# Foreign Direct Investment in Japan: 1899–1930

Kaku Furuya

### Abstract

Historically, foreign direct investment (FDI) in Japan (as compared with developing countries in the past and present) was very small both in terms of the absolute amount and the share in the total foreign capital inflows. This paper focuses on a period (1899–1930) that was characterized by relatively free capital mobility and examines why FDI was so little despite the absence of explicit government measures against it. Noting that most of the FDI in Japan in this period took the form of a joint venture between a foreign company and its Japanese counterpart, the paper develops a simple geometrical model for analyzing Japanese companies' decision (regarding whether or not to accept FDI). A condition under which Japanese companies will not accept FDI is derived. Some quantitative and anecdotal evidences consistent with this condition are also presented.

### I. Introduction

Foreign direct investment (FDI) in Japan historically accounted for only a small portion of the total foreign capital inflows into Japan. This small portion is often explained by restrictive measures of the Japanese government, but this explanation is not sufficient for the early three decades of the twentieth century, when there was no direct government control over foreign capital inflows. Corporate histories reveal that the small share of FDI in this period can be attributed to the stance of Japanese companies that was very cautious about — or even averse to — allowing foreign influence on their management. This paper investigates the origin of such intolerance to foreign managerial involvement, based on a simple geometrical model.

The paper is organized as follows: next section (Section II) provides historical evidence on the minor share of FDI in Japan. Section III examines the standard explanation for the phenomenon, which focuses on restrictive measures by the Japanese government. Section IV proposes an alternative explanation which focuses on the

behavior of Japanese companies and provides supporting evidence from several corporate histories. Section V presents a simple geometrical model and analyzes the economic reasoning behind the corporate behavior described in section IV. Section VI briefly examines whether the analysis in section V can be empirically justifiable. Section VII summarizes the whole paper.

### II. Evidence on the Small Share of FDI in Japan

Ever since 1960's, when developing countries started to grow by rapidly introducing capital from developed countries, FDI has had a substantial share in the total capital inflow into the developing countries. As we can see in Table 1, FDI had provided 15 to 30% (27.3% on average) of the net long-term private capital inflows into the developing countries in the period of 1968–85. The significance of FDI has increased recently as commercial bank lending to developing countries dropped drastically as a result of the debt crisis since 1982. The share of FDI in long-term resource flows to all developing countries almost doubled from 18.6% in 1985 to 35.4% in 1989 (Table 1), while the amount doubled from about US\$ 10 to about US\$ 20 billion [IBRD, 1990: 46].

Table 1 Share of FDI in Long-term Capital Inflows into LDC (%)

	(1)	(2)		(1)	(2)	
1968	27.7		1980	26.3	11.0	
1969	31.5		1981	37.0		
1970	24.4	15.8	1982	33.4		
1971	24.2		1983	28.7	12.5	
1972	25.1		1984	31.1	13.3	
1973	22.3		1985	44.4	18.6	
1974	1.3		1986		18.6	
1975	45.9		1987		28.6	
1976	25.4		1988		31.4	
1977	30.4		1989		35.4	
1978	22.2					
1979	10.2		Average	27.3	16.6	
			1968-79			

Notes: (1) Share of net FDI in net long-term capital account

(2) Share of FDI in private resource flows

Source: (1) IMF, Balance of Payments

(2) IBRD, World Debt Tables

Table 2 Share of FDI in Total Foreign Investment Flow into Post-war Japan (%)

1952	16.0	1967	3.6	
1953	4.9	1968	3.6	
1954	12.8	1969	2.0	
1955	4.4	1970	4.1	
1956	5.2	1971	6.0	
1957	5.4	1972	2.9	
1958	1.4	1973	5.7	
1959	9.4	1974	3.1	
1960	14.9	1975	1.5	
1961	7.0	1976	1.7	
1962	3.3	1977	1.5	
1963	4.8	1978	1.2	
1964	3.4	1979	2.4	
1965	8.4			
1966	8.7	Average	5.3	
		1968-79		

Source: Ozaki (1972), p.277

Bank of Japan, Statistical Yearbook

of Japan

If we look back to Japan's experience after World War II, however, we will find a picture quite different from that of developing countries now; in post-war Japan, FDI has been a very small portion of the foreign capital inflows into Japan; most of the capital inflows took the form of indirect investment such as loans, bonds, and corporate debentures. As we can see in Table 2, FDI has accounted only 5% of the total inflows of foreign investment in the period from 1952 to 1979.

