Culture's Consequences in Japanese Multinationals and Lifetime Commitment

Nobuo Takahashi (University of Tokyo)
Toshio Goto (Kokumin Keizai Research Institute)
Hideki Fujita (Graduate School, University of Tokyo)

Abstract

Hofstede's *Culture's Consequences* (1980) found out four dimensions of culture from the survey of IBM. To inquire into the cultural features of Japanese companies (three leading companies of the computer industry) and 13 subsidiaries of nine countries, we adopted the uncertainty avoidance index (UAI) and the power distance index (PDI) out of Hofstede's four dimensions of culture in order to conduct two surveys; IT96 and IMS96.

Including IBM Japan, UAIs of Japanese companies are high and these results correspond to lifetime commitment that has been pointed out in the argument of Japanese management. Within Japanese multinationals' environment, however, it should be noted that such a high UAI is observed only in Japan and not in their subsidiaries located outside of Japan. Based on Takahashi's (1996) perspective index, the differences of the mobility among overseas subsidiaries can be explained while the existence of lifetime commitment in Japan can be identified.

1. Multinational Comparison of Corporate Culture

Hofstede's Culture's Consequences (1980) is a result of an extensive research on the international comparison of the corporate culture in forty countries through 1967 to 1973. The survey was composed of two phases. Phase One was conducted during 1967 to 1973 to obtain 31,218 workers' data. As its result, the questionnaire was modified, which was reportedly composed of 60 core questions (A1-A60) and 66 optional ones (B1-B66). The former questions were used through the entire process of Phase Two, while the latter were recommended for the optional usage. Phase Two was conducted during 1971 to 1973 to obtain 40,997 workers' data.

In total, 72,215 workers' data were selected for the analysis. Finally, the sample was limited to cover employees at sales and administration departments deleting production and product development departments.

According to Hofstede, four dimensions of culture were identified as a result of extensive surveys, i.e., UAI (uncertainty avoidance index), PDI (power distance index), IDV (individualism index) and MAS (masculinity index). As for the latter two indexes, fourteen questions were employed for factor analysis, but Hofstede (1980) did not explicitly present the exact computation formula (Takahashi, 1995, ch.5). Therefore, UAI and PDI alone were adopted in our surveys to be introduced in the next section. The detail of the computation formula is reviewed hereafter.

(a) PDI (Power Distance Index)

Power Distance is a measure of the interpersonal power distance between B (boss) and S (subordinate), which is defined as "the difference between the extent to which B can determine the behavior of S and the extent to which S can determine the behavior of

B" (Hofstede, 1984, p.72). In the actual analysis, PDI is employed so that it becomes higher when the followings become high:

(1) Frequency of employees' perception that they are afraid to disagree with their managers.
(2) The ratio of those subordinates who prefer not to work for superiors with a consultative style of decision making.
(3) The ratio of those subordinates who perceive their boss as