

Banking and Industry in Japan

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Michio Morishima*

I

In this paper I review the history of the Japanese economy since 1931, concentrating on the following points. First, during this period of sixty years the Japanese economy was converted from a free enterprise economy to a controlled, planned one and then after the war returned back to a free enterprise system. The transformation to the planned economy was quick and rather easy because of the existence of a powerful, despotic government. The military forces were very strong. It was impossible for the general public and businessmen not to follow the military's will, especially after the majority of journalists and academics had surrendered themselves to the opinion guided by the militarist-ultranationalist power. However, although Japan was put under a new strong power (the occupation forces) at the beginning of the post-war period, she was provided with a weak government in the period of self-governing democracy after independence. Democracy created chaos. Therefore, the reverse course from the planned economy to the free enterprise system was slow because of bureaucratic resistance against losing vested rights to meddle in private business and other difficulties. This was especially true in the monetary field.

The process of transformation to the planning economy and the reverse process back from it will be studied in Section II and III, respectively. It may particularly be emphasised that throughout most of the post-war period, Japan adopted Keynesian monetary policy, fixing the rate of interest at a low level; city banks lent as much money to the industrial companies as they demanded. Where commercial banks could not satisfy all the demand directly, they satisfied it by borrowing from the central bank. Of course, this easy supply of money created a number of bouts of inflation; on several occasions they were very severe. In the trade-off between inflation and economic growth, Japan obviously chose the latter rather than minimising the former, and she was then clearly rewarded greatly.

* This paper has been discussed at Covegni Internazionali, Salone della Banca, Assicura 92, held in Torino, Italy, 22 - 27 October 1992. In writing it, I have benefitted from various books by Professor H. Okumura, as well as Nihon Ginko 100 Nen Shi (The Centenary History of the Bank of Japan), 6 volumes, The Bank of Japan, 1984. I am also grateful to Professor S. Yoshida, Musashi University for his comments.

Secondly, after the war zaibatsu families were prohibited from running their own business; they had to sell their companies' shares and retire from the business world by order of the occupation forces. Thus the main problem of post-war Japan was to find out how a free enterprise economy would be workable without the money from these rich families, that is to say, how a capitalist economy is possible without dominant individual capitalists. After the peace treaty, the businessmen devoted most of their effort to this problem of restructuring the economy. The answer they came up with was to establish a system of 'mutual shareholding' which will be explained in Section IV below. On the basis of this organisational innovation having been carried out in 1955-1960, Japan paved the way to flourish in 1970-90. (In fact, if I were asked what element had most contributed to the success of the Japanese, I would without hesitation mention their ability to make organisational innovations, which the reader will observe in various places throughout this paper.)

Thirdly, it will be seen in this paper that behind this system was the power of professional managers. It was higher education in Japan which enabled her to achieve this organisational innovation. Accordingly the analysis of the cliques of university graduates in the Japanese business world is very important. It is seen in Section V that the dominance of university graduates in the sector of big business was already obvious in pre-war Japan as early as the 1920s. Among the most powerful cliques has been and still is that of graduates of the University of Tokyo. They succeeded the samurai group which formed the central government after the Meiji revolution and dominated the other cliques in the government until now. Therefore, in the business world too they were extremely powerful, because the company would have a great advantage by establishing within it a power structure similar to the one in the government, in order to maintain good relationships between them. Of course, it is without doubt that cliques of any kind are a big source of corruption. Nevertheless, a country dominated by selected university graduates, though I personally dislike it, would be a more bearable and more productive society, compared with the usual plutocratic, capitalist countries where cliques formed by the rich families let nepotism prevail among them. The cliques in the big enterprise group and in the financial sector are examined in Section VI.

The market in Japan connecting the firms as demanders for money capital with the commercial banks as its suppliers is not competitive but collaborative. The 'main bank system' which originated during the war (see Section II) formed couples of demander and supplier, in which the latter took the responsibility of providing the former with the money capital it needed. In many cases the couples were in a 'one to many' correspondence in the sense that several banks formed a consortium which collectively took the responsibility of supplying the funds. Because of this system, it has seldom happened in Japan that at some point in the construction of

production facilities (say, a channel tunnel) the money is exhausted and the construction work is stopped, as has often occurred in the case of the construction of the Euro-tunnel. 'Once it was decided, it should go ahead as planned.' This iron rule was very rarely broken in Japan as far as the financing of investment projects was concerned, thanks to the main bank system.

The main bank relationship is usually formed within the enterprise groups, between the companies in a group and the city bank in the same group, so that the bank naturally plays the part of the headquarters of the group; it is the pivot for unifying the group. We discuss, in Section VII, quantitatively how the city bank grips the industrial companies of the group, that is to say, an index is given for quantifying the bank's control of the enterprise group. In any case, having city banks supplemented by industrial and other special banks, Japan never felt a shortage of money in supporting ambitious industrial innovations in the 1970s and 1980s. It is not an exaggeration to say that this banking system is another example of the organisational innovation made by Japan; it smoothed the channelling of money required for investment from banks to companies in these two decades remarkably. It was indeed a great achievement.

In that section, technical innovations of the 'Japanese type' which were carried out especially during the years of the oil crises and after are also discussed. It is seen how the rapid progress of the real sub-economy inevitably induced the development of the monetary sub-economy, as it happened in the midst of the long continuing process of economic growth in 1970-85; this is, in fact, symbolised by the fact that Tokyo became one of the financial centres of the world in the 1980s. Finally, parts of Section IV and VII review why the successful advance of Japan in the 70s and the early 80s ultimately brought about financial scandals and collapses in the late 80s and after.

II

In September 1931 the Manchurian Incident took place, initially having favourable effects upon the economy which was in the midst of the great depression, but later becoming Japan's heavy burden as it expanded into her prolonged war with China and finally gave rise to the world war. During this period, the government geared the economy to the needs of circumstance; it was rapidly transformed into a controlled economy according to the totalitarian political principle, by abandoning the free-enterprise system modelled on Britain which had been established around 1885 and maintained since then until 1930. Japan was moving away from Britain towards the Nazi Third Reich.

It was Korekiyo Takahashi, Minister of Finance, who carried out Keynesian policies before the publication of The General Theory. As a result of these policies Japan was able to recover from the depression very rapidly. But unfortunately these expansionist spending policies greatly helped the army circles which were preparing to spread the war into wider areas. It is not surprising that the spending policies were carried out to a larger degree than Takahashi had intended for the purpose of economic recovery from the depression. They naturally created excessive inflation, as war-time inflation was added to the one due to proper Keynesian policies. Having realised this, he changed his attitude in later years so as to minimise the increase in military expenses. Because of this, in the uprising of 26 February 1936 he was chosen as one of the targets of the coup d'état and killed.

As for issuing the government securities, there are two ways of distributing them. One is for the government to sell them to private individuals or to institutions directly (through, say, post offices) or indirectly (through city banks), while the other is for it to sell them to the central bank which, in turn, sells them to the city banks, according to demand. In the second method, all the government securities issued are immediately bought by the central bank, so that the government will at once receive the amount it wants to raise, though the securities are eventually held by private individuals or institutions if the central bank and then the city banks succeed in selling them on. It is obvious that in the first method it takes time to sell all the securities the government wants to, so the spending policies have to be carried out gradually, whereas the second method produces an immediate result. From this point, we may say that the second is more preferable and effective than the first. However, because the central bank becomes an administrative office of the Ministry of Finance, there is no authority which could control the amount of money, independent of the government's political aims. Takahashi adopted the second method, and thus

subjugated the Bank of Japan under the Treasury. It was the start of the march of the Japanese economy towards all-out nationalisation.

In the first method, the money is transferred from the private sector to the government in exchange for the government securities sold, so that there is no creation of money, though some of the idle money held in the private sector is activated by the hand of the government which uses it to carry out its fiscal policies. In the second method, however, an amount of money equivalent to the securities issued is created immediately, although part of it will later be absorbed by the central bank when it sells the securities to the private sector. This method, therefore, will bring about a substantial decline in the value of the country's money and, therefore, in its exchange rate against foreign currencies. Also it results in a reduction of the interest rate. Of course, the government can use the money raised in this way to achieve its aims. At the time of Takahashi, civilian departments of the government were much weaker than the army and navy departments, so the money was used to finance the Manchurian war. After the 1936 incident in which Takahashi perished, this abuse of the 'Keynesian policy' was continued by successive ministers of finance. For example, Eiji Baba who succeeded Takahashi gave in to the increasing financial demand of the military forces and his policy was similar to, or more generous than, the 'Keynesian' one originally adopted by Takahashi. Because the military forces now had the means to serve the imperialist expansion, Japan's invasion of China became unstoppable.

Japanese politicians in these years were in a dilemma: either prevent the militarists from accomplishing their purpose, or collaborate with them and minimise evils which their imperialist expansionism would bring about. It implied, as the case of Takahashi proved, death (or a political death at least) for a politician to take the anti-militarist stance; thus many of the statesmen or the politicians in pre-war Japan became collaborators of the politicised factions of the military authorities. It is then natural that Japan became isolated in international affairs; international trade treaties were scrapped one after the other. A number of Japanese exporters were accused of dumping because the cheap yen enabled them to reduce the prices of their exports greatly. But in this way Japan's trade surplus deteriorated.

In December 1931 the Japanese government placed an embargo on the export of gold, but it had to ship gold to those countries with which Japan had a big trade deficit in order to make payment. As gold holdings in Japan would be exhausted sooner or later, all the available gold mines, however poor they might be, had to be mobilised for production. As the production had to be carried out against the law of marginal productivity, some special encouragement had to be given to the gold mining industry, so an artificial incentive scheme had to be devised. The international isolation created a bigger demand for weapons and munitions; in order to satisfy it the economy had to be converted to a planned economy as quickly as possible.

Japan was already an over-populated country, so that land was one of the most scarce commodities. The entire non-residential and cultivatable land had to be shared between industry and agriculture. The former should be developed for winning the war, while the latter was equally important because, for a country like Japan which was isolated from others in international trade, self-sufficiency in producing food was a necessary condition for carrying on the war to victory. The government embarked on the introduction into the economy of planning, rationing and controls by some means or other, and intervened in spontaneous economic activities. As the theory of economic planning was very poor in those days, there was no orthodox answer, and the government could not be afraid of its idiosyncrasy.