As for pre World War II era, several authors have pointed out that the share of FDI in total capital inflows into Japan had been small ever since 1870, when Japan transformed itself into a modern nation state [Lockwood, 1954: 49; Reubens, 1955: 220]. The claim of these authors can be partly supported by data. Table 3 shows the cumulative amount of FDI and the total outstanding amount of foreign investment in 1904–30. The share of FDI in total foreign investment was less than 5% most of the time; these figures were substantially lower than the figures for Canada before World War II, where FDI accounted almost one-third of the total foreign investment (Table 4). The amounts of FDI and capital inflows were also much smaller in Japan than in Canada. (See also Table 4).

Table 4 Total Foreign Investment and FDI: Canada and Japan (in US\$ millions, end of the year, unless indicated otherwise)

		Canada			Japan		<u> </u>
,	Total	FDI	Share(%)	Total	FDI	Share(%)	
	(1)	(2)	(3)	_(4)	(5)	(6)	
1926	6003	1782	29.7	1006	43		4.3
1930	7614	2427	31.9	1217	56		4.6
1939	6913	2296	33.2				
1945	7092	2713	38.3				
1955					29		
1956	15569	8868	57.0				
1960	22214	12872	57.9		91		
1964	27354	15889	58.1				
1965					272		

Source: Litvak and Maule (1970) p.80 for data on Canada Sekiguchi (1972) p.256 for data on post-war Japan Yamazawa and Yamamoto (1979) p.256 for exchange rates

By the discussion so far, we can say that compared with FDI's in the contemporary developing countries (both now and before World War II), FDI in Japan has accounted relatively smaller part of the total capital inflows when Japan pursued economic development. A question which naturally arises here is why it has been so. Why has the share of FDI been so small in Japan?

### III. Standard Explanation for Small Share of FDI

A standard explanation for the above question was that the Japanese government controlled foreign capital inflows and discouraged FDI in favor of indirect investment. Several authors have attributed the small share of FDI in Japan to restrictive measures by the Japanese government [Yoshino, 1975: 274; Kobayashi, 1987: 197].

The above explanation seems to capture the truth for three periods, i.e. for the periods of 1870's-1898, 1930's-1945, and 1945-1970's. In the first period (1870's-1898), the government prohibited the foreigners from owning or participating in a company in Japan except in several extraterritorial residential areas. The government also prohibited foreigners from acquiring land, engaging in railway construction, mining, and city gas services. These restrictive measures presumably discouraged FDI and made it very negligible compared with the floating bonds which the government issued abroad [Allen,

1954: 228; Lockwood, 1955: 322]. In the second period (1930's–1945), the military gained a strong influence on the government's policies. Foreign capitals in Japan were forced to hand over their holdings to Japanese shareholders, and FDI was discouraged by various discriminatory industrial policies which favored the purely domestic firms [Wilkins, 1982: 504]. In the third period (1945–1970's), all of the long-term foreign investment in Japan was under the screening by Foreign Investment Council, which had a wide discretionary power and favored indirect investments against FDI. The restriction on FDI was a part of the industrial policy to protect domestic industries [Komiya et al., 1984: 143].

Although it seems appropriate for the three periods described above, the standard explanation is less convincing for the period of 1899–30. It is true that in this period, the Industrial Bank of Japan, which was established by the government in 1900, raised funds from abroad on behalf of individual firms and kept these firms away from FDI [Okita & Miki, 1967: 145]. But the Bank's loans were made for the most part to selected heavy industries such as shipbuilding, iron and steel [Allen, 1946: 49] and were not enough to finance all the industries and to keep them away from FDI. Other than the Industrial Bank of Japan, there was no law or scheme which explicitly prohibited or restricted FDI.

We may suspect that the small share of FDI in 1899–1930 was only an illusion of statistics: the rapid increase in indirect investments might have exceeded and concealed a significant increase in FDI. But the amount of total foreign investment did not increase significantly (see Table 3), so the absolute amount of FDI did remain small. Apparently, something other than the government's policy hindered the growth of FDI in Japan.

In sum, the standard explanation which attributes the small share of FDI to government policy is not sufficient for the period of 1899–1930. We need another explanation for why the share and the amount of FDI were small in this period.

## IV. An Explanation by Behavior of Japanese Companies

The question we now have is why the share as well the amount of FDI was small from 1899 to 1930. A fact we could utilize when we tackle this question is that most of the FDI in Japan in this period took the form of a joint venture between a foreign company and its Japanese counterpart, with a few exceptions in the automobiles (GM and Ford) and the rubber (Dunlop) industries [Yamazawa, 1984: 159]. Recalling this fact, we could interpret the small amount of FDI as an outcome of inter-firm relations between Japanese and

foreign companies. In other words, we could attribute the small amount of FDI to the behavior of Japanese companies when they faced a foreign company which tried to go into partnership with its Japanese counterpart. It may be the case that Japanese companies were not very hospitable toward foreign companies so that they did not go into partnership very much, thus making the amount of FDI relatively small.

To see whether this explanation (intolerance of Japanese companies to foreign capitals) is plausible or not, we need to look at a relatively large number of negotiations of joint ventures in a relatively wide range of industries in the period of 1898–1930. Such an examination is impossible because of the shortage of data, but we can seek evidence in several corporate histories looking at how these companies behaved when they faced a foreign company as a potential partner of a joint venture.

What the pieces of information in the corporate histories tell us is that these Japanese companies were by no means receptive to their foreign counterparts.

In some cases, the negotiation of the joint venture just broke down. One of the earliest examples was the negotiation between Western Electric Company and Oki Electric Company in 1898. Western Electric, which was looking for a Japanese partner for the production and sales of telephone operating systems, offered Oki Electric, the single largest telecommunication company at that time, to set up a joint venture. After the three months of negotiation, Oki Electric declined the offer and chose to remain a "purely domestic firm" [Oki Electric, 1981: 78]. The intention of Western Electric to penetrate into Japan was temporally blocked. Another example is the negotiation in 1923 between Mitsubishi Electrical Engineering Company, one of the four largest electric companies in Japan, and Metropolitan Vikers, a British electric company. In this case, both parties could not agree on the terms of the joint venture, and the negotiation broke down [Mitsubishi, 1981: 31]. The same kind of breakdown took place in 1919 between Furukawa Company and Alicecharmer as well as Furukawa Company and American Aluminum [Nihon Keizai Shinbun, 1980: 267].

In some cases, Japanese companies took a very firm attitude toward foreign companies in negotiating over joint ventures and tried to reduce the share of the foreign companies. For example, the above-mentioned Mitsubishi Electrical Engineering Company struggled with Westinghouse Electric Manufacturing Company and managed to reduce the share of Westinghouse from one-third to one-tenth in 1923:

The condition Westinghouse initially proposed to us was very severe: they demanded one-third of our stocks for free. The negotiation broke down.... In the meantime, the delegates of Westinghouse came again to resume the negotiation. The new condition they proposed was that we hand over to them one-tenth of our stocks, one million yen for free of charge, and fifty hundred thousand yen with face value... Since we felt their deep interest in doing business with us and thought that the new condition was acceptable for us, we signed the contract. [Mitsubishi, 1981: 32].

In another case, Japanese companies wanted to be independent from foreign companies and did not have any interest in a joint venture. A typical example is Hitachi Manufacturing Company Ltd. Founded in 1910, Hitachi had been one of the four largest electric companies in Japan. While its three rivals went into partnership with foreign companies, Hitachi did not form any partnership with foreign companies. The corporate history makes clear its policy in the early three decades of the twentieth century:

The fastest way to make a technological progress would be to go into a partnership with foreign company, import technology, and start up business... But over-dependence on foreign technology might hamper the development of original technology... Thus we didn't choose the option of forming a joint venture with a foreign company [Hitachi, 1960: 179].

Other than Hitachi, Oki Electric and Teikoku Artificial Silk were the examples of leading manufacturers which did not go into partnership with foreign companies and developed their original technology [Oki Electric, 1981: 82; JANASM, 1959: 222].

By the examination of corporate histories so far, we can conclude that Japanese companies described above were by no means hospitable toward foreign companies: they sometimes declined the offers of joint venture, sometimes tried to reduce the foreign share, and sometimes did not show any interest in forming a joint venture. Thus, the evidence we have seen in corporate histories supports the view that the intolerance of Japanese companies toward foreign capital contributed to make the amount of FDI small, partly by reducing the foreign companies' opportunity for forming joint ventures, and partly by reducing the share of foreign companies in the joint venture.

### V. A Geometrical Model

Supposing that the answer we got in the last section is true, we still have to answer what caused the intolerance of Japanese companies to foreign capital, which presumably gave rise to the small share of FDI in 1899–1930. In what follows, we will develop a simple geometrical model to describe the economic reasoning of the behavior of Japanese companies described in the last section.

Assume that there are only two periods, period 0 (the present) and period 1 (the future). Imagine a domestic firm which invests in period 0 and gains profit in period 1. The domestic firm has two options: one is to make an investment by itself, and the other is to accept FDI, forming a joint venture with a foreign company and allowing the foreign company to get part of the total profits. Each party of the joint venture invests and receives profits according to the share of holdings, which is determined by the negotiation before forming the partnership. Assume that the profits of the joint venture for a given amount of investment are higher than or at least as high as that of the domestic firm alone because of the improvement in quality or the decrease in costs due to a superior technology and/or a more efficient way of management brought by the foreign firm. Assume also that both of the domestic and foreign firms can borrow as much as they want with constant interest rate *i*.

Figure 1 shows the optimal amount of investment and the level of net profits of the domestic firm with and without FDI. In Figure 1, R(I) represents the gross profits in current value when the domestic firm does not accept FDI, and  $\tilde{R}(I)$  represents the gross profits of the joint venture. By assumption,  $\tilde{R}/R \ge 1$ .

When the domestic firm does not accept FDI, it determines the optimal level of investment  $I^*$  by maximizing the present value of net profits  $PV(\Pi_d)$ 

$$PV(\Pi_d) = \frac{R(I)}{1+i} - I$$

so that  $I^*$  satisfies

$$R'(I^*) = 1 + i$$

Thus, the net profit of domestic firm in current value,  $\Pi_d$ , is given by the line segment BC in the Figure 1.

When the domestic firm accepts FDI, the joint venture as a whole will invest  $I^{**}$  and gain gross profits  $\tilde{R}^{**}$ , which are equivalent to line segment HM. If, in the negotiation prior

Figure 1 Determination of Critical Share  $\bar{s}_d$  when there is a large gap between R and  $\tilde{R}$ 

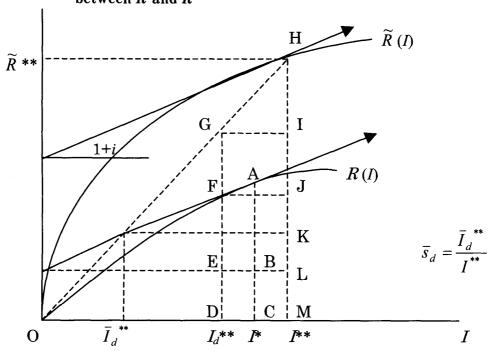
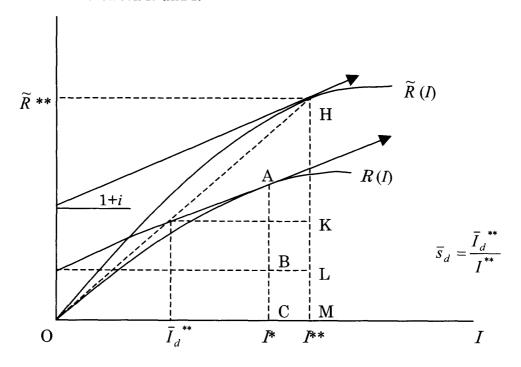


Figure 2 Determination of Critical Share  $\bar{s}_d$  when there is a small gap between R and  $\widetilde{R}$ 



to the formation of joint venture, the domestic firm has already gotten a fraction  $s_d = I_d^{**}/I^{**}$  of the total share holdings, it will invest  $I_d^{**}$  in Figure 1 and will receive the gross profits which amount to  $s_d \tilde{R}^{**}$ . Recalling that OM: OD = HM: GD = HM: IM in the Figure 1, this amount,  $s_d \tilde{R}^{**}$ , is expressed by line segment IM. Thus, the net profits of the domestic firm with FDI,  $\tilde{\Pi}_d \{=s_d \tilde{R}^{**} - (1+i)I_d^{**}\}$ , is expressed by HM-JL.

When the domestic firm invests  $\bar{I}_d^{**}$  out of  $I^{**}$  in Figure 1, the gross profits of the domestic firm are expressed by KM in Figure 1.  $\tilde{\Pi}_d$ , the net profits of the domestic firm, are then expressed by LM, which coincides with BC, the net profits when the firm does not accept FDI. Thus, the net profits with FDI are greater (smaller) than that without FDI as long as  $I_d^{**}$  is greater (smaller) than  $\bar{I}_d^{**}$  in Figure 1. Therefore, given R,  $\tilde{R}$ , and i, the domestic firm will never accept FDI if its share of holdings is less than the critical value  $\bar{s}_d = \bar{I}_d^{**}/I^{**}$ .

We can see that the smaller the gap between R and  $\tilde{R}$  is, the higher the critical value  $\bar{s}_d$  will be. In other words, the smaller is the gap in profitability when the domestic firm accepts FDI and when it doesn't, the higher the domestic firm's critical share in holding will be. (See Figure 2.) If, in an extreme case, there is no gap in profitability, the critical value will become 100%, and the domestic firm will never accept FDI. If there is some gap but it is small, then it is likely that the critical value of domestic share is very high, the domestic firm tries to secure a very high share in the partnership, which seems unacceptable to the foreign firm, and the negotiation breaks down. Moreover, if the gap in profitability is small, the domestic firm can be bolder than when the gap is very large, because even if the negotiation fails and the firm has to invest alone, the loss due that failure is not large.

Based on the above framework, we can explain the behavior of Japanese companies described in the last section. The explanation goes as follows: the potential gross profits for given amount of investment were not so different whether a firm accepted FDI or not. This small difference in profitability made the critical share of Japanese companies high and the potential loss of being inflexible and ruining the negotiation low, thus caused them to take a strong attitude to reduce the foreign share (remember the case of Mitsubishi Electric Manufacturing Co.). That strong attitude sometimes led the negotiation into breakdown (remember the cases of Mitsubishi and Furukawa). It is likely that the foreign companies did not know the profitability of the Japanese companies in detail, although it did know the profitability of its own technology or know-how. Such imperfection of

information would have helped to increase the possibility of breakdown of the negotiation because the foreign companies were likely to underestimate the profitability of Japanese companies and regarded the claims of the Japanese companies as unreasonable. Some Japanese companies perceived the gap in profitability as almost zero, and did not have any interest in going into partnership. They chose to remain a purely domestic company (remember the cases of Oki Electric, Hitachi, and Teikoku Artificial Silk).

### VI. Empirical Examinations

The geometrical model in the last section provides a hypothetical explanation for the intolerant attitudes of Japanese companies toward foreign companies, which presumably caused the small amount as well as the share of FDI in total capital inflows. The factor which played a critical role in the model was the difference in the profitability when a domestic firm accepts FDI and the profitability when it doesn't. The intolerance of Japanese companies was hypothetically attributed to small differences in profitability.

An important empirical question which arises here is whether or not the difference in profitability was small in 1899-1930. This question is very hard to answer because it concerns the unobservable ex-ante profits for a company, like the R(I) and  $\widetilde{R}(I)$  curves in Figure 1, while the observable profits are only one point on one of the curves.

One way to infer the magnitude of the difference in profitability is to compare the profitability of those companies which accepted FDI with the profitability of those which didn't. If the ex-ante profits were significantly higher when a company accepted FDI than when it didn't, in other words, if  $\tilde{R}(I)$  in Figure 1 was significantly higher than R(I), we can expect that, with other things being equal, the ex-post profit rate of the company which accepted FDI was significantly higher than the ex-post profit rate of the company which didn't accept FDI.

Again, the limitation of data does not allow us an examination over all the industries, so we will focus on the electric industry. The choice has some reason. First, this industry was the second largest hosts for FDI in the early twentieth century next to the machine tool industry; out of 82 companies with FDI which were listed in the survey by the Industrial Bank of Japan in 1931, 13 companies (15.9%) were in the electric industry with the machine tool industry having 24 companies (29.2%) [Yamamoto, 1989: 104]. Second, we can expect that the electric industry was one of the industries where the technological gap between Japan and Western countries was the largest. Thus, we can expect that the

electric industry presents the upper limit of the gap in profitability.

As a tentative empirical test for differences in profitability, we will compare two major electric companies in 1920's. One is Mitsubishi Electric Engineering Co., which accepted the direct investment of Westinghouse in 1923, and the other is Hitachi Manufacturing Co., which didn't accept any FDI. Other than the acceptance of FDI, these two companies had many things in common. In 1920's, both of them mainly produced industrial electric machines such as generators, transformers, and switchboards [Mitsubishi, 1982: 26; Hitachi, 1960: 65]. The amounts of their total assets were fairly close from 1923 until 1932, when Hitachi opened its stock to the public and started to expand its scale. If the increase in profitability due to FDI was very large, we can roughly expect that the profit rates of Mitsubishi, which was a joint venture with Westinghouse, would be significantly higher than those of Hitachi.

It would have been better if we had been able to obtain the data on the amount of investment and the gross profit for each company, which correspond to  $I^*$ ,  $I^{**}$ ,  $R(I^*)$ , and  $\tilde{R}(I^{**})$  in Figure 1, and calculate gross profit rates R(I)/I for each company, but all we could get was the data on the net profit and total assets. Thus, we will approximate gross profit rate by net profit total asset ratio (NP/TA) and see whether Mitsubishi earned a significantly higher NP/TA's than that of Hitachi.

Table 5 shows the NP/TA's of each company. Mitsubishi's NP/TA fluctuated due to a large fluctuation in its net profit, while Hitachi's NP/TA was much more stable. However, if we average out the NP/TA's of each company for a longer period, when these two companies were similar in their scales and characteristics, we can see that Mitsubishi, the company with FDI, actually had a smaller value than that of Hitachi: the average NP/TA's of Mitsubishi were 2.7% for 1923-1930 and 0.9% for 1923-1932, while those of Hitachi were 3.2% and 3.0% respectively.

Although the above comparison between two companies is very crude and needs more elaborate empirical testing, it seems to support the view that the profitability was not significantly different when a company accepted FDI and when it didn't in the electric industry in 1920's. As long as we can think that the electric industry provides the upper limit of the gap in profitability, we can also expect that in general, the potential increase in profitability by accepting FDI was not so high.

Other than the above quantitative evidence, we can also find some qualitative evidence of small difference in profitability in a couple of corporate histories.

Table 5 Net Profit Total Asset Ratio of Mitsubishi and Hitachi

	Mitsubishi	Hitachi	Asset Ratio
	(%)	(%)	Mitsubishi / Hitachi
	(1)	(2)	(3)
1923:S1	15.9	4.0	1.25
1923:S2	8.6	4.1	1.38
1924:S1	12.9	3.8	1.04
1924:S2	11.6	3.9	1.02
1925:S1	3.6	3.6	0.97
1925:S2	-21.4	3.2	1.05
1926:S1	-10.5	3.2	1.14
1926:S2	-5.2	2.8	1.08
1927:S1	6.0	2.9	1.23
1927:S2	20.3	3.5	1.15
1928:S1	7.8	3.5	1.08
1928:S2	2.4	3.2	1.23
1929:S1	2.6	3.5	1.04
1929:S2	1.3	3.0	0.98
1930:S1	1.1	2.0	0.95
1930:S2	-13.4	1.4	0.98
1931:S1	-12.9	1.3	0.98
1931:S2	-26.2	1.3	0.97
1932:S1	-3.2	1.5	0.95
1932:S2	17.6	3.8	
Average			
1923-30	2.7	3.2	
1923-32	0.9	3.0	

Source: Mitsubishi (1982) pp.711-713

Hitachi (1960) Statistical Appendix

One such qualitative evidence is the fact that Japanese companies had an enough technological basis to copy foreign products and catch up with foreign technology by themselves. Without accepting FDI and forming a joint venture, Japanese companies could advance their technological level, improving their competitiveness and profitability. For example, Oki Electric succeeded in copying a series of receivers and telephone operating machines without any technological cooperation with foreign companies. When Western Electric asked Oki Electric to form a joint venture in 1898 offering the blueprint for the latest type of receiver, Oki Electric had already copied that receiver. One year after it declined the offer of Western Electric, Oki managed to release the receiver to the market [Oki, 1981: 77]. Hitachi also managed to catch up with foreign technology well. In the

early 1910's, just after it was incorporated, Hitachi applied for a patent for an electric motor for mining use at the same time as General Electric did [Hitachi, 1960: 121]. Shibaura Manufacturing Company, which formed a joint venture with General Electric, surprised its partner by succeeding in the production of refrigerator by itself at the end of 1920's:

When we tried to start the experimental production of refrigerator, Chief Executive Walren from General Electric said to us, "With your current level of technology, it is too difficult for you to produce a refrigerator. Don't try." So we carried out experiments secretly... Finally we succeeded in producing an experimental model, and obtained the permission [from General Electric] to manufacture it [Toshiba, 1963: 71].

Another qualitative evidence of the small difference of profitability is the fact that a Japanese company which formed a partnership and received a technological license from a foreign company very often had a regional restriction on export imposed upon it. Even if the *productivity* when a Japanese company accepted FDI was significantly different from when it didn't, the *profitability* might not necessarily be different because of the restriction on export. The corporate history of Hitachi makes clear this point:

As for export, we had an advantage over other companies in the [electric] industry. For, we didn't have any foreign company which imposes regional constraints on our export. As we emphasized before, one of the reasons why we didn't go into partnership with foreign companies was that we wanted to develop an original technology, but it was also because we wanted to develop our overseas market freely... For example, when the export of our electric fan dominated India and other regions around 1932, other companies could not follow us because of the regional constraint imposed by foreign partners [Hitachi, 1960: 128]

Although the above empirical examinations are limited to one industry and subject to a wide margin of error, they seem to provide a support for the view that in the early twentieth century, the difference in profitability when a company accepted FDI and when it didn't was not very large. Thus, we can conclude that the explanation based on the model in section V is not totally groundless.

### VII. Conclusion

The small share of FDI in the total capital inflows into Japan has been conventionally explained by government policy. But this conventional explanation is not sufficient for the period 1899-1930. This paper tried to figure out why the share of FDI was small in this period.

The answer for the question can be summarized as follows: the profitability when a Japanese company accepted FDI and formed a joint venture was not greatly different from the profitability when it didn't accept FDI, partly because Japanese companies at that time had a sufficient technological basis to catch up with foreign technology by themselves, and partly because the formation of partnership narrowed the scope of export and reduced profitability. The small difference in profitability made the Japanese companies less hospitable toward foreign companies and made joint ventures less likely to take place. In other words, the inhospitable attitudes of Japanese companies hindered the penetration of foreign companies into Japan, thus made the amount as well as share of FDI small.

Interestingly enough, a similar attitude of Japanese companies can also be seen after World War II. For example, in 1951, when Nippon Electric Corporation (NEC) negotiated with International Standard Electric (ISE) to resume the partnership interrupted by World War II, NEC insisted on maintaining its two-thirds of share in holdings, which directly conflicted with the demand of ISE for majority holdings. As a result of difficult negotiations, NEC got its way and maintained the majority. After this incident, ISE lost its interest in NEC and eventually sold out its holdings [NEC, 1979: 223]. Another example is the negotiation of a joint venture between Toyota Motor Co. and Ford in 1960. The negotiation also broke down because Toyota insisted on setting up a third company and didn't want Ford to hold any share in Toyota itself [Ekonomisto, 1977: 40].

Further research could be done to see whether the framework developed in this paper for the period 1898-1930 is also applicable to after World War II. But even before examining the other period, there are many things to do for the period of 1898-1930. Definitely, further empirical studies are necessary to see whether the difference in profitability was small and to what extent intolerance of Japanese companies blocked FDI. Another important task would be to shed a light on the behavior of foreign companies, which was not analyzed explicitly in this paper but might have been another reason for the small amount and share of FDI.

#### References

- Allen, G.C. (1946). A Short Economic History of Modern Japan: 1867-1937. London: George Allen and Unwin.
- Allen, G.C. & Donnithorne, A.G. (1954). Western Enterprise in Far Eastern Economic Development: China and Japan. N.Y.: The Macmillan Co.
- The Bank of Japan. Statistical Yearbook of Japanese Economy.
- The Ekonomisto. (1977). *Sengo Sangyoshi he no Shogen*. (Testimonies for the post-war industrial development vol. 2) Tokyo: Mainichi Shibunsha. (in Japanese)
- Hitachi Manufacturing Company Ltd. (1960). *History of Hitachi Manufacturing Company Ltd.* Tokyo: Hitachi Manufacturing Co. Ltd. (in Japanese)
- Japan Association of Natural and Artificial Silk Manufactures (JANASM). (1959). *Nihon Ken Jinken Orimonoshi*. (The history of the natural and artificial silk industry.) Tokyo: JANASM. (in Japanese)
- Kobayashi, N. (1987). "Japanese Intervention with respect to Foreign Direct Investment." in Robinson, R.D., ed. *Direct Foreign Investment: Cost and Benefits*. N.Y.: Praeger.
- Komiya, R., et al. (1984). *Nihon no Sangyo Seisaku*. Tokyo: The Univ. of Tokyo Press. (Industrial policy of Japan) (in Japanese)
- Litvak, I.A. & Maule, C.J., eds. (1970). Foreign Investment: The Experience of Host Countries. Praeger.
- Lockwood, W.W. (1954) The Economic Development of Japan: Growth and Structural Change, 1868-1938. Princeton Univ. Press.
- Mitsubishi Electrical Engineering Company. (1982). *The History of Mitshbishi Electrical Engineering Company.* Tokyo: Mitsubishi E.E.C. (in Japanese)
- Nippon Electric Company (NEC). (1980). *Nippon Denki Monogatari*. (The story of NEC) Tokyo: Gakuyo Shuppan. (in Japanese)
- Nihon Keizai Shinubun. (1980). *Watashi no Rirekisho: Keizaijin 14*. (Memoirs: Business executives. vol.14) Tokyo: Nihon Keizai Shinbunsha. (in Japanese)
- Oki Electric Company. (1981). 100 Years of Oki Electric Company. Tokyo: Oki Electric Company. (in Japanese)
- Okita, S. & Miki, T. (1967). "Treatment of Foreign Capital: A Case Study of Japan." in Kuznets, P.W, ed., *Capital movements and economic development*. N.Y.: Saint Martin Press.
- Ozaki, R.S. (1972). The Control of Imports and Foreign Capital in Japan. Praeger.
- Reubens, E.P. (1955). "Foreign Capital and Domestic Development in Japan, 1868-1937." in Kuznets, S. et al., eds. *Economic growth: Brazil, India, Japan*. Durham, N.C.: Duke Univ. Press.
- Sekiguchi, S. (1979). Japanese Direct Foreign Investment. Montclair, N.J.: Allanheld, Osmun & Co.
- Tokyo Shibaura Electric Corporation (Toshiba). (1963). 85 years of Tokyo Shibaura Electric Corporation. Tokyo: Toshiba. (in Japanese)
- Wilkins, M. (1982). "American-Japanese Direct Foreign Investment Relationships, 1930-1952." Business History Review. vol.56, no.4, Winter.
- The World Bank. (1990). World Debt Tables: 1990-1991. IBRD.
- Yamamoto, Y. (1989). Senkanki Nihon Shihonshugi to Keizai Seisaku. (Capitalism and Economic Policy in Inter-war Japan.) Tokyo: Kashiwa Shobo. (in Japanese)
- Yamazawa, I. (1984). Nihon no keizaihatten to kokusai bungyo. (Economic Development and

- International Trade.) Tokyo: Toyo Keizai Shiposha. (in Japanese)
- Yamazawa, I. & Yamamoto, Y. (1979). Foreign Trade and the Balance of Payments. (Estimates of Longterm Economic Statistics of Japan since 1868, vol.14). Tokyo: Toyo Keizai Shinposha.
- Yoshino, M.Y. (1975) "Japan as a Host to International Corporations." in Frank, I., ed. *The Japanese Economy in International Perspective*. Johns Hopkins Univ. Press.