralyzed, and leads to death. Dr. Shigeto Tsuru wrote as following on his book, "The Political Economy of the Environment".

"The rising of the curtain on the Minamata drama was the reporting of convulsive deaths of cats and crows in the Minamata area in 1953, followed by the first filing for report in May 1956 by Chisso (chemical company) to the local health office about 'an incident of an inexplicable disease' among some residents of Minamata. This story was reported in Kumamoto Nichi-Nichi Sinbun (local news paper) on 16 May 1956, which turned out to be the first concrete public information on the Minamata disease through a local mass media."⁽⁴⁾

The true cause of this disease had been almost confirmed by a research group in the medical faculty of Kumamoto University until July in 1959. The factory effluents containing methyl-mercury were most likely to have been the direct cause. Whoever ate fishes, which were caught in the Minamata Bay, had their central nervous systems paralyzed by methyl-mercury which was contained in the fishes. It was caused by the factory effluents of Chisso company which were producing chemical fertilizer and polyvinyl chloride. Discharging of the products on wastes without any treatment into Minamata Bay resulted in the extraordinary human tragedy. The officially certified number of deaths were 1, 196, and that of patients were more than 10,000 by the end of 1995.

However it was in 1968 that the central government accepted the hypothesis of the group in the medical faculty of Kumamoto University. Because the Chisso Company opposed the hypothesis, and consulted with the Ministry of International Trade and Industry, and also with the Japan Association of Chemical Industries, and resulted in the mobilization of scholars who denied the true cause. But a movement by fishermen, and many people who supported the true cause, including scholars, lawyers, doctors, and citizens of all over the country changed the situation.

In Table 4, I summarized the four major Kogai (pollution) and the Law-Suits. In the

period from the late 60's to the mid 70's, various social movements had arisen, and the people who accused the big companies which gave damages, received victories at courts.

In the late 1960's, social movements in the field of preventing various industrial pollutions spread all over land.

Welfare system for elderly people

As the high economic growth has led traditional communities to collapse, various serious problems have occurred. Lack of Aged Care is one of the most serious problems. In traditional communities, it was the natural duty of family members to care for the elderly relatives. But in the period of high economic growth, many young people moved from rural areas to urban areas. They made so-called nuclear families of just couples and a few children. Many of their parents had lived in rural areas. When the parents became older, and could no longer live alone, the new couples were embarrassed. The social welfare system was not established. It was only for poor people without relatives.

In Japan, the speed of demographic change to an aging society was as rapid as the economic change. Table 5 shows how rapidly the aging society advanced. The ratio of people older than 65 years as a percentage of the total population was 4.94% in 1950, but it increased to 7.07% in 1970. In the year 2000, it became 17.24%, which was higher than many European countries. In addition, the life expectancy increased rapidly. In the period from 1920 to 1930, it was about 45 or 50 years old, but it rose to about 60 in the 1950's, and about 70 in the 1960's. In 1998 it was 77.16% for males, 84.01% for females. Although the increased life expectancy is testimony to advances in civilization, lack of a social welfare system is still a serious social problem.

People who had moved from rural areas to urban areas, got married there, and had small families. When their parents needed assistance for their day to day living, they could not respond to their need. Reluctantly many of them were obliged to go to hospitals, and national payments of medical insurance have increased. In the year 2000 the central government established public care insurance system for the elderly, and has begun to supply services for elderly. However this system has various problems. For example everyone who would like to receive these services must pay ten % of the total care cost, but it is too much for poor aged persons. In addition the supply of this service is not enough for needs and often inadequate.

Child Raising and Educational Problems

Child raising in family and education in school have had much serious problems such as the lack of concern for the elderly in Japan. Since 1868 the Japanese government has made efforts to popularize the school education. Earlier in Japan, elementary school was compulsory, and after the 2nd World war, junior high school education also became compulsory. Today all children enter elementary school, when they become 6 or 7 years old, and after 6 years they go to junior high school, and study there for 3 years. In 1999 the percentage of the ratio of further entering for senior-high school was 96.9%, and that of university was 40.9% in 1999. This ratio is lower than that for Korea and America, but

higher than for France and Germany.