Big companies were combined or amalgamated into even larger ones by order of the government as part of its industrial rationalisation policy. Smaller companies were annexed to larger companies to form a subcontractual factory system. In these vertical relationships between companies, the high-ranking companies had to control their own subordinates, so that the government need be concerned with handling the top companies only. The relationships were not freely competitive in the sense that these firms could behave on an equal basis, but 'obligatory'. Each company had to fulfil its own duty assigned by the government; it should, first of all, be loyal and obedient to its immediate superior. The firms were transformed from being profit-pursuing organisations into entities which were entrusted with providing everlasting national services. This period of the war or quasi-war structure (1931-1945) was a return to the Tokugawa feudalism that had prevailed until 1867. We can still see its reflection in the contemporary Japanese subsidiary (Keiretsu) system.

Also the banks, Japan Hypothec Bank and the Industrial Bank of Japan, which Japan had established in 1896 and 1900, for the purpose of supplying sufficient long-term funds to industrial companies were strengthened and reorganised so that they could give priority to the heavy and chemical industrialisation urgently needed. Banks for agriculture and industry had existed in various prefectures since 1896. After 1921 many of them were merged with Japan Hypothec Bank; they totally disappeared when the remaining five were amalgamated into JHB in 1944. To fulfil the responsibility of supplying industrial funds these banks were allowed to make long-term loans, provided that banks were granted reliable debentures and shares by way of security. The Bank of Japan issued bank notes, if necessary, without limit, i.e. without cash reserves corresponding to them.

In 1943 the government finally started to arrange 'marriages' between munitions companies and city banks. One bank, or a few banks, assigned to a munitions company took responsibility for supplying the funds it needed. Then an intimate, continuing collaboration began between them. This marriage system soon spread itself widely through the whole industry,

because the definition of munitions companies was extended to include railways, warehouses, construction and building companies, etc. The system may, of course, be criticised as favourable treatment of munitions companies, discriminating against others. There is no doubt about it, but it is also true that from the point of view of industrial efficiency it is a very good organisation if consideration is confined to a medium term. The coupling of banks with manufacturing companies continued to exist in the post-war world in a modified form. The contemporary 'main-bank' system discussed later emerged in this way.

Thus Japanese industrial companies became to be well taken care of financially by their respective custodial banks. As far as this aspect of the war-time economy of Japan is concerned, it is very close to Hilferding's 'organised capitalism'.¹ The banking system is no longer merely an organisation for intermediation of payments but also the one for financing industry; industrial capital is combined with banking capital to form financial capital. This is exactly what happened in war-time Japan. There was little possibility of competition between banks. Various kinds of capital were accumulated within banks becoming money capital; it was controlled by the government and allocated to industrial companies in accordance with their perceived contributions to carrying on the war to a successful finish. The role of the central bank was dramatically changed. It was no longer responsible for maintaining the internal and external value of the currency; its main function was to utilise the available amount of money capital in order to realise the aim of the government in the most efficient way. Of course, the aim was switched from 'victory over the enemy' to 'economic growth' after the war, but the relationships between companies and banks still remain more or less intact, businessmen and bankers serving for the same aim with the same ethos.

The marriages between banks and companies brought about not only favourable effects, as stated above, but also bad outcomes, and some of the bankers and economists were critical of this change in the banking system. As the companies were assured of obtaining enough funds for their production activities, there was no incentive for them to save money. Unless they were subject to banks' strict superintendence, there was always a possibility that the funds provided by the banks were spent wastefully. Furthermore, banks themselves were also inclined to lose the sense of self-responsibility because the money they lent to the companies was provided by the Bank of Japan, which in turn enabled it to create as much money as was wanted. The post-war habits of the city banks of over-lending to the manufacturing companies and over-borrowing from the central bank originated in the tight collaboration of banks and companies during the period of

¹ Rudolf Hilferding, Das Finanzkapital, Eine Studie über die jüngste Entwicklung des Kapitalismus, 1910, Wien.

the controlled economy. In any case the rate of the company's own capital to its total capital declined sharply. It was 90% in 1934, whilst only 30% in 1944.

The Bank of Japan lost its independence from the government. After it became the underwriter for national bonds which the government issued, the amount of currency expanded rapidly. Of course, the Bank of Japan could have sold the national bonds in the open market. If it had done so on a substantial scale, the price of the national bonds would have declined and money would have been tight -- a contradiction of its principal duty of channelling a sufficient amount of money to industry. Moreover, the real output of all commodities declined enormously due to shortages of materials, war damages, etc. When Japan was allowed to join the IMF, in August 1952, the exchange rates were set at ¥ 360 per dollar and ¥ 1,008 per pound sterling, whilst in October 1934 they were ¥ 3.43 per dollar and ¥ 17.14 per pound sterling. Though this great

should have a clear idea of how to reach a political settlement of the war against China, particularly in taking the capacity and feasibility of the Japanese economy into account.² Unfortunately, it was too late; the age of mass hysteria had already begun. The war had its own momentum; nothing favourable to stopping the war resulted from this warning of the Governor.

² Nihon Ginko 100 Nen Shi (The Centenary History of the Bank of Japan), Vol.4, The Bank of Japan, 1984, p.377.

III

In August 1945 Japan surrendered to the Allied Powers; she had, until the conclusion of the San Francisco peace treaty in 1951, two governments, one being her own government and the other the Allied Powers General Headquarters (GHQ), the former being under the control of the latter. Of course, whilst high-ranking officials from the war time were barred from holding public office, ordinary officials remained in office. Their way of thinking or mentality was not very different from the one in war time and often conflicted with the liberalist view of the GHQ. They still lived in the control economy, while the GHQ wanted to establish a free-enterprise system in Japan as quickly as possible. When the views conflicted greatly, the GHQ rightly and properly gave orders which the Japanese government had to carry out, but even in such cases it was possible for the government to put planning elements into the policies when they were implemented. Thus the planning-oriented way of thinking still survived when Japan got independence and naturally revived itself afterwards.

It was fortunate for the Japanese that Joseph M. Dodge, the President of the Bank of Detroit, was appointed as a financial adviser to the Supreme Commander for the Allied Powers (the SCAP) in 1948. He was a classical, orthodox banker: ascetic, diligent and thrifty and he believed in the price mechanism of the free market economy. He was a staunch supporter of the theory which said that government should be kept small and welfare spending had to be minimised. He was a person who could claim to be called a genuine Thatcherite. He insisted that government spending should be confined to its current income, i.e. tax revenues, revenues from state enterprises and others; the central bank should not pay the deficits of the government. The finance corporation established for reconstruction and redevelopment in 1946 was allowed to issue reconstruction savings debentures, provided that they were sold in the open market; its aim was to lend money to the basic industries which had difficulty in obtaining funds for equipment. However, because the corporation had not been strict enough in withdrawing loans, the GHQ ordered in 1949 that the corporation be closed. Whereas the government considered the official prices either had to be raised or abolished, Mr. Dodge's line was to push down the black-market prices to the official ones by rationalising enterprises so that they could bear international competition under the given foreign exchange rates. The enterprises were allowed to rely on the price control compensation only as a temporary means. Naturally a compromise was reached between the two. Although the Japanese government respected the Dodge line, the official prices gradually rose and met the black-market prices which were declining. The equilibrium prices

established in this way were perfectly consistent with the exchange rate on which Mr. Dodge finally agreed with the US government.

We may say that economic controls were removed from most areas except food supplies, international trade, foreign exchange, and finance. This was, however, not strictly true. For a fairly long period afterwards, administrative directions were given to private enterprises; the government was able to lead the economy to the desired position by treating some enterprises favourably and some others unfavourably, especially in the allocation of money capital.

In such a stage of reconstruction we could not say that competition was more essential and preponderant than planning. Enterprises, even though they were equally profitable, had to be distinguished and discriminated among from the government's policy point of view. At the very beginning of recovery, agriculture and the food industry were very important; these were later replaced in the ranking of importance by material importing traders which in turn were replaced by industries for export markets. Although the order of significance of industries was changing over time, the government had to discriminate among enterprises appropriately according to their moving significance in its national economic plan for reconstruction. As far as such a time is concerned, it cannot be said that fair competition should necessarily be more respected than discrimination.

The problem was how to use the given amount of money capital efficiently. In order to make finance to key industries smooth, the Bank of Japan bought the government securities from the city banks which held them and let the banks lend the money thus obtained to selected enterprises of the key industries. Moreover it exempted the banks from the progressive interest-rate scheme which was applied to a large loan exceeding some minimum amount. Such an operation of buying securities and bonds for the purpose of smoothing or facilitating the supply of loans to some particular enterprises was called a himotsuki (tied) operation. By this means the Bank of Japan took the responsibility for financing industry even in the Dodge-line period. Clearly, a himotsuki operation should not be confused with the open market operation for the monetary policy purpose.

In 1950 the Korean war broke out when the inflation due to the second world war was about to cease. There was no doubt that this new war was also a cause of another bout of inflation, because it stimulated exports greatly, so that Japan was benefitted by an enormous trade surplus. The dollars earned in this way were changed into yen; therefore, the prices of commodities tended to increase as larger amounts of money circulated in the economy. To avoid such inflation, imports had to be increased in order to keep the trade surplus as low as possible. To stimulate imports some beneficial treatment had to be extended to importers. Loans were given to them on very favourable terms. This created an over-loan of the central bank to city

banks which in turn made an over-loan to the importers. In this way materials for a further expansion of the economy were accumulated and even a speculative inventory investment was made with respect to imported materials.

