

**Corporate Culture and Managerial Delegation:
A Comparative Study of Japanese and American Multinational Enterprises**

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Abstract

This is an attempt to apply Greif's (1994) "cultural beliefs" model to a comparative institutional analysis of the nature of multinational enterprises (MNEs). The first issue is the question whether Japanese MNEs, like Greif's (1994) collectivist societies, are inclined to hesitate to give managerial delegation to non-Japanese talents. My empirical evidence shows that Japanese MNEs have a significant tendency to send more directors (both the top of the board of directors (BOD) and directors as a whole) from the headquarters to their foreign affiliates than American MNEs do. The second issue is the evolution of corporate culture. The results of the paper indicate that, over the five years, the distribution of behavioral characteristics of Japanese MNEs moves towards the ones of American MNEs. This finding is consistent with the recent studies which describe the cultural integration based upon the evolutionary models.

JEL Classification: D23, F23, Z13

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1. Introduction

The study on the cultural aspects of multinational enterprises (MNEs) has a rich and growing literature, although the economic and institutional analysis on this subject is still in its nascency. This paper is, to the best of my knowledge, the first attempt to apply Greif's (1994) "cultural beliefs" model to a comparative institutional analysis of the nature of MNEs. As a matter of fact, there is fairly general agreement among scholars on the point that Japanese MNEs share certain collectivistic culture, as opposed to the individualistic culture of Anglo-Saxon MNEs (Ouchi 1981; Hofstede 1980, 1991). Although there is plenty of description about cultural aspects of Japanese MNEs in this line of literature, what is lacking is a formal tool to illustrate the essence of this subject systematically and analytically. This paper may be viewed as an attempt to provide a bridge to a more formal analysis of cultural dimensions of MNEs employing Greif's (1994) model as an analytical benchmark.

To put the matter simply, there are two hypotheses in this paper. The first hypothesis is that Japanese MNEs share collectivistic cultural behaviors in the sense of Greif's (1994) model and have a tendency to send more directors from the headquarters to their foreign affiliates than other individualistic MNEs do. The second hypothesis is that (i) cultural integration gradually occurs between Japanese affiliates in the U.S. and American affiliates in Japan from 1998 and 2003, and (ii) the integration is mainly caused by the behavioral change in Japanese affiliates in the U.S. These are the hypotheses to be examined empirically later on.

This paper concludes by presenting evidence consistent with these hypotheses: concerning the first hypothesis, Japanese MNEs have a significant tendency to send more directors (both the top of the board of directors (BOD) and directors as a whole) from the headquarters to their foreign affiliates than American MNEs do. In addition to this, so far as the appointment of the top of the BOD is concerned, Japanese auto-related MNEs are segregated and collectivistic in the sense of Greif's (1994) model that they are more likely to send the top of the BOD from their headquarters. The similarity between Japanese MNEs and Greif's (1994)

collectivist societies are also confirmed in respect of (i) pay for directors (in other word, agents) and (ii) valuation on information sharing.

So far as the second hypothesis is concerned, the results of the paper indicate that, over the five years from 1998 to 2003, the distribution of behavioral characteristics of Japanese MNEs moves towards the ones of American MNEs while there are still decisive differences between them in 2003. This finding is consistent with Kuran and Sandholm's (2003) study which describes the process of cultural integration based upon the evolutionary models.

The rest of the paper is organized as follows. Section 2 provides a definition of cultural beliefs, and then shows some important implications of Greif's (1994) cultural beliefs model. Section 3 describes the data source, the sample selection, the variables and the specification of the empirical models. Section 4 summarizes and interprets the empirical results. Some discussions on the empirics and other broader issues are presented in section 5. Section 6 concludes the paper and suggests some directions for further research.

2. Greif's Cultural Beliefs Model and Its Implication to MNEs' Behavior

The first hypothesis of this paper is that, as shown in the introduction, Japanese MNEs share collectivistic cultural behaviors in the sense of Greif's (1994) cultural belief model and have a tendency to send more directors from the headquarters to their foreign affiliates than other individualistic MNEs do. Before turning to an empirical analysis, I shall address three fundamental questions to the hypothesis. First, what are cultural beliefs which are in Greif's (1994) model? Second, what are the implications of Greif's (1994) cultural beliefs model? Third, is there really any evidence to show that the characteristics of Japanese MNEs conform to the setting and implications of Greif's (1994) model?

2.1 Definition of Cultural Beliefs

“Cultural beliefs” is a terminology that I borrowed from Greif’s (1994) epoch-making work which formally analyzes the relationship between the cultural constraints of the societies and their economic performance. He defines cultural beliefs as follows:

(C)ulture --- an important component of which is cultural beliefs. Cultural beliefs are the ideas and thoughts common to several individuals that govern interaction ---between these people, and between them, their gods, and other groups--- and differ from knowledge in that they are not empirically discovered or analytically proved. In general, cultural beliefs become identical and commonly known through the socialization process by which culture is unified, maintained, and communicated” (Greif 1994, p.915).