Recently various serious problems have occurred in the field of school education. The increase of school refusal is one of these problems. This means that children who want to go school, can not go for some psychological reason often with psychosomatic symptoms such as headaches or stomachache. According to Ministry of Education statistics, there were 94,000 pupils who were absented from elementary or junior high school in 1996.

Bullying has also increased recently, and suicides of children who were bullied has increased. Of course quarrels occur with children in any country, but suicides due to bullying did never occurred, when I was a child. According to a government research in 1998, children who had experienced bullying amounted to 33% of all elementary and junior high school students, and those who had watched someone being bullied amounted to 56%. These serious problems come from intense competition for university entrance examinations. Parents expect their children to enter higher level junior high school or senior high school, and the competition extends to lower pupils. This competition causes strong stress for children and mothers.

Child-raising in the period from birth to entering school is not without many serious

Table 4 Four Major Litigations of Industrial Pollutions

	Mninama Dwsease of Kumamoto top	Minamata Dease of Nigata	Itai-Itai ¹ Dsease	Pollutions of Yokkaichi
Damage	Paralysis of extremities and death	Paralysis of extremities and death	Pain in the bone and death	Bronchial ailments e.g. asthma etc.
Cause	The factory effluent containing methyl-mercury	The factory effluent containing methyl-mercury	Cadmium poisoning discharged by a mine factory	The pollution of air and water caused by smoke and effluent etc
Company who gave damage	Chisso (chemical company)	Showa Denko (chemical company)	Mitui Kinzokukogyo (metal mine)	6 companies (petrochemical and electric power etc.)
Place of the occurrence	Minamata Bay in Kumamoto Prefecture	Agano River Basin in Nigata Prefecture	Jintu River Basin in Toyama Prefecture	Around the petrochemical complex in Yokaichi City
Time of occurrence	1953 ~	1964 ~	1912 ~	1959 ~
Judgement of law-suits ²	Victory of the claimants, October in 1972	Victory of claimants, September in 1971	Victory of claimants, June in 1971	Victory of claimants, February in 1971

Note : (1)Itai-Itai are exclamatory words expressing acute pain in Japanese.

(2)These judgement had been made at district courts, and law "suits were continued in higher courts after these judgements.

Table 5 The ratio of the people older than 65 in the total population

	1950	1970	1990	2000	2020
Japan	4.94	7.07	12.05	17.24	26.85
America	8.26	9.84	12.39	12.51	16.62
France	11.38	12.87	15.60	15.18	20.51
Germany	9.72	13.69	14.96	16.35	21.57
Sweden	10.25	12.64	15.72	16.03	19.82
Denmark	9.13	12.27	15.60	15.93	20.15
Netherlands	7.74	10.16	12.84	13.79	20.65
Italy	8.26	10.89	15.32	18.17	24.06
England	10.73	12.94	15.72	16.03	19.82

Source: National Social Welfare and Population Institute "The Trend of Population" (1994)

note: The figures after 2000 are estimates.

problems. many young mothers are nervous about bringing up their children, because they often have to raise them by themselves. The working hours of Japanese husbands are so long that they can not participate with child-raising. As the traditional communities have collapsed, young mothers have not been able to obtain assistance from their neighbors. Although daycare centers for children have been established by local governments, mothers who are not working can not use them. In 1992 the ratio of working women amounted to 50.7%. But many young women withdraw from the workforce, when they marry or start a family. In Japan the most important task is the resolutions of the above and other social problems.

(This paper was wrote in 2001)

Note

- (1) Tokue Shibata "Japan's Spacial Feature", Edited by Tokue Shibata "Japan's Public Sector", published by University of Tokyo Press, in 1993, Japan.
- (2) Naomichi Hayashi "The Japanese Ecinomy Today" -50 Years After World War -, published by Osaka University of Economics & Law Press in 1996 Japan.
- (3) HIroyuki Nakanishi "Nihon no Chiho Jichi" (Japanese Local Government's Autonomy), published by Jichitai-Kenkyuusha, Tokyo, Japan.
- (4) Shigeto Tsuru "The Political Economy of the Enviroment" -The Case of Japan-, published by Athlone Press, London in 1999 England.