Whereas great emphasis was laid on the stabilisation of the value of money, the Japanese government stuck to its war-time policy. This was supported by businessmen. In fact, in a letter addressed to Mr. Dodge, the Federation of Economic Organisations (Keidanren) asserted that the main objective of monetary policy should be to provide necessary funds for development of such basic industries as coal, electricity, steel and shipbuilding, and to help those industries which had the potential to export their products, by furnishing them with funds for making their equipment adequate and modern. In order to secure industrial funds it was important to reform the tax system so as to promote capital accumulation, in addition to enhancement of national savings. According to the view of the Bank of Japan at the time, those funds which could be used as capital for a long period, such as the funds for collating with the US aid to Japan and the deposits to the Treasury's deposit department, should be allowed to be regarded as long-term funds for industry. Export Bank of Japan and Japan Development Bank were both established in 1951 along this line of thought. The economic and scientific section of GHQ was reluctant to make this move. It warned the Japanese government of their approval of allowing enterprises to use their profits, which were very big due to the Korean war, for an expansion of production facilities and inventory holdings, without returning the loans they had borrowed. As Japan became independent, she diverged from the GHQ line considerably and the Bank of Japan continued to be involved in the finance of industrial investment, as it had been so during the war, so that the official rate was kept low over a long period of time after the San Francisco treaty.

After the peace treaty, the Japanese government more loosely interpreted Dodge's philosophy of finance in such a manner that the scale of public finance could be expanded. Nevertheless, we may say that the essential spirit of the Dodge line was respected in the sense that the government gave a high priority to the stability of the value of yen; the funds needed for expanding basic sectors, electricity, shipbuilding, etc. as well as the funds for rationalising heavy-chemical industries, had to be supplied mainly by increased savings. The finance of the remaining part was left to efforts of the banking and financial organisations as it had been during war time.

At that time, however, Japan was in a gravely difficult situation; the price level was higher than her international competitors', so that she had to tighten credit in order to secure an equilibrium of international trade balance. On the other hand, in order to reconstruct her industry an expansion of imports was inevitable, which had to be accompanied by an expansion of exports, to restore the trade balance. To stimulate imports and exports some scheme for subsidising import

and export enterprises should be inaugurated, for the purpose of which a credit expansion was needed. Economic reconstruction meant an easy-money policy. Nevertheless, it is true that the government had to increase the effectiveness of the available amount of money. To do so, therefore, it strengthened the progressive interest-rate scheme, rationalised the scheme for favourable treatment of the loans for imports and intensified the government's control (guidance and regulation) on borrowing for the purposes of industrial investment.

As a result, money poured into the circle of big firms; small and medium sized firms were segregated and hardly obtained funds for investment. Because of the increase in the productivity of the whole nation due to this tight financial policy, the wholesale prices of commodities declined and approached the international level. The international trade balance was considerably improved, although the production of mining and manufacturing industries became lower. In an economy like the Japanese one in this period of time, in which everything was in shortage, it was very important to select those enterprises which had the ability to perform better, and to distinguish them from others, so that in deciding on an economic policy the government's quality assessment of the enterprises was taken into account. It might be criticised as an unfair system because it was not operating according to an impersonal principle of equal opportunity. In 1953-54, however, the money market was tightened in order to improve the trade balance, and a consideration was clearly paid to the restraint of total demand. In this sense, a return to orthodox financial policy was observed to some degree. Moreover concerning financial matters, during the occupation period, the GHQ gave directions to the Bank of Japan directly rather than indirectly via the Japanese government. Thus it contributed to making monetary policy more independent of other industrial policies.

In 1955 Japan succeeded in expanding exports greatly, so that her real GNP grew at a very high rate of 8.8%. Prices were stable, trade balance was improved, and lending-borrowing positions of commercial banks were improved. For a short period at least, the central bank was set free from the fear of acceleration of over-loan. Unemployment decreased, though the economy still had many disguised unemployed workers. In 1959 the circumstances of the labour market changed dramatically; labour at last became scarce. Competition for hiring new school leavers was getting severe. Furthermore, during the ten years from 1955 to 1965 foreign capital was introduced into the economy; this, together with the improvement in international trade liberated Japan from the international trade balance constraint which had been very restrictive in the past.

However, an over-loan of the central bank reappeared as soon as business conditions recovered because commercial banks relied on the central bank and borrowed excessively from it in order to lend as much as possible to the firms. Such a situation should be considered as

unhealthy, but it was, nevertheless, a case in which the central bank could, rather easily, manipulate monetary policies in order to encourage or discourage investment activities of the firms.

In 1955-56 when over-loan almost disappeared the government tried to establish an open market for government short-term securities, but its open market operations did not work, because it issued them excessively and insisted on the original conditions of the issue. Consequently the Bank of Japan had to buy all the securities remaining in the market. This shows how difficult it was to re-introduce free markets into the economy once citizens and administrators had forgotten how to behave in the market and how to operate it. Even though the economy was provided with a market, the price mechanism did not work there. The interest rate was not adjusted flexibly, and we had nothing other than an economy that would be characterised as a fixed price (or fixed interest rate) economy, in spite of the fact that the Bank of Japan wanted to have an open market where the rate of interest was flexibly changed by virtue of its open market operations. In fact, the official rate changed only three times during the post-war period of inflation and only once in the six years from 1949 to 1955. Occasionally, either rationing was carried out in the market, or a progressive interest-rate scheme was applied to large loan. Otherwise, Wicksell's fixed-interest-rate models of cumulative process was perfectly adequate for describing the Japanese economy in this period.

Why had such a financial structure continued to prevail after the war too? During the war period the interest rate was kept low in order to support enterprises. Commercial banks lost the principle of self-responsibility and played the role of tunnels connecting the central bank and the industrial firms. They lost their own individuality and they uniformly just informed the central bank of the fact that they were unable to support the firms' industrial investment by such and such an amount. All the excess demand for industrial funds were cleared by the central bank at the given, current rate of interest. There was no need for the firms to issue new shares. All stock exchanges were closed during the war time and were only re-opened again in 1949. The firms were thus financed by borrowing from commercial banks which in turn borrowed from the central bank, and this last merely printed as much paper money as requested. This easy going 'over-loan' regime continued to prevail, in spite of Dodge's effort, after the war and even after the independence of Japan.

This occurred where the city banks lent to the firms that money which they had borrowed from the central bank, because their lending was too large in comparison with the deposits they received. The total liabilities of the city banks, except the part that was lent to the firms, were held either in the form of cash or deposits, or in the form of stocks or securities. Where the holdings in this last form were small, lending would be large, provided that holdings in cash or

deposits were limited. While the stock exchanges were closed, the tradition of over-loan came to stay in the post-war economy.

Obviously the stock exchanges had to be re-opened and stimulated in their activities. As will be discussed later, however, there was a reason for the fact that the business world in that period did not much welcome a very active circulation of shares but wanted to have stable share holding. Then the Bank of Japan investigated an alternative way to overcome the over-loan phenomena. Its plan, as will be seen later, was not carried out.

In any case, to the eyes of foreigners it looked very unstable and vulnerable that commercial banks had lost the spirit of independence and self-responsibility and easily over-borrowed from the central bank. It was extremely important and urgent to restore the free financial market of the pre-war period because the role of international trade became more and more significant for the recovery and new development of the Japanese economy. On the other hand, in spite of the recognition of over-loan as being undesirable and in spite of every effort of the Bank of Japan to get rid of it, it survived. It is true that over-loan almost disappeared for a short while in 1955, but as soon as this was realised by the firms and the commercial banks, the former requested the latter to lend them more money, while the central bank had to support the commercial banks by satisfying their demand for borrowing from it. In those days where there was a limitless demand for industrial investment for recovery and the government committed itself to providing the industry with enough funds for recovery at a low interest rate, an elastic supply of money and, therefore, an inelastic interest rate were natural consequences to a certain extent, although the supply of money was restricted by introducing rationing in the case of the demand being too large.

In such emergency circumstances like those after the war, various sectors of the economy should be treated differently according to their roles expected in the whole process of recovery and development. A special and distinct treatment was, in fact, made to each of them in such a way that the economy would work most effectively. The economic principle supported in post-war Japan was planning and rationing on a priority basis but it was neither rationing on equality basis nor free competition. The following sectors were favourably treated: (1) those non-munitions industries which had been badly damaged by air raids, (2) the agricultural sectors, including the fertiliser and other agribusiness, which had to play a crucial role in rescuing the people from the serious difficulty of obtaining food in a period just after the war, (3) the international trade sector importing the materials for domestic industries, and finally, (4) promising export industries.

As for (3), the loan for establishing the funds needed for settling import bills was granted on a favourable condition in the first ten years after the war. Such a consideration was almost

terminated in 1955 and completely abolished in 1966. Secondly, regarding (4), a similar consideration was made concerning the funds for settling export bills; it survived until 1973. In order to strengthen the nation's export capability the government treated selected industries favourably by providing them with a loan for investment at a low rate of interest. This scheme was criticised by international competitors as unfair, but the post-war Japanese experience shows that planning carried on the priority principle was more effective than free competition. There was, of course, a trade-off between the rate of growth of production and the depreciation of the value of the currency. Whereas generous finance in favour of industrial investment would have created excessive inflation, it would also have raised economic growth greatly. Clearly gain dominated forfeit.

Finally, it may be said that the financial policy taken by the Japanese government was 'Keynesian', while the one insisted on by Mr. Dodge was 'monetarist'. According to the former, it is most important to establish nationally agreed economic policies systematically, so that it is necessary that the central bank is subordinate to the government and gives support only to those proposals which are consistent with the government's plan. On the other hand, according to the latter, the main task of the central bank is to make the value of the currency stable; the monetary policy should, therefore, be neutral and independent of the political aims of the government. Like the two-party political system, the central bank should perform a part of the Opposition to the government. Such a structure obviously slows down the speed of development, though it secures the economy against inflation and other monetary difficulties. The Japanese were 'Keynesian' after, as well as during, the war. They always run at full speed, collapse, and then rouse themselves to action again.

It is true that throughout the post-war economic history of Japan until 1970 the following Keynesian characteristics were evidently observed. First, the official interest rate was kept low so as to enhance industrial investment. Secondly, the quantity adjustment, rather than the price mechanism, prevailed in the money market, in order to pour money into industry as much as possible. Fortunately, in spite of this kind of monetary policy no serious inflation of prices was noticed in the 1960s, whereas some necessary monetary measures, including tightening of the central bank's lending regulations, were taken when the situation became serious. The financial capital of industry was supplied by banks, while equity finance deteriorated. Therefore, bankers, rather than shareholders, ruled the enterprises. Nevertheless, it is also true that the Bank of Japan tried, several times, to restore its classic sovereignty from the government; its efforts, however, may be said to have been generally unsuccessful, though it tended to be independent at a very slow tempo.

IV

Japan's surrender to Allied Powers brought her a revolution. Although the Emperor survived the war, he had to transfer most of his property to the State. The major zaibatsu Konzerns, the kernel of the pre-war Japanese economy, were all ordered to disband. Holding companies of zaibatsu groups were dissolved and zaibatsu families had to dispose of shares they held. Not only they themselves were not allowed to be appointed to the position of director or executive of any company which had belonged to a zaibatsu group previously, but also many war time directors and executives of big companies were purged from the business world because they had been in collaboration with militarists during the war. Moreover, big companies were split up. In the case of Mitsui Trading Company (Mitsui Bussan) and Mitsubishi Trading Corporation (Mitsubishi Shoji), for example, a new company was prohibited from forming if it employed more than two high class members (directors of the departments or above) or more than 100 staff members and clerks of either of the two companies. Big city banks, however, were not subdivided. In all these companies, after directors and executives had been forced to resign, the vacancies created were filled by younger people. But among them there were people who had little experience of running a company in the age of free competition. In fact, although some had experienced company management under the direction or control of the government, others did not have much experience because they had spent many years at the front as soldiers. The new presidents and executives of these companies were powerless because they had no powerful shareholder who would support them but were just promoted to the places their predecessors had evacuated. The shares they themselves held, if any, were negligible.

In Japan, it was already obvious as early as the first world war that the management of the big, modern enterprises was left to professional managers who had graduated from university. Nevertheless, it cannot be said that ownership and management was separated in Japan for the reason pointed out by A.A. Berle, Jr. and G.C. Means.³ Behind the managers of the pre-war zaibatsu companies, there were shareholders, i.e. zaibatsu families, who supported them, so that it cannot be said that management and ownership were separated from each other. In the post-war economy, they were separated, however, not for the economic reason as asserted by Berle and Means that where a joint-stock company becomes large, dominant shareholders disappear as the holding of shares tends to be dispersed among many small shareholders, but for the political

³ A.A. Berle, Jr. and G.C. Means, The Modern Corporation and Private Property, New York, Macmillan, 1st ed., 1932; revised ed., New York, Harcourt, Brace and World, 1965.

reason that big owners of the company were forced to give up ownership, so as to take the so-called 'responsibility for the war'. It is true, nonetheless, that newly appointed managers had to fill up this vacuum of ownership to make the company firm and safe as well as to secure legitimacy and authority for their own positions. In fact, companies were in an extremely shaky position after the war both in ownership and management.

During the occupation period it was true for each zaibatsu Konzern that although it had been disbanded, chairmen of its member companies met each other and kept in contact secretly. After independence, the meeting of chairmen of ex-member companies of a zaibatsu Konzern became more open and regular. In the case of the Mitsubishi group, for example, the meeting was called the Friday meeting, which began to play a significant role as an informal decision making body around 1954, though it had existed since 1946, rather secretly, in a form of a social gathering of executives of ex-member companies of the Mitsubishi Konzern. Other Konzerns also had similar meetings, at which important matters were discussed and resolved. In this sense, it may be said that the pre-war zaibatsu survived and continued to be active after they had been disbanded.

However, zaibatsu families never came back to their own groups. This was because these families had been criticised severely from both the right and left wings -- they had been, in fact, targets of terrorism in the pre-war period, so that they did not want to be reinstated in their former positions. It is also true, on the other hand, that new executives of these companies did not welcome their return. Without these former bosses, how could these companies re-establish the previous solidarity and regulation between themselves which they had enjoyed in the time of zaibatsu Konzern? They had no longer the holding company (or the head corporation) which had taken the role of the headquarters; moreover, new executives were in a very weak position, because they had no powerful shareholders behind them. These were overcome in the following way.

First, each group had a big city bank and a big comprehensive trading house (Sogoshosha). Companies in a zaibatsu group were usually financed by its city bank and their purchasing of materials and selling of products were dealt with by its trading house; so the chairmen of these organisations were naturally regarded as the leader and the chief secretary of the group. Sogoshosha was not just a trading company: it had the great ability of gathering information about anything. It dealt with commodities ranging from noodles to jet planes. It often is said that Mitsui trading company is as powerful as the CIA; thus it fits perfectly in the position of the head office of the group. In order to band the companies in the group strongly together, it was devised that they mutually held a substantial portion of shares of the companies in the same group. Let A, B, C be companies in a group. If A holds shares of B so as to be able to

dominate other shareholders, and B holds shares of C and C shares of A, then A is controlled by C, which is reciprocally controlled by A indirectly, because A control B which in turn controls C. Thus A, B and C form an indecomposable group, so that they collaborate with each other in the same way as they did at the time when they formed a zaibatsu Konzern.⁴ Thus without the holding company it was found that companies were able to form a powerful group as long as they hold shares mutually, so as to be linked with each other to make an indecomposable group.

This system of mutual holding of shares was a very powerful device, by means of which directors and executives were able to secure their positions without individual shareholders' backing. In the classical capitalist society, they themselves were either big shareholders' agents who were approved and trusted at the general meeting of shareholders or the big shareholders themselves. Each share has an equal right to cast one vote, so that a person who has the largest number of votes behind him is most powerful in the company. This was true in the pre-war Japanese business world and it

is still true in contemporary Western capitalist societies. In the exceptionally chaotic period after the war, due to an enormous vacuum created by the absence of zaibatsu family members from shareholding, however, it was especially true for the ex-zaibatsu companies that the new executives would have been powerless, unless they were supported by institutional shareholding. For this purpose the mutual shareholding system explained above worked very effectively. Because there is no person, except the chairman of company A himself, who can legitimately represent the shareholding of A, the mutual holding system may work as a mutual support system of the current chairmen of the companies in the group. On the basis of the majority shareholding of A in B, chairman a of A supports chairman b of B, who supports c of C by means of B's majority holding of shares in C. Similarly c supports a. In this way a revolutionary takeover was made by moneyless (or proletariat) managers in the ex-zaibatsu companies from the hands of individual owners.

In Japan, professional managers have traditionally been highly regarded since the introduction of Western technology and system of business. In almost every sphere of activity the society was already dual-structured before the end of the nineteenth century. Shoten (its literary meaning being shop) was distinguished from Kaisha (company or corporation) as the former often meant a company of the traditional Japanese style, while the latter always meant a company of the Western style. The latter needed educated professional managers and technical experts, whereas

⁴ Hiroshi Okumura, Shin-pan Nippon no Rokudai Kigyo Shudan (Sixth Biggest Enterprise Group of Japan, New Edition) 1983, Tokyo, Diamond Press, p.106ff.

masters and gentlemen without Western education could run traditional shops and works. Moreover, where these were involved in business with government offices, they had to employ educated professionals, in order for them to be able to be a match for government officials. In this way educated persons were highly regarded in companies; the bosses or capitalists entirely relied on them. The loyalty of these employed professional managers to the boss was the most important virtue and duty in the business world. As Japan was a typical Confucianist country where education was most highly respected, this system of mutual trust worked with no trouble between boss and professional managers in the pre-war era.

Nevertheless, it is true that once the owners were purged from the companies by the GHQ, the companies were hijacked by their employed managers, who secured their own positions by inventing the system of mutual shareholding. The following case of Asahi Newspaper shows how firmly the standing of executives had now been established within the company. Asahi, originated and owned by the Murayama family, has been one of the most influential newspapers through the modern history of Japan. The family was purged by the GHQ but later wanted to restore its status as the owner of the company. The then chairman and executives of Asahi were, nevertheless, strong enough to resist the proposal, though they had finally to make a compromise and accepted Ms Michiko Murayama as one of the directors. From the point of view of the family this may be taken as a revolution, while from the viewpoint of the professional managers there was no revolution at all because they were lawfully appointed to the post of executive, and the company is still owned by shareholders, individual or institutional, who have decided to support them.

The device of mutual holding of shares was later found to be effective in defending the company from a takeover bid in which an outsider or a foreigner challenged its executive team. The system started, as has been seen above, to support otherwise powerless employed executive members. It was intrinsically based on an implicit assumption that the institutions involved in the scheme would never sell the shares they had bought. Such shareholders are said to be 'stable'. As unstable shareholders can never be trusted, shareholders taking part in the scheme must all be stable in order for it to work as a mutual supporting system. It is therefore, very natural that the system was encouraged again and promoted in the late 1960s when Japanese companies were considered as possible targets of American takeover. It was then criticised by foreign, especially American, investors as an evidence clearly showing the fact that Japan's financial markets were not open enough.⁵

⁵ H. Okumura, Hojin Shihon Shugi (Corporate Capitalism) 1984, Tokyo, Ochanonizu Shobo, p.100ff. R. Dore, Flexible Rigidities, Industrial Policy and Adjustment in the Japanese Economy, 1970-80, London, 1986, The Athlone Press, p. 70.

In Japan new shares used to be issued at face value and allocated to the current shareholders in proportion to the number of shares they held. In the 1970s it became popular that

they would meet each other in the market, where the price would openly and fairly determined. However, as they are sections of the same comprehensive firm, the price is decided within it; and this insider trade may, and perhaps will, produce unfair prices.⁶

Throughout the 1970s and 80s it was easy to manipulate the prices in the security market. First of all, it was (and still is) monopolised by the big four, Nomura, Daiwa, Nikko and Yamaichi, all comprehensive and uniform in the sense of behaving similarly. In addition, customers were extremely speculative in those days, so that they would not take much notice of the price level as long as they believed that prices would continue to rise in the future. By providing news and information to the effect that the price of shares of company A would be higher in the future, it is almost certain that the big four could create a speculative rush of customers to the market to obtain the shares of A. Under the mutual holding regime the institutional stable shareholders of course bought A's new shares to keep its proportion, so that the rush always created a big excess demand for the shares, producing a high price. Thus the news and information (suggested by the big four to the customers by various means) were confirmed. Repeating the same story for many cases of new issues, customers came to believe rationally and confidently that because of their economic success Japanese companies' share prices would be higher and higher in the future. The manipulation worked very well. Company A acquired a large amount of funds, huge profits accrued to securities firm S, and individual customers were satisfied because they succeeded in speculation.

So far, so good. In 1987 Nomura Securities surpassed Toyota car-manufacturing in the amount of current profits produced. And big corporations obtained huge amounts of funds by issuing new shares, so that they could pay back to the banks the money they had borrowed from them for industrial investment. The rate of the company's own capital in its total capital improved greatly, but in the 1980s there was no big, promising industrial investment opportunity; it was a period during which the financial world was much more prosperous and flourishing than the industrial world. Those companies which had raised excessive amounts of funds started to use them for financial investment and loans to their subsidiaries. They behaved like city banks and were teasingly called Toyota bank, National Panasonic bank, etc. Excessive issues of shares continued further; it then became more and more difficult for stable shareholders to remain 'stable' by buying an appropriate proportion of the new shares, because they needed huge amounts

⁶ I greatly owe this analysis and the following to H. Okumura, Kaitai suru `Keiretsu' to Hojin Shihon Shugi (Dismantling `Enterprise Groups' and the Corporation Capitalism), 1992, Tokyo: Shakai Shiso Sha.

of money to do so. Thus a fear for the viability of the mutual holding system naturally emerged, and the confidence that share prices would continue to rise was shaken and faded away among individual speculators. They then started to sell the shares, and the prices actually fell, confirming their worries. Once the tide rolled back, prices declined further and further. Not only individual speculators but also institutional shareholders for the purpose of 'stability' suffered greatly.

During this process of reversion the securities firms made a serious mistake because of their internal conflict of interests. Both individual and institutional shareholders lost considerably in proportion to their holdings because of the fall of share prices. However, the securities firms treated them differently. In the case of institutional customers, the underwriting sections of the firms did (or would) benefit from those which had issued (or would issue) new shares, while individual customers were only concerned with the brokerage sections. The firms therefore compensated the losses of large companies, whereas individual customers were usually left out. This was of course a scandalous and discriminate treatment and invited criticism from various corners of the society.

Simultaneously, it was revealed that Nomura and Nikko had loaned a huge amount of money to a yakuza (mafioso). He used it for buying shares to 'takeover' a company. Moreover, it was found that Nomura had manipulated the share price on his behalf. (In fact, regarding the so-called 'takeover' undertaken in Japan it is usually understood that the person who has bought the shares in a large amount has actually no intention of taking over the company but blackmails the company into believing that they will be taken over. Then the company buys back the shares at a much higher price. It is shameless indeed that leading securities firms, like Nomura and Nikko, have been involved in such dirty affairs.) Individual customers' confidence was entirely betrayed. Share prices plunged repeatedly. From this story many would agree that the mutual holding system is one of the tricky but most effective organisational innovations that the post-war Japanese business world have ever devised. It contributed enormously to promoting the strength of Japanese enterprises. It went too far, however, because of its effectiveness, and finally it gave rise to a decline, or at least a halt of Japan's economic growth for a considerable length of time.

V

For a university graduate, Japan is a paradise. This has been true almost from the beginning of this century. As I have emphasised elsewhere,⁷ the Meiji revolution 1867-68, usually referred to as the Meiji restoration (of the direct administration of the Emperor), was an overthrow of the samurai regime carried out by samurai themselves with the purpose of transforming Japan into a modern nation-state, but it was quickly realised after the revolution that unless samurai were replaced by a new type of samurai, university graduates educated in the Western manner, it would be impossible to establish a country as civilised as the West. The government reformed traditional education at elementary and higher levels, just after the revolution, and conspicuous yields of the new education system were already appearing in the 1880s. Around the turn of the century, the new intellectuals had acquired a significant share of power in every corner of society. This quick propagation and great success of the new (Western) education would probably be attributed to the fact that Japan was a Confucianist country, where education was regarded as having a high intrinsic value and the classification of the people was made according to their education received into, say, literates and illiterates. Because Japan had been more Confucian before the revolution than after, education had already been widespread at a considerably high level in the feudal Tokugawa period;⁸ what the new government needed to do was simply convert from the existing Chinese style education to the Western style.

Naturally, the samurai of those clans which had led the revolution acquired high positions in various spheres of activity in the post-revolution world. As they decided not to transfer the capital from Tokyo, their clans had to shoulder the big disadvantage of all being located very far from the capital. The driving force of the clans soon expired, and this contributed greatly to an easy advancement of the university students into all sorts of circles of society. In 1926, the end of the Taisho period, five years prior to the appointment of Korekiyo Takahashi to the Minister of Finance, the business world was already dominated by university graduates and was unworkable without them.

The process of historical transformation of the traditional business world to this modern type may be seen in the following. In order to quantify the movement, I have used Nippon Zaikai

⁷ Why has Japan 'Succeeded'? , Cambridge University Press, 1982, "A Historical Transformation from Feudalism to Capitalism", a discussion paper, STICERD, LSE, 1986.

⁸ R. Dore, Education in Tokugawa Japan, London, The Athlone Press, 1965.

Jinbutsu Retsuden (a series of short biographies of great figures in the Japanese business world) Tokyo, Aoshio Publishers, vol.1, 1963 and vol.2, 1964 which contain bibliographies of 200 successful entrepreneurs and business men, to analyse how the business world changed in the Meiji-Taisho period, 1868-1926. Because 23 of them were too young to establish themselves as significant figures in this period, I have excluded them and divided the remaining 177 into eight groups according to the time of their debut. Group A consists of those who were already known as businessmen before the revolution, 1867-68; group B includes those who made their debut as established businessmen during the first fifteen years, 1868-82; those of the vintage years 1883-90, 1891-97, 1898-1905, 1906-12, 1913-20 and 1921-26 form groups C, D, E, F, G and H, respectively. The allocations of the 177 sample members to the eight groups A-H are 11, 12, 9, 21, 18, 37, 24, 25 people, respectively. These sample sizes are very small, even if the underdevelopment of Japanese business circles in these years is taken into consideration. It must be remembered that the following analysis may be able to sketch only a rough picture of the cream of the crop of businessmen.

Also, it has to be noticed that these allocations of the sample members to the eight periods represents the numbers of new entrepreneurs who were admitted as members of the business elite in the respective periods. Of course, it is difficult to determine the time when a person was recognised as a distinguished figure unless we make a detailed biographical study of each individual. Thus we must acknowledge that our allocation is more or less arbitrary, being subject to my personal judgement. We may, nevertheless, be able to conclude, from the investigation to be discussed in the following, that in the last sub-period, 1921-26, university graduates, especially those of the state university, already held the hegemony of the business world in Japan.

We classify the people according to whether they received higher education or not. In the early days after the revolution, a formal education system, particularly that of higher education, had not yet been established as a system available to ordinary young people in Japan. In order to receive higher education, boys were sent abroad. It is also very difficult, and, therefore, more or less arbitrary to decide whether an individual actually received higher education or not in a foreign country. In the biography it is usually written: "He yugaku-su (he played and studied) in America." But he might have mainly played and occasionally studied. Accordingly, for those persons who had visited a foreign country, a "higher education diploma" was given by my personal, intuitive judgement. But in later years the numbers of such persons declined significantly because most of them went through the Japanese system, so that the arbitrariness due to my personal conference of diplomas does not affect the general conclusion of the study.

Before the revolution, the Tokugawa central government and a number of feudal clan governments had schools for their own samurai boys. Most of them were transformed, after the

revolution, into the British type grammar school, while a few of them became schools for higher education. In particular, on the basis of the schools of the central government in the feudal age, the University of Tokyo was established in 1877; it was later (in 1886) reformed into the Imperial University, which was further reformed into the present University of Tokyo after the second world war. In parallel with this, a few private higher education organisations were emerging in the closing days of the Tokugawa shogunate. The most famous and influential of these was Keio Gijuku (the present Keio Gijuku University) and the other would be Tekijuku (now the School of Medicine of Osaka University). Immediately after the revolution, private higher education gained power and led public higher education, but their relative position was soon reversed.

Under the Imperial University a few high schools were founded and played the role of preparatory schools to the university. The Imperial University system then expanded; in 1926 there were already five imperial universities in Tokyo, Kyoto, Sendai, Fukuoka and Seoul, Korea. Also, quite a few colleges of agriculture, commerce, medicine and technology were founded and the high schools increased in number, corresponding to the expansion of the university system, especially after the first world war. At the end of 1926 there were 33 high schools in Japan and Taiwan but not in Korea. Whereas both private and state universities expanded greatly in terms of quantity, the quality of the private universities was taken as being generally much lower than that of the imperial universities throughout the last five of the eight sub-periods we are concerned with.

In the first period A, as is shown in Table 1, businessmen had no higher education. The business elite in that period consisted of traditional merchants only. In the post-revolution period B, however, new technology was introduced and educated businessmen appeared but they all studied abroad. In the third period C the business circles began to accommodate graduates of Japanese private higher education organisations, while it was in the fourth period D that they received state university graduates for the first time. As far as the entrants in successive periods are concerned, the share of those without higher education and that of those with it but in foreign countries in the total members of the sample have both declined almost monotonously. The businessmen with Japanese state university education increased more rapidly than those from private universities.

On the basis of these statistics, Table 2 is obtained on the following assumptions. (1) All the persons in group A were fully active until the end of the fifth period, 1898-1905; but only half of them worked in the sixth period, 1906-12, and they were all retired from business afterwards. Group A, therefore, appears with only half weighting in the sixth period, whereas it has the full weight 1 before the sixth and zero weighting in the seventh and eighth. (2) Group B has weight 1 from its appearance to the sixth period, half weighting in the seventh and 0 afterwards. (3)

Similarly, group C keeps weight 1 from the third until it has only half weighting in the eighth period. (4) All other groups D, E, ..., H have full weighting in every period after they first appeared until the end (i.e. the eighth). Then the numbers of active leading businessmen for the eight periods are obtained as is shown in the second row of Table 2.

Table 2 gives statistics regarding active businessmen in the eight periods; it is clear that the percentage of those with no higher education in the business elite steadily declined throughout the Meiji-Taisho period. It started with 100% and reached the low level of 38%. This means that traditional merchants were constantly replaced by university graduates. The circles became more and more intellectual, and without the professional specialist knowledge concerning management and technology it become very difficult to run companies and factories. Also, from the table we may observe a clear import substitution concerning education. Japan first imported educated and capable experts though they themselves were Japanese. The share of such people quickly diminished and became one third of its former level by the first post-revolution period, at the end of the Taisho period. The native experts with state or private higher education not only filled the new places created by the expansion of the business world but also advanced into the vacancies

Table 1

The Business Elite of Meiji-Taisho Japan: Flow Table*

Period	A 1860-67	B 1868-82	C 1883-90	D 1891-97	E 1898-1905	F 1906-12	G 1913-20	H 1921-26
The number of businessmen	11	12	9	21	19	36	24	45
Classification by education								
No higher education	11 (100)	9 (75)	7 (78)	13 (62)	9 (47)	12 (33)	7 (29)	13 (29)
Foreign higher education	0 (0)	3 (25)	0 (0)	2 (10)	1 (5)	1 (3)	1 (4)	3 (7)
State university education	0 (0)	0 (0)	0 (0)	4 (18)	6 (32)	15 (42)	9 (38)	20 (44)
Private university education	0 (0)	0 (0)	2 (22)	2 (10)	3 (16)	8 (22)	7 (29)	9 (20)

* Figures in parentheses are percentages.

Table 2

The Business Elite of Meiji-Taisho Japan : Stock Table

(unit: %)

Period	A 1860-67	B 1868-82	C 1883-90	D 1891-97	E 1898-1905	F 1906-12	G 1913-20	H 1921-26
The number of businessmen	11	23	32	53	72	102.5	115	149.5
Classification by education (unit: %)								
No higher education	100	87	84	75	68	54	46	38
Foreign higher education	0	13	9	9	8	7	6	5
State university education	0	0	0	8	14	24	30	36
Private university education	0	0	6	8	10	15	19	20

VI

Dramatic changes happened in both the business and education worlds after the second world war. As has been mentioned, the zaibatsu Konzerns were disbanded. Ultra-nationalistic political influences, as well as military controls and interventions, no longer existed in post-war Japan, whilst the left-wing labour movements had once been vehement and strikes had frequently occurred before Japan was transformed into a relatively easily governable country with no serious opposition group in the middle of the 1970s. The scale of the business world in 1992 has been greatly expanded. Enormous sectors of big businesses and of small and medium-sized businesses now exist in Japan. Furthermore, the big business sector as well is structured hierarchically; at the top of it, there are companies whose chairmen and presidents are regular members of the luncheon (or breakfast) meeting of an ex-zaibatsu enterprise group. The second stratum consists of the major companies which belong to the six enterprise groups but are not member companies of the lunch or breakfast meetings. The third would be those others whose shares are listed in Part I of the main exchanges. Of course, there are some big, powerful companies among the unlisted but they are comparatively few in number. One can compare those businessmen in the Meiji-Taisho period who were reviewed in Nippon Zaikai Jinbutsu Resuden, with the directors and executives of the luncheon (breakfast) meetings of the six enterprise groups, and I shall show the result of the comparison below.

The education system also changed greatly. The system which had treated the imperial universities differently financially from ordinary state universities, and under which their autonomy in appointment of professors and in curriculum decisions had been respected by the Ministry of Education, was abolished by the GHQ as it considered that these universities had collaborated with the military forces in the invasion of the Asian countries. Imperial universities were then transformed into ordinary state universities and their special connection with high schools was dissolved. Under the new regulation the term of the usual undergraduate courses was extended from a three year system to a four year American system. High schools in the cities where an imperial university had existed became part of it to form a new state university in which they were concerned with education in the first two years, while all other high schools were combined with colleges of medicine, commerce, technology, etc., in the same region to form a new provincial state university. As military academies had all been closed, universities were the only means to climbing the social ladder in the secular world, so that the rat race for obtaining a place in a state university was intense and very severe in post-war Japan. Those who were

unsuccessful in the race rushed into private universities. These too, therefore, had to expand in capacity and the list of private universities became very long.

We may then classify the universities in contemporary Japan in the following groups: (1) Tokyo University, (2) Kyoto University, (3) Hitotsubashi-TIT, (4) major state universities, (5) other national and municipal universities, (6) Keio and Waseda Universities, and (7) other private universities. (1) and (2) are ex-imperial universities in Tokyo and Kyoto respectively. In (3) Hitotsubashi is the former college of commerce in Tokyo, now specialising in economics and other social sciences, while TIT (Tokyo Institute of Technology) is the former college of technology in Tokyo. These two together would perhaps make a second Tokyo University. (4) includes five former imperial universities (Tokoku, Kyushu, Hokkaido, Osaka and Nagoya) and Kobe, this last being a comprehensive university, comparable with Osaka and Nagoya, established after the war on the basis of a college of commerce in Kobe with other institutions. The universities in category (5) are influential in their respective localities but have not yet established a nationwide reputation. Among private universities most eminent are Keio and Waseda listed in (6); in terms of numbers of students, the latter is much larger, and although it is more powerful in political circles, journalism, etc., Waseda is far less influential than Keio as far as the business world is concerned. Category (7) includes huge private universities such as Nippon, Kinki and Fukuoka, as well as more moderate universities such as Meiji, Rikyo and Doshisha, etc. with some historical reputations. Also it includes small organisations, some with historical reputations but others being new enterprises.

It has already been seen that after the war employed professional managers and experts were in high positions without the back-up of powerful shareholders; they let their companies buy shares of their friends' companies and the mutual holding of shares formed in this way was used as a means of supporting their respective posts in the companies. However, this would not work unless those on the top stratum in different companies could trust each other. What would play the role of the bond of trust between them? Is it their personal friendship? Obviously not, because if so, every time the president of a company was replaced by a new person, the shareholding of the previous president had to be replaced by the one of the new, and this would create a chaotic state in the stock market which was never observed. The mutual shareholding has been stable over a long period, exceeding the span of the individual presidency. Behind this there must have been trust in the persistence of the character which the president and executives of a company have as a group. One of the elements which determine the colour or character of a company would be the composition of the universities from which its president and executives have graduated. This composition is stable over a considerably long period, so that companies which have a similar composition may trust each other. The trust is even more unshakable,

especially when they belong to the same enterprise group. In any case, the school tie is very strong in Japan.

The 1992 distribution of executives of the six enterprise groups according to the educational backgrounds may be summarised as in Table 3. Column (A) gives the percentages of those graduates from the first class state universities, while (B) gives the percentage from the first class state or private universities. It is found from the table that there is a clear distinction between the top four ex-zaibatsu and the bottom two newly formed enterprise groups. Among the four, Mitsubishi and then Sumitomo are biased towards state universities, while Mitsui and the Fuyo towards private universities. In more detail, Mitsubishi is very much Tokyo-oriented, whilst Sumitomo is Kyoto-oriented. This probably reflects the history that Mitsubishi has been very much connected with the Tokyo government dominated by Tokyo graduates, since the time of the Meiji revolution, whereas Sumitomo originated from the Kyoto-Osaka region. In the private university oriented groups, Mitsui's Keio faction dominated its Waseda faction by 2:1, while in the case of Fuyo, the proportions of Keio and Waseda are more or less even. On the other hand, in the case of the new enterprise groups, Daiichi-Kangyo (DK) and Sanwa, it is seen that minor national or municipal universities (5) and minor private universities (7) still have substantial shares.

The ratio, $[(B)-(A)] \div (A)$, that is $(6) \div (A)$, would give a fair index for showing the relative powers of state and private universities. The lowest is the one for Sumitomo, 13%, followed by the one for Mitsubishi, 25%, while the highest in Mitsui's 46% followed by DK's 44%. Figures for Fuyo and Sanwa are 34% and 31%, respectively. The average of the six enterprise groups is 31%, and that for all listed companies is 48% in 1992. These figures may be compared with the figures obtained from the bottom two rows of Table 2. It is 56% for the period 1921-26 of column H, so that we may conclude from these that the relative power of the private universities versus the state universities is much weaker in the business world, in the post-war than in the pre-war years. This may contradict the intuitive view of the business world which the contemporary Japanese people would depict; but our statistics clearly support this conclusion.

Similar statistics can be obtained for the presidents and chairmen of the board of directors of various companies. Table 4 shows the distribution of presidents and chairmen according to their educational background for the six groups. The general patterns of Table 3 and Table 4 are similar, except that the relative power ratio between private and state universities, i.e. $(6) \div (A)$, is much lower for each enterprise group for presidents and chairmen than for executives. Even in the case of the two groups, Mitsui and DK, which are in favour of Keio and Waseda universities, the ratio falls from 46% and 44%, respectively, for executives to 28% and 31%, respectively, for

presidents and chairmen. This means that the very top stratum of the business circles is still more dominated by the national universities. Mitsubishi's and Sumitomo's figures clearly reflect this general character, though the former is typically Tokyo-oriented while the latter tilts towards Kyoto.

Table 3

Educational backgrounds of executives of the six enterprise groups, 1992

(unit:%)

	State Universities					Private Universities		Others	Sums	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(A)	(B)
Mitsubishi	36	6	15	11	6	17	6	3	68	85
Mitsui	25	7	9	15	9	26	6	3	56	82
Sumitomo	29	20	7	19	6	10	6	4	75	85
Fuyo	28	6	10	14	9	21	8	6	58	79
DK	22	6	7	13	12	22	12	7	48	70
Sanwa	15	16	5	18	16	10	12	8	54	64

Table 4**Educational backgrounds of presidents and chairmen of the six enterprise groups, 1992**

(unit: %)

The index of the relative power of Keio and Waseda against the major state universities (i.e. all ex-imperial universities plus Hitotsubashi, TIT and Kobe) is calculated by subdividing the enterprise groups into three sub-sectors: (I) financial companies comprising city banks, trust banks, insurance, securities and lease companies, (II) trading corporations, real estate agents, warehouse and transportation companies and recreation facilities and (III) companies belonging to other industries. These sub-groups are referred to as the financial sector, the non-financial tertiary industry sector and the secondary industry sector, respectively. Table 5 summarises the results for the executives and for the presidents and chairmen of the enterprise groups. From the table we may derive the following two conclusions: the indices for financial and non-financial tertiary sectors are generally higher than the corresponding indices for the secondary sector. This is especially true for Mitsui group. This group is not very much different from the other groups as far as the secondary industry sector is concerned but has very high indices in the other two. This would not be surprising in view of the fact that Keio and Waseda are weaker and smaller than the state university in the field of science and technology, whereas they have big social science faculties, especially in economics, business, commerce and politics. Secondly, the figures for presidents and chairmen are generally lower than the corresponding ones for executives, though those for financial and non-financial tertiary sectors fluctuate greatly because samples are very small; that is, at the very top level state universities still dominate private universities more than at the executive level.

Table 5

**The relative power of private universities to
state universities, 1992: Sectoral indices**

(unit: %)

	Executives				Presidents and Chairmen			
	(I)	(II)	(III)	(T)	(I)	(II)	(III)	(T)
Mitsubishi	33	33	19	25	0	20	14	11
Mitsui	70	172	31	46	40	67	17	31
Sumitomo	17	22	10	13	14	0	0	3
Fuyo	31	36	35	35	0	100	15	16
DK	67	57	39	45	100	11	26	29
Sanwa	18	27	16	17	25	100	3	13
Average	36	46	26	30	24	39	13	17

Note: (I) The financial sector, (II) the non-financial tertiary sector, (III) the secondary industry sector, (T) the total for the group.

Source: See Table 3.

Table 6

**The percentage of executives and presidents with a science,
technology, medicine or agricultural degree**

(unit: %)

	Executives			Presidents and Chairmen		
	(I)+(II)	(III)	(T)	(I)+(II)	(III)	(T)
Mitsubishi	6	45	30	0	42	26
Mitsui	5	49	29	0	46	29
Sumitomo	4	44	27	0	42	26
Fuyo	9	45	35	6	34	24
DK	4	46	33	0	46	32
Sanwa	10	48	38	19	45	38
Average	6	46	32	4	43	31

Note: (I) + (II) financial and non-financial tertiary sectors, (III) secondary sector, (T)=(I)+(II)+(III).

Source: See Table 3.

Table 7

Educational backgrounds of executives and presidents of banks, 1992

(unit: %)

	Executives						Presidents and Chairmen					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
Special banks	86	7	3	0	3	0	100	0	0	0	0	0
Industrial Banks	54	11	16	4	2	10	100	0	0	0	0	0
City Banks	41	12	10	12	3	18	64	9	18	9	0	0
Trust Banks	24	8	9	12	4	21	67	17	8	0	0	8

Note: (1) Tokyo, (2) Kyoto, (3) Hitotsubashi-TIT, (4) major state universities, (5) other national and municipal universities, (6) Keio-Waseda.

Special banks: Bank of Japan, Japan Development Bank, Export-Import Bank of Japan.

Industrial Banks: Industrial Bank of Japan, Long-Term Credit Bank of Japan, Nippon Credit Bank.

City Banks: Mitsubishi, Sakura, Sumitomo, Fuji, DK, Sanwa.

Trust Banks: Mitsubishi Trust, Mitsui Trust, Sumitomo Trust, Yasuda Trust, Toyo Trust.

Source: See Table 3.

It has been pointed out that the university affiliations of the directors are different between the enterprise groups. Mitsui and Fuyo are oriented towards Keio-Waseda, while Mitsubishi and Sumitomo towards Tokyo-Kyoto. From Tables 3 and 4 we may suggest that even Mitsui, Fuyo and DK do not differ from the Mitsubishi type in the sense that the ex-imperial university group, i.e. the sum of (1), (2) and (4), holds commanding power in the group; Sanwa is a mini-Sumitomo with a strong Kyoto group. Nevertheless, we may point out a remarkable similarity through these groups with respect to one other aspect of the education backgrounds of the directors, that is to say, with respect to their academic fields.

The directors are now classified into two groups: one consisting of those graduates from social science or humanity faculties and the other of those from natural science faculties, i.e. science, technology, medicine or agriculture faculties. The ratio of the number of directors of the second group to the total number of directors of both groups is calculated for various categories (for the aggregate of the financial and non-financial tertiary sectors and for the secondary industry

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When the rate of interest was fixed at a low level, investment increased greatly in the 1960s; there were, of course, many investment opportunities for redevelopment and reconstruction of the production facilities damaged and destroyed during the war. This expansion in investment resulted in an increase in GNP which in turn brought about an increase in tax revenues. Thus the government had enough money to expand its expenditure. The fiscal policy worked well, which contributed to a further increase in GNP. Moreover, new facilities improved the quality of the products, so that exports increased remarkably. This produced a further increase in GNP. In the early 1960s a shortage of labour began to be felt and imports of materials for production were increased. The increase in exports was not as high as the one in imports; the trade balance deteriorated, but the rate of interest was kept low.

Naturally then firms borrowed greatly from city banks which in turn borrowed from the central bank. This created an atmosphere in favour of a financially centralised economy that could be regulated by rationing lending to city banks by the central bank, the rationing being called *madoguchi kisei* (the window regulation), according to which an allocation of lending to city banks is decided by the central bank on the basis of their reports of their performances in the previous periods and their prospects for the future. Of course, other measures were also proposed. One of them was that for strengthening the firms' own capital, a special fund be established within the Bank of Japan on the basis of foreign money which the government's special account for foreign exchange stabilisation held. The firms would then sell newly issued bonds and shares to the special fund of the bank and would return the money thus acquired to the city banks to pay back the money they had borrowed. The city banks would then be able to return the money they had borrowed from the central bank. Thus all of the over-lendings to the city banks would be cleared. Although the fund would lose the foreign money they had received from the government, they would have acquired the bonds and shares, on the basis of which it was thought that Japan now would be able to establish a sound and powerful securities market which would make a great contribution to increasing the firms' own capital.

It was, however, very difficult to realise this scheme, because, at the time the scheme was being considered, its most essential premises, that is the central bank's purchase of the foreign money that the government held, the issue of corporation debentures and shares and so forth, did not have a reasonable time limit for completion. Thus the over-loan remained in the economy; the interest rate was kept low, and as much money as requested was lent by the central bank to

city banks. Then, as the interest rate was fixed, city banks maximised their profits by maximising the amount of their lending, so that the quantity mechanism remained prevalent in the lending market. Although the `real' side of the economy was greatly freed and the control measures for the real economy which had been introduced before or during the war were mostly removed after the war, the monetary side was still using the method of rationing, in order to allocate the scarce resource, money, among the industrial firms. Thus, in the Japanese economy of this time price and quantity mechanisms worked in the real and monetary sub-economies, respectively, and the Japanese banking system was constructed to fit this mixed mechanism perfectly.

Under the central bank, there have been after the war two specialised banks, one for financing the activities for development and the other for promoting international trade. Japan has also established three banks for providing long-term credit to industrial investment projects. These collaborate with city banks, surrounding which industrial firms form enterprise groups. As has been shown in Table 7 the weights of the national university graduates, especially those of the graduates of the University of Tokyo, in the executives and presidents of these central and semi-central banks are very much heavier than those for city banks, whilst these banks themselves are very much dominated by the executives and presidents from the national universities. The school tie or the academic clique in the financial sector would perhaps be the basis on which the monetary controlled system has been built; or conversely, it at least reflects the control-economy character of the post-war financial sector.

It has been pointed out that each group has one city bank and one trust bank, the only exception being the DK group with no trust bank. It is not unusual for the city bank to send its staff members to the companies in the group to which the bank belongs, as either executive or president. On the average of six groups, the city banks send 0.75 people per company, though this figure may be regarded as somewhat understating reality because the statistics book I have used does not record those executives and presidents who came from the outside to some lower posts of the companies and were then promoted within the same companies afterwards.⁹ These city banks play the role of either the headquarters of the groups or the bond cementing the member companies in the groups; the staff members sent by the city bank to the companies in the same group form the arteries putting organs under its control.

Moreover, the city banks of the six enterprise groups are usually the main bank of the member companies in their respective groups -- the main bank system being a legacy of the system of marriage arranged between munitions companies and city banks during the war, as has

⁹ Yakuin Shikiho, Jojo-kaisha ban, 1992, Toyo Keizai Shimposha, 1992.

been pointed out earlier. In such a couple the city bank assumes the moral responsibility of providing the company with an amount of money that it needs for carrying out its production plan. The `marriage' may be polygamous, especially for large companies. They may each have a consortium consisting of a few main banks. These are not on an equal basis; there are big differences in their responsibilities between the city bank which is nominated as the first main bank and others nominated as the second, third, ... main banks. The burden of responsibility declines rapidly, where a city bank is ranked at a lower place in the consortium of the main banks. When a company wants, for example, to raise some money for introducing a new method of production, it has first to propose the idea to the first main bank which will draw its conclusion after consulting with other member banks. Therefore, the power of the first main bank is distinctly higher than that of the second main bank, and so forth. The distribution of power among them is very similar to the distribution of power between the first wife, the second wife, ..., in a polygamous family. It is much more sociological or anthropological than economic, in the sense that the distribution of power is not necessarily proportional to the amounts of money the banks lend to the company. Accordingly, when this law of distribution of power is violated, a war for `humanity and justice' starts between the main banks of the company without any `humanity and justice',¹⁰ in the same way as wives of the same family fight with each other in similar circumstances. The first main bank's rights are enormous, as will be seen below, in exchange for which they are burdened with a duty to behave paternalistically. Any bank which violated the rule would be ostracised in the banking world.

Consequently, in the banking business, the competition for obtaining the position of the first main bank is most severe and fierce. Of course, in the case of the company being in serious financial trouble, its first main bank would be wounded severely because it would have to pour an additional substantial amount of money into the company which is in a critical condition. However, the bank will, in exchange, get the power to control not just the money of the company which the bank has loaned to it, but its entire money, otherwise the bank cannot bear the responsibility of keeping the company financially sound. Therefore, when it expands or improves its production facilities, the first main bank will be granted a right to loan a substantial portion of the necessary money to the company. This is a big attraction for banks to raise their activity levels in such an economy as Japan's where the quantity adjustment mechanism works in the lending market. The bank must have the greatest possible group of firms to which it can loan

¹⁰ This has clearly explained with interesting examples by H. Okumara in his Ginko to Kigyo, sono Kiken na Kankei (Banks and Firms, their Jeopardising Relationships), Toyo Keizai Shimposha, 1978.

money for investment.

Thus it is very important for a city bank to become the first main bank of the greatest possible number of companies. Moreover, the first main bank has a great opportunity of sending its staff members as executives to the companies that it takes care of. This entry into companies for the purpose of control is very much appreciated by the bank because it has to find satisfactory positions for high-class staff members, to which they are willing to be transferred. Otherwise, under the notorious permanent employment system, the bank will go bankrupt because of the over-employment of high-salaried managers.

The powerfulness of the main bank differs considerably between enterprise groups. In the case of the Mitsubishi group, Mitsubishi bank is in the position of the first main bank for 95% of those twenty member companies of the Friday meeting of the group, which exclude Mitsubishi Bank, Mitsubishi Trust Bank and Meiji Insurance Company. Similar figures which show the percentages of Mitsubishi bank to be the second and the third main bank of the same twenty companies are 5% and 0%, respectively. To get the overall index from those three figures we aggregate them with weights, 1, $\frac{1}{2}$, $\frac{1}{3}$, respectively. Of course, these numerical values for weighting are arbitrary but may be considered to be not very far from those reckoned to be reasonable. Thus the index obtained according to this formula would not be entirely out of tune for the purpose of showing the bank's power of commanding the companies in the group. The index is calculated at 97.5% for Mitsubishi. Similarly, it is at 87.5, 100, 92, 92.5 and 92, respectively, for Mitsui, Sumitomo, Fuyo, DK and Sanwa.

From these it is seen that the most powerful bank vis-à-vis the companies in its own group is Sumitomo which is followed by Mitsubishi, at least in 1992. The banks of Fuji (for Fuyo), DK and Sanwa form the next group and are almost equal in powerfulness. The Mitsui group is weakest in its bank's power of commanding the companies in the group, though this situation is expected to improve for Mitsui since its bank has recently been merged with Taiyo-Kobe bank, a large city bank to form a new Sakura Bank. In addition to these city (or commercial) banks, each group (except DK) has, its second bank, a trust bank. Their main bank indices are calculated on the assumption of the same weighting system. Sumitomo's score is again at the top with an index of 44, which is followed by Mitsubishi (40) and Mitsui (31). Fuyo and Sanwa are weak, scoring 16 and 12 points, respectively.

From these observations we may conclude that the Mitsubishi and Sumitomo groups are a typical, or ideal, enterprise group whose member companies are united by means of the financial commanding power of its city and trust banks. However, Mitsui is seen to be clearly weaker than these two, confirming the usual view that Mitsui which had been the most powerful and successful zaibatsu before the war was overtaken by Mitsubishi after the war. DK and Sanwa are

the new groups formed around a big city bank; there is still an obvious distance between them and the old Mitsubishi and Sumitomo.

Having been provided with enough money for investment by their main banks, the companies in the six enterprise groups played the role of engines bringing the Japanese economy to a place from where it could launch a fresh mission for chasing developed Western countries. Thanks to the new production facilities made available by the loans for investment, the economy was enabled to produce more products of higher quality. Also, in the 1960s Japan enjoyed a huge increase in demand from the US whose economy was booming and whose involvement in the Vietnam War became deeper and deeper, so that the procurement by the US forces from Japan became hectic. Japan's capacity of production had expanded greatly, and her cost of production diminished remarkably. Exports expanded at an enormous speed and yielded a large trade surplus. A high rate of economic growth was sustained and in spite of the boom remaining in the economy from year to year, wholesale prices were stable. Eventually a drastic appreciation of the value of yen became unavoidable. The old IMF regime at last collapsed in 1971. Obviously, the advancement of Japan was one of the factors responsible for the collapse.

Table 8

The percentages of the member companies of the six enterprise groups having their own city banks and trust banks as the 1st, 2nd, 3rd main banks, 1984

(unit: %)

Enterprise Group	City Bank			Trust Bank		
	1st	2nd	3rd	1st	2nd	3rd
Mitsubishi	95	5	0	0	70	15
Mitsui	80	15	0	5	35	25
Sumitomo	100	0	0	0	76	18
Fuyo	84	16	0	0	16	24
DK	85	13	3	0	0	0
Sanwa	86	6	9	0	14	14

Source: Nikkei Kaisha Joho (Nikkei Information on Companies) 1984, Nippon Keizai Shimposha.

The luncheon/dinner meetings of presidents and chairmen of the enterprise groups naturally produced new ideas of entrepreneurial activities, many of which were later realised by a number of member companies collaborating with each other. To establish a new business necessary factors of production have to be brought together; they are money, knowledge about the market, knowledge about the necessary technology, ability to construct the factory, etc., and all these are available within the group. Especially, money is provided by the city bank of the group, while the necessary market research is made by its trading house. We may, therefore, be able to say that conversations in the luncheon meeting result in a major industrial innovation relatively easily.

According to Schumpeter, innovations are decided individually and secretly. However, although the meetings of presidents and chairmen are secret, what has been discussed there is very difficult to be kept in absolute secrecy because the meetings are attended by many people. Once a good idea is examined in one group, more or less similar ideas would soon appear on the agenda of some other group. Thus, in Japan, innovations are observed in quick succession or gregariously. For example, a committee for atomic energy was formed in the Mitsubishi group in 1955 and then in both the Mitsui and the Sumitomo group in 1956. On the basis of these committees, companies named Mitsubishi atomic power industry and Japan atomic power enterprise were established in 1958 by Mitsubishi and Mitsui, respectively, followed by Sumitomo atomic power industry in 1959. The same story was repeated soon after this with reference to the petrochemical industry.

In the 1970s, the (first) oil crisis immediately followed the collapse of the international money market. Businessmen and politicians had a presentiment of an age of uncertainty and Japan groped for industries for the future. Then the Prime Minister, Kakuei Tanaka, the author of 'A Plan for Remodelling the Japanese Archipelago', had a very ambitious outlook concerning the future Japan. Although his premiership was terminated after only two and a half years because of his involvement in the Lockheed scandal, the relationships of the government with the business world were kept tight. The businessmen surrounding the Prime Minister became very powerful; the 'national consensus' produced by them often became a topic of the presidents-chairmen meeting of the enterprise groups. Then a number of innovations were carried out by the groups. Japan developed greatly in the field of electronics, information, computers, business machines and medical instrument industries. Robotisation was carried out rapidly in the small and medium-sized factories, more than in the large factories. Because smaller factories feel labour shortage more acutely than large factories, they had a big incentive to equip themselves with robots, and

the quality of the products of robotised small firms improved greatly. It is no doubt that all these contributed to expanding the export market and increasing employment in Japan.

In Japan too, the problem of Keynesian theory versus the monetarism attracted the interest of academic economists in the late 1970s and the early 1980s. It was, however, no more than a problem of academic interest. No Japanese economist seriously believed that these theories were able to remove imminent difficulties in that period. Japanese politicians and businessmen, thanks to Kakuei Tanaka, were neither Keynesian nor Milton Friedmanian but Schumpeterian as far as this period of time was concerned. They believed that wherever a number of innovations were successively carried out at almost all times, employment would be kept high; there would be no need for a reduction of real wages as well as no need for expanding the government's expenditure to keep employment of labour high. In addition the economy's position of international trade was to be very favourable because exports were kept high, thanks to the quality and novelty of the products. Thus the Japanese industries remained very aggressive. Besides those industries mentioned above, Japan started, in the beginning of the 1980s, to extend her interest in the fields of biotechnology and oceanics. Naturally then, ambitious institutes of research for development and think tanks were built by many private corporations; and the government authorised in the 1970s the expansion of the technology faculties of national and private universities in order to prepare the economy for innovations.

By watching Japan in this period another important issue of academic interest will be revealed. From the textbook of international trade we know that the sum of current account, capital account and cash account is identically zero. Then, providing that cash account and non-trade balance in the current account are both in equilibrium, a positive trade balance implies a negative capital account. Therefore, during the long period of the trade balance being black, Japan's holding of capital assets in foreign countries was increasing more rapidly than foreigners' assets in Japan.

These experiences revealed the clear inadequacy of the conventional neoclassical growth theory. It usually studies the phenomena of economic growth on the assumption of the economy being closed, despite experience telling that there is no significant real economic growth under such an assumption.¹¹ In fact, in the actual world, only those countries which are successful in the business of international trade have shown a perceptible growth of industry which is, in turn, accompanied by an advance of their financial organisations and property businesses abroad. This repercussion of growth from the secondary to the tertiary industries has been clearly observed

¹¹ R. Harrod, Towards a Dynamic Economics, London, Macmillan, 1952 is a notable exception.

with respect to Japan in the 1970s and 1980s. Thus we may conclude that exports and imports are indispensable elements linking the theory of economic growth on the real side with that on the monetary side; without these the theory only traces out a monotonous expansion of the industrial sector with no effect upon stock markets and foreign exchange rates. Thus the conventional neo-classical theory of growth based on the assumption of the closed economy has only made a dull caricature of the dynamic actual world.

After the war Japan had to obey the GHQ's order of land reform; big landowners had to sell their land for farming to peasants and tenant farmers. During the period of high industrial expansion and the following period of 'remodelling the archipelago', big business bought land from petty landowners for its future development or simply for speculation. Therefore, the price of land was already extremely high in the late 1970s and early 1980s. Moreover, because of the worldwide oil crises (first and second) Japan's tempo of industrial expansion became slower than the rate at which the economy had expected to grow. Consequently, the price of land was at last halted in the late 1980s. This created very damaging effects, because in Japan, in the period after 1970, land has been closely linked with stocks; in fact, small landowners bought shares with the money they borrowed by putting a portion of land as security. When the stock market plunged in the 1990s, as has been discussed above, those petty landowners not only lost their land offered as a security for borrowing money but also had to sell shares or some portion of their remaining land, in order to return the money they had borrowed to the bank. Thus the land price started to decline in parallel with the fall of share prices. These affect the value of yen adversely. To foreigners' eyes, Japan may appear to be faltering, but Japanese economists and businessmen seem to remain rather optimistic because the fundamentals of the economy are still not too bad. They may yet be right in expecting yields from the innovations which they decided on in the early 1980s for the 1990s and which are still continuing.