It seems fair to say that this definition of cultural beliefs, a formalization of an aspect of culture as a whole, makes sense not only as a reflection of reality but as an analytical setting. Analytically speaking, when each player chooses his best response to these identical and commonly known beliefs, the set of permissible cultural beliefs is restricted to those that are self-enforcing. I employ this descriptive definition in the present paper.¹ This definition implies that a cultural belief is a kind of institutions, following the definition by Nabli and Nugent (1989).²

2.2 Implications of Greif’s Cultural Beliefs Model

¹ This definition naturally raises the question whether there is any analytical benefit from distinguishing between strategies and cultural beliefs. Unlike strategies, as Greif (1994, p.915) claims, cultural beliefs are qualities of individuals that affect decisions in historically subsequent strategic situations. Typically, cultural beliefs provide focal points and coordinate expectations, thereby influencing equilibrium selection and society’s enforcement institutions. On the other hand, Basu (1995) and Nagaishi (2003) are the examples that explicitly identify cultural norms with a game’s strategy sets.

² Nabli and Nugent define an institution as “a set of constraints which governs the behavioral relations among individuals or groups” (Nabli and Nugent 1989, p.1335).

Greif (1994) offers an interestingly original historical institutional analysis dealing with the one-sided Prisoner's Dilemma (OSPD) in the context of Mediterranean trade in the medieval world. He compares the different ways in which Genoese merchants from the Latin region and Maghribi merchants from North Africa would respond to the same agency problem. In enforcing honest behavior of agents, the different beliefs in the two merchant groups (an individualistic belief for the Genoese and a collectivistic belief for the Maghribis) have implications for the historical trajectories of organizational characteristics of the societies and institutional evolutions. There is no space to for an extended discussion on the article,³ but let me summarize some important implications of Greif's model.

[Implication 1] In collectivist societies, like the Maghribis, the social structure is segregated in the sense that each individual socially and economically interacts mainly with members of a specific ethnic or familial group. On the contrary, in individualist societies, like the Genoese, the social structure is integrated in the sense that economic transactions are conducted among people from different groups. Typically, when inter-economy agency relations become possible, while collectivist merchants do not utilize such an opportunity following their segregation principle, individualist merchants may find it optimal to establish the inter-economy agency relations (proposition 4 and 5, Greif 1994, pp.933-935).

[Implication 2] In collectivist societies, social structure tends to be horizontal in the sense that each merchants serves as an agent, and vice versa. In contrast, social structure in individualist societies is likely to be vertical in the sense that the class division of merchants and agents are decisive (Greif 1994, pp. 927-929).

³ For an interpretation of Greif's (1994) model from a somewhat different perspective, see Aoki (2001, Section 3.2).

[Implication 3] So far as contract enforcement is concerned, while collectivist societies tend to rely upon informal institutions such as moral sanctions against deviants, individualist societies mainly resort to specialized second-party organizations such as the court (Greif 1994, pp.924-925 and 936-939).

Among these, the first two implications are, broadly speaking, the consequences of the different efficiency wages between collectivist and individualist societies (proposition 1 and 2, Greif 1994, pp.919-920). The last point comes from the two societies' different valuation on information sharing (proposition 3, Greif 1994, p.921).

2.3 Do Japanese MNEs Have Similar Features with Greif (1994)'s Collectivistic Societies?

As I mentioned earlier, there is fairly general agreement on the point that Japanese firms share certain collectivistic culture, as opposed to the individualistic culture of Anglo-Saxon firms; one of the differences in the economic literature is whether they deal with the cultural factors explicitly (Ouchi 1981; Hofstede 1980, 1991) or not (Kojima 1978; Aoki and Okuno-Fujiwara 1996). Although there is no systematic quantitative analysis on the relationship between MNEs' nationality and their decisions on managerial delegation, it is generally said that Japanese MNEs tend not to delegate the corporate control to non-Japanese directors (Itagaki 1997). In addition, there are some interesting theoretical and empirical findings in the literature of the economic analysis of Japanese firms, namely, (i) Japanese firms are inclined to invest in information networking among their business partners (Imai 1989; Hoshi 1994), and (ii) their organizational structures are more horizontal than the American firms (Aoki 1986, 1988). One may associate these features with the ones of Greif's collectivist societies mentioned earlier.

Thus, it seems reasonable to assume that we have solid rationale to hypothesize that Japanese companies are something like Greif's (1994) collectivist societies. Especially, I would like to focus my attention on an empirical investigation whether Japanese MNEs are segregated in the sense of Greif's (1994) **[implication 1]** and have a tendency to send more directors from

the headquarters to their foreign affiliates than other individualistic MNEs do. In this paper, I take up a comparison of Japanese and American MNEs since they are a good reflection on Greif's (1994) collectivist societies and individualist societies, respectively.

It should also be added that it is not my present purpose to explore all the implications above and search for more comprehensive applications to the study of MNEs. However, some other important implications, such as (i) the differences in pay for directors (in other word, agents) and (ii) different valuation on information sharing, are briefly examined later on to confirm the validity of my arguments.

3. The Data, Sample Selection and Empirical Models

3.1 Data Source and Sample Selection

First, to pick up American MNEs' affiliates operating in Japan (American affiliates in Japan, hereafter), I use data from the publicly available Japanese database, *Kaisha Shikihou* (KS, The Dictionary of Japanese Listed Companies), Fall 1998 and Fall 2003 editions, provided by Toyo-Keizai Shinpo-sha. Second, to select Japanese MNEs' affiliates operating in the U.S. (Japanese affiliates in the U.S., hereafter), I use data from the database, *Kaigai Shinshutsu Kigyo Ichiran* (KSKI, The Dictionary of Japanese Companies Operating Abroad), 1998 and 2003 editions, provided by the same publisher, Toyo-Keizai Shinpo-sha. These are standard databases used by academic scholars and management professionals to analyze listed companies in Japan and their foreign affiliates. The KS covers about 3,920 listed companies in Japan and the KSKI does 18,000 Japanese foreign affiliates in the year of 2003. I pick up American and Japanese affiliates which already started operating in 1998 and still existed in 2003, since one of my interests is to capture the dynamics of behavioral patters of these companies over time. From these databases, I obtain data on 133 affiliates, which can be decomposed into 26 American

affiliates in Japan and 107 Japanese affiliates in the U.S.⁴

3.2 Statistical Outlook

Before turning to the regression modeling, let me show a statistical outlook of the 133 sample companies. The same sample is used in my empirical analysis later.

Table 1, indicating the industrial distribution of Japanese affiliates in the U.S. (the second and third column) and Japanese affiliates in the U.S. (the fourth and fifth column), vividly illustrates the different features of these two groups. The table proves that about two-fifths of Japanese affiliates in the U.S. are concentrating only in the auto-related industry and 14 per cent in the electrical and electronics goods industry. On the other hand, for American affiliates in Japan, the share of service sector is remarkably high, more than three-fifths.

Next, table 2 and 3 summarizes the basic statistics of these sample companies in 1998 and 2003, respectively. They compare the mean values of Japanese and American affiliates in terms of (i) the share of the directors who are sent from their headquarters, and (ii) whether the top of the BOD, such as a chairperson, the CEO, a managing director, is sent from their headquarters (yes is counted by 1; otherwise, 0), (iii) the shareholding of parent companies, (iv) age, (v) sales turnover, and (vi) the number of employees.

As of the year of 1998 (table 2), Japanese affiliates in the U.S. were, relatively speaking, owned in large proportion by the parent companies (85.3 per cent *vis-à-vis* 52.4 per cent), old (14.1 years *vis-à-vis* 11.8 years), small in sales scale (319 million U.S. dollars *vis-à-vis* 2,147 million) and low in employment (773 *vis-à-vis* 2,918). The differentials in their decision of managerial delegation are more noteworthy; first, the proportion of the directors from their headquarters (SHHQ in table 2) in Japanese affiliates in the U.S. is markedly lower than the proportion of the directors from their headquarters in American affiliates in Japan (29.8 per cent *vis-à-vis* 71.7 per cent). The differentials between these two groups are statistically significant

⁴ The complete list of these 133 companies is in Appendix A.

at 1 per cent level. These findings appear to support my hypothesis that Japanese MNEs have a tendency to send more directors from the headquarters to their foreign affiliates than American MNEs do. However, these decisive differentials may be, at least to some extent, due to the fact that the share of parent company ownership in Japanese affiliates is higher than that of Americans. The one of the aims of the regression analysis in the next section is, therefore, to look at the difference in managerial delegation decisions between Japanese and American MNEs, after controlling the effects of the share of parent company ownership and other controls (examination of the first hypothesis in the introduction section).

As of the year of 2003 (table 3), the basic characteristics of Japanese affiliates in the U.S. and American affiliates in Japan do not change much from 1998. Japanese affiliates in the U.S. are again owned in large proportion by the parent companies (87.6 per cent *vis-à-vis* 51.5 per cent), old (19.1 years *vis-à-vis* 16.8 years), small in sales scale (470 million U.S. dollars *vis-à-vis* 2,654 million) and low in employment (920 *vis-à-vis* 5,415). Besides, the proportion of the directors from their headquarters in Japanese affiliates in the U.S. is lower than the proportion of the directors from their headquarters (63.9 per cent *vis-à-vis* 28.4 per cent). The probabilities that the top of the directors is sent from their headquarters also differ sharply: the probability that the top of Japanese affiliates in the U.S. is from their headquarters (TPQC) is higher than the probability that the top of American affiliates in Japan is from their headquarters (62.9 per cent *vis-à-vis* 30.8 per cent). The TPQC is not taken up in the case of the year 1998 since the variable in 1998 is not available.

The important point to note is that, over the five years from 1998 and 2003, the managerial delegation behavior of Japanese MNEs has moved towards the one of American MNEs, while there are still decisive differences between them in 2003. Table 2 and 3 show that, from 1998 to 2003, the mean SHHQ of Japanese affiliates drops down from 71.7 per cent to 63.9 per cent (the differential is statistically significant at the 5 per cent level), while mean SHHQ of American goes up only slightly, from 29.8 per cent to 28.4 per cent (the differential is *not* statistically significant even at the 10 per cent level). As a result of this change, the mean gap in

the SHHQ between Japanese affiliate in the U.S. and American affiliates in Japan has been narrowed down from 41.9 per cent in 1998 to 35.5 per cent in 2003. This tendency is confirmed not only by the mean comparison of the two group but also the comparison of the distributions which is shown in figure 1. The second hypothesis of this paper (gradual cultural integration between Japanese affiliates in the U.S. and American affiliates in Japan caused by the behavioral change in Japanese affiliates in the U.S.) is supported by these statistical facts, at least to some extent. This issue is taken up in detail in the regression analysis in the next section.

3.3 The Models

The following regression models examine the two hypotheses spelled out in the last subsection:

[Model 1] $SHHQ = \beta_0 + \beta_1 PSH + \beta_2 SAL + \beta_3 AGE + \beta_4 JPD + \beta_5 SVD + \beta_6 ITD + \beta_7 ATD + e_1$
(OLS estimation, level in 1998 and 2003),

[Model 2] $TPHQ = \beta_0 + \beta_1 PSH + \beta_2 SAL + \beta_3 AGE + \beta_4 JPD + \beta_5 SVD + \beta_6 ITD + \beta_7 ATD + e_2$
(probit model estimation, level in 2003),

[Model 3] $?SHHQ = \beta_0 + \beta_1 ?PSH + \beta_2 ?SAL + \beta_3 ?AGE + \beta_4 JPD + \beta_5 SVD + \beta_6 ITD + \beta_7 ATD + e_3$ (OLS estimation).

Model 1 and 2 examine the first hypothesis that Japanese MNEs have tendency to send more (top) directors from the headquarters to their foreign subsidiaries than American MNEs do. The dependent variables in model 1 and model 2 are (i) the proportion of the directors from their headquarters (SHHQ) and (ii) the probability that the top of the BOD is sent from their headquarters, respectively. I apply OLS estimation for model 1 and probit model estimation for

model 2.⁵ For each model, I include some control variables which may have impacts on the decision of director appointment. The most crucial independent variable for my analysis is JPD, a Japanese MNE dummy variable which represents whether the firm belongs to Japanese affiliates in the U.S. Among controls, the proportion of parent company's shareholding (PSH) is expected to have a strong positive impact on the dependent variables in model 1 and 2. In addition to this, I chose sales turnover (SAL), age of the company (AGE), and three industry dummies (a service industry dummy (SVD), an IT industry dummy (ITD) and an auto-related industry dummy (ATD)) as controls. Age variable has a reasonable expectation to produce a negative effect (the older the company is, the more managerial delegation to indigenous talents) in these models.

In order to examine the second hypothesis (gradual cultural integration between Japanese affiliates in the U.S. and American affiliates in Japan caused by the behavioral change in Japanese affiliates in the U.S.), model 3 tries to capture the determinants of the MNE's changing behavior on the managerial delegation from 1998 to 2003. The dependent variable is the change in the proportion of the directors from their headquarters (?SHHQ). The most important independent variable is again JPD, the Japanese MNE dummy variable. The hypothesis is supported if the impact of JPD is negative and statistically significant. I chose the change in the proportion of parent company's shareholding (?PSH), the change in sales turnover (?SAL), and three industry dummies (a service industry dummy (SVD), an IT industry dummy (ITD) and an auto-related industry dummy (ATD)) as controls.

4. Empirical Findings

4.1 Model 1: Directors Sent from the Headquarters (SHHQ) and Japanese MNE Dummy

Column 1 and 2 of table 4 summarizes the estimation results of model 1 for all 133 Japanese and

⁵ I also tried logit model estimation and OLS estimation for model 2, but the results remain qualitatively the same.

American affiliates in 1998. First and foremost, I can find that Japanese MNE dummy has a positive and statistically significant impact on the proportion of the directors from their headquarters. This result indicates that the first hypothesis, which says that Japanese MNEs have a tendency to send more directors from the headquarters to their foreign subsidiaries than American MNEs do, is strongly supported. The significance is robust whether the industry dummies are included (column 2) or not (column 1). If I take up the case with the industry dummies, the Japanese MNE dummy brings 20.1 per cent higher proportion of the directors sent from their headquarters compared to American affiliates in Japan.

Second, among control variables, parent company's shareholding has a positive and statistically significant impact on the dependent variable, as was expected. Other controls, however, do not play any significant role in the regressions. Age of the company has a negative impact on the dependent variable as was expected, but the effect is not statistically significant.

Column 1 and 2 of table 5 shows results of model 1 in the year of 2003. The results are qualitatively similar with the ones in the year of 1998, but one may notice that the coefficient of JPD in 2003 (0.186) is somewhat smaller than the one in 1998 (0.201). The reduction of the impact of JPD may, roughly speaking, show the gradual cultural integration between Japanese affiliates in the U.S. and American affiliates in Japan; further discussion on this point will be presented in subsection 4.3.

4.2 Model 2: Top of the Directors Sent from the Headquarters (TPHQ) and Japanese MNE Dummy

The results of model 2 for the year of 2003 are shown in column 3 and 4 in table 5. As I mentioned earlier, I employed probit model estimation for this model. The TPQC is not taken up as a dependent variable in the case of the year 1998 since the variable in 1998 is not available, as has been mentioned.

First, I evaluate the specification without the industry dummies (column 3). In this case, Japanese MNE dummy has a positive and statistically significant impact on the probability

that the top of the BOD is sent from their headquarters. Computation of marginal effect (when Japanese MNE dummy goes 0 to 1) using this specification shows that the probability that Japanese MNEs send the top of the BOD from the headquarters is 18.2 per cent higher than the probability that American MNEs do. This result confirms the robustness of the first hypothesis in terms of top managerial delegation. What is interesting, however, is the result of the specification with the industry dummies (column 4). In this setting, significance of Japanese dummy disappears and then the auto industry dummy shows a strong positive correlation with the dependent variable. Judging from the fact that 26 out of 29 auto-related companies in the sample are Japanese affiliates in the U.S., it seems reasonable to suppose that, among Japanese MNEs, auto-related affiliates are specifically conservative in the sense that they are more likely to send the top of the BOD from the headquarters.

So far as the other controls are concerned, the results are broadly similar with the ones in model 1. Parent company's shareholding has a strong positive effect on the dependent variable and the correlation is statistically significant. Sales, age, and the industry dummies, except for the auto industry dummy, are insignificant in the regressions.

To sum up, empirical evidence in my regression analysis is strongly consistent with the hypothesis that I spelled out in line with Greif's (1994) model. Japanese MNEs have a significant tendency to send more directors (both the top of the BOD and directors as a whole) from the headquarters to their foreign affiliates than American MNEs do. In addition to this, so far as the appointment of the top of the BOD is concerned, Japanese auto-related MNEs are segregated and collectivistic in the sense of Greif's (1994) model that they are more likely to send the top of the BOD from the headquarters.

4.3 Model 3: Cultural Evolution of Japanese Affiliates in the U.S.

Let us now turn to the examination of the second hypothesis, namely, gradual cultural integration between Japanese affiliates in the U.S. and American affiliates in Japan. Model 3 attempts to capture the determinants of the MNE's changing behavior on the managerial delegation from

1998 to 2003, and the results are shown in table 6. Importantly, the Japanese MNE dummy has a negative and statistically significant impact on the change in the proportion of the directors in the affiliates who are sent from their headquarters. This means that Japanese affiliates in the U.S. have been significantly reducing the proportion of the directors from their headquarters, compared with American affiliates in Japan. What the finding makes clear at once is that the gap of the behavioral patterns between Japanese and American MNEs has been narrowed down, showing the evidence of the integration of corporate cultures over the five years from 1998 to 2003.

The impacts of controls in model 3 are somewhat similar with the ones in model 1 and 2. The change in parent company's shareholding has a positive effect on the dependent variable and the correlation is statistically significant. Other controls are all insignificant in the regression.

5. Discussion

The hypotheses of this paper are, as I have argued in the previous section, strongly supported by evidence. There may be, however, criticism which can be raised against my arguments from various aspects. In this section, I shall take up some potential objections to my arguments. The potential objections shall be, however, not strong enough to deny the validity of my arguments.

5.1 Are Regulatory Environments Comparable?

One may point out the possibility that the frameworks to regulate foreign direct investments (FDI) are not comparable between Japan and the U.S., and thus my method of pooling regressions makes little sense. For example, between these two countries, if there are remarkable differences in the rules of (i) appointment of foreign directors, (ii) appointment of outside directors and (iii) the limits of foreign ownership (they are sometimes sector-specific), my empirical results may be potentially biased.

Japan External Trade Organization (JETRO) (1995) provides useful information to examine this point more closely. The Japanese government-sponsored organization conducted a comparative study on the FDI policies in Japan and the U.S. JETRO's (1995) conclusion is that there is no fundamental difference between Japanese and American regulatory environments in FDI, except for the fact that Japanese Company Act sets higher hurdles in the case of outside director appointment than American counterpart does. It seems unrealistic to suppose that this kind of minor difference causes a serious problem in my empirical study.⁶

5.2 Is the Similarity in Managerial Delegation Just a Coincidence?

Another possible objection may challenge to my arguments in the wider context. That is, the similar behavioral pattern of Japanese MNEs with Greif's (1994) collectivist societies in managerial delegation to the agents is just a coincidence and it is an exaggeration to conclude, only from this ground, that Japanese MNEs are something like Greif's (1994) collectivist societies. Thus, in order to make my arguments more promising, it is right to pick up some other important aspects of Greif's (1994) implications, such as (i) the differences in pay for directors (or agents) and (ii) different valuation on information sharing.

The first point is a difference in pay for directors (or agents). In a widely cited article, Kaplan (1994) concludes that the top executives in large American firms earned, on average, five times what the executives in large Japanese firms earn in the early 1980s. Using the results of the more recent survey, Abowd and Kaplan (1999) show that pay for the CEOs in the U.S. was three times higher than the one of the counterparts in Japan in the mid-1990s. These findings are consistent with Greif's (1994, pp.919-920) proposition 1 and 2 which imply that the efficiency wage is higher in individualist societies than in collectivist societies. It is true that

⁶ JETRO (1995) examines only formal regulations and pays scant attention to the informal constraints concerning appointment of directors and acquisition of company ownership in Japan and U.S. These informal aspects, however, definitely play a role in the managerial delegation decisions of MNEs. I leave the issue for a future research topic.

Japanese executives likely receive more non-pecuniary benefits; but, even so, the differences are too huge to overlook.

Second, in respect of information sharing, Imai (1989) and Hoshi's (1994) work on the Japanese business groups is an informative source. He finds that Japanese business groups (*Kigyo-Shudan* and/or *Keiretsu*) are keen to share information among members about their business partners through informal top-executive meetings (*Shacho-kai*), board member's exchange, and joint projects execution. It is natural that one may associate these features with informal and collectivistic mechanisms of the Maghribis.

All the findings in this section strengthen my arguments earlier. Now it seems reasonable to conclude that the similarity between Japanese MNEs and Greif's (1994) collectivist societies can be found not only in their managerial delegation decisions but also in other respects such as pay for directors (in other word, agents) and valuation on information sharing.

6. Conclusion and Some Future Directions for Research

This paper is an attempt to examine the hypotheses on the behavior of Japanese and American MNE and their affiliates. The first hypothesis is that Japanese MNEs share collectivistic cultural behaviors in the sense of Greif's (1994) model and have a tendency to send more directors from the headquarters to their foreign affiliates than other individualistic MNEs do. The second hypothesis is that cultural integration gradually occurs between Japanese affiliates in the U.S. and American affiliates in Japan from 1998 and 2003, driven by the behavioral change in Japanese affiliates in the U.S.

In short, my empirical findings are strongly consistent with these hypotheses. Japanese MNEs have a significant tendency to send more directors (both the top of the BOD and directors as a whole) from the headquarters to their foreign affiliates than American MNEs do. So far as the appointment of the top of the BOD is concerned, Japanese auto-related MNEs are segregated and collectivistic in the sense of Greif's (1994) model that they are more likely to send the top of

the BOD from the headquarters. I also briefly examined some other important features, such as (i) pay for directors (or agents) and (ii) valuation on information sharing. The similarity between Japanese MNEs and Greif's (1994) collectivist societies is confirmed in these respects, too. Although there are such decisive differences between Japanese and American MNEs, the gap of the behavioral patterns between Japanese and American MNEs has been narrowed down, showing the evidence of the integration of the corporate cultures over the five years from 1998 to 2003.

Since my discussion in the present paper is just a preliminary approach to this issue, it may be fruitful to suggest a line of hopeful future research. First, the dynamic evolution of corporate cultures is a crucial issue. The results of the paper indicate that the distribution of behavioral characteristics of Japanese MNEs moves towards the ones of American MNEs, but the distribution of behavioral characteristics of American MNEs does not change significantly over the investigated period. Does this imply the convergence of corporate cultures in the way that American MNEs typically behave? This is an important question and should be investigated from the broader perspective.

Second, from the empirical point of view, panel-data analysis with sufficient time-series will yield rich dividends in the future since the bottom line of the study is to capture the dynamic behavioral pattern of MNEs. Although such a direction cannot be attempted here due to the constraints on data, the extension to this direction is imminent.

Third, in order to test the robustness of my hypothesis here, one must inevitably introduce broader comparative perspective. Specifically, it is an interesting extension to investigate the case that Japanese and American MNEs are both penetrating into the third world, which can be either something like collectivist or individualist societies.

Last but not least, I would like to mention about the relative efficiency of the two distinct economic systems, namely, collectivistic and individual societies. Greif (1994) suggests that individualistic system may have been more efficient in the long run in the context of Mediterranean trade competition. But, in the context of modern manufacturing competition, it

seems to be the case that Japanese auto-related MNEs, which appear as collectivists especially in regard to top executive appointment, have competitive strength in the world market. After all, relative efficiency and growth performance between the different economic organizations is, as Greif (1994) suggests, history-dependent and case-dependent. Relative growth performance and its path dependency in the different systems is an important (although too involved to treat here in detail) subject and I leave an extension of my interest to this direction for my future research topic.

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Table 1: Industrial Distribution

	J. Affiliates (in the U.S.)		A. Affiliates (in Japan)	
	Number	Share (%)	Number	Share (%)
1) Auto Related	43	40.2	3	11.5
2) Chemical	12	11.2	2	7.7
3) Electrics & Electronics	15	14.0	2	7.7
4) Foods	3	2.8	1	3.8
5) Service/IT	0	0.0	7	26.9
6) Service/Others	15	14.0	9	34.6
7) Machinery	14	13.1	0	0.0
8) Metals & Ceramics	3	2.8	1	3.8
9) Others	2	1.9	1	3.8
Total	107	100.0	26	100.0

Source: (1) Japanese affiliates in the U.S.: *Kaigai Shinshutsu Nippon Kigyo Ichiran*, 1998 and 2003, Toyo-Keizai Shinpo-Sha. (2) American affiliates in Japan: *Kaisha Shikihou*, Fall 1998 and Fall 2003, Toyo-Keizai Shinpo-Sha.

Table 2: Summary Statistics of the Sample Companies, 1998

	SHHQ	TPHQ	P's Share	Age	Sales	Employees
[1] J. Affiliates (in the U.S.)	0.717	-	0.853	14.1	319	773
[2] A. Affiliates (in Japan).	0.298	-	0.524	11.8	2,147	2918
Differential ([1]-[2])	0.419***	-	0.329**	2.3	-1,828***	-2,145***

Table 3: Summary Statistics of the Sample Companies, 2003

	SHHQ	TPHQ	P's Share	Age	Sales	Employees
[1] J. Affiliates (in the U.S.)	0.639	0.692	0.876	19.1	470	920
[2] A. Affiliates (in Japan).	0.284	0.308	0.515	16.8	2,654	5,415
Differential ([1]-[2])	0.355***	0.384***	0.361**	2.3	-2,184***	-4,495***

Source: Same as table 1.

Notes: (1) Means of top's nationality are calculated using the binary measure {If from its parent company=1, if not=0}. (2) Sales volume: Million U.S.\$\$. (3) *** Significant at 1 per cent, **Significant at 5 per cent.

Table 4: Estimation Results, Level, 1998

<i>Dependent Variable</i>	SHHQ		TPHQ	
	(1)	(2)		
Estimation Method	OLS	OLS		
<i>Independent Variables:</i>				
Parent's Shareholdings	0.368*** [0.089]	0.423*** [0.119]	-	-
Sales Volume	0.000 [0.000]	0.000 [0.000]	-	-
Age of the Company	-0.003 [0.002]	-0.003 [0.002]	-	-
Japanese MNE dummy	0.201*** [0.055]	0.233*** [0.070]	-	-
Service Industry Dummy		-0.011 [0.049]	-	-
IT Industry Dummy		0.061 [0.066]	-	-
Auto Industry Dummy		0.099 [0.077]	-	-
Constant	0.055* [0.021]	0.069 [0.081]	-	-
Adjusted R Squared	0.311	0.289	-	-
Number of Observations	133	133	-	-

Notes: (1) Standard errors in parentheses. (2) ***1% significant, **5% significant, *10% significant

Table 5: Estimation Results, Level, 2003

<i>Dependent Variable</i>	SHHQ		TPHQ	
	(1)	(2)	(3)	(4)
Estimation Method	OLS	OLS	Probit	Probit
<i>Independent Variables:</i>				
Parent's Shareholdings	0.484*** [0.091]	0.481*** [0.098]	1.485*** [0.547]	2.948*** [0.741]
Sales Volume	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]
Age of the Company	-0.002 [0.002]	-0.002 [0.002]	-0.009 [0.011]	-0.005 [0.011]
Japanese MNE dummy	0.186*** [0.059]	0.200*** [0.073]	0.567* [0.350]	-0.526 [0.467]
Service Industry Dummy		0.015 [0.054]		-0.114 [0.325]
IT Industry Dummy		0.026 [0.070]		0.104 [0.433]
Auto Industry Dummy		0.007 [0.049]		1.606*** [0.406]
Constant	0.069 [0.072]	0.050 [0.087]	-1.058*** [0.442]	-1.901*** [0.591]
Adjusted R Squared	0.377	0.363	0.121	0.247
Number of Observations	133	133	133	133

Notes: (1) Standard errors in parentheses. (2) ***1% significant, **5% significant, *10% significant

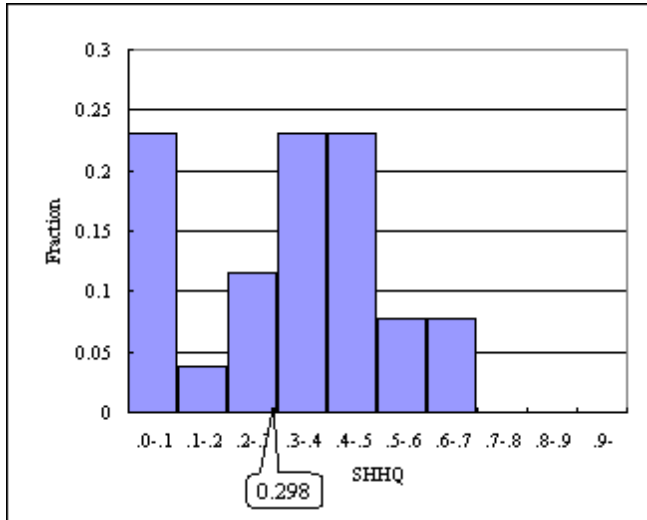
Table 6: Estimation Results, Change of the Variables from 1998 to 2003

<i>Dependent Variable</i>	? SHHQ		? TPHQ	
	(1)	(2)		
Estimation Method	OLS	OLS		
<i>Independent Variables:</i>				
? Parent's Shareholdings	0.311 * [0.156]	0.339** [0.098]	-	-
? Sales Volume	0.000 [0.000]	0.000 [0.000]	-	-
Japanese MNE dummy	-0.511** [0.204]	-0.482*** [0.089]	-	-
Service Industry Dummy		-0.011 [0.080]	-	-
IT Industry Dummy		0.024 [0.041]	-	-
Auto Industry Dummy		-0.091 [0.055]	-	-
Constant	0.044* [0.021]	0.050** [0.020]	-	-
Adjusted R Squared	0.350	0.406	-	-
Number of Observations	133	133	-	-

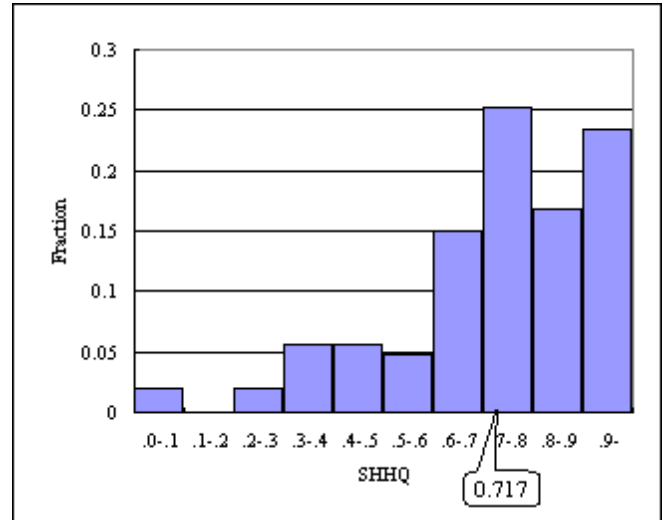
Notes: (1) Standard errors in parentheses. (2) ***1% significant, **5% significant, *10% significant

Figure 1: The Proportion of the Directors from Their Headquarters (SHHQ) of Japanese and American Affiliates, 1998-2003

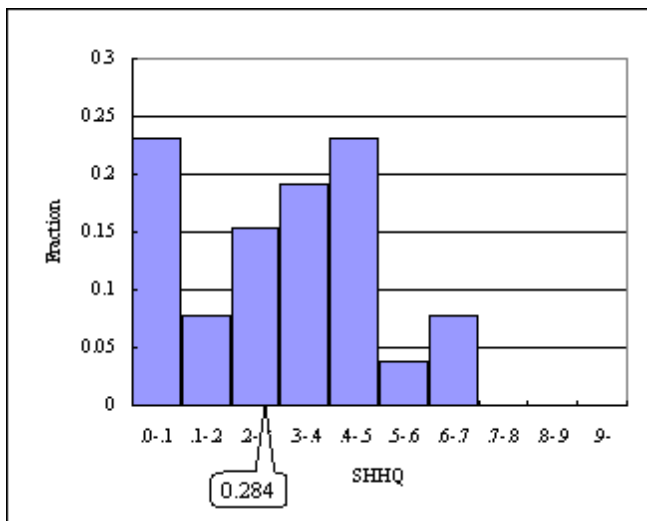
1-1: U.S. Affiliates in Japan, 1998



1-2: Japanese Affiliates in the U.S., 1998



1-3: U.S. Affiliates in Japan, 2003



1-4: Japanese Affiliates in the U.S., 2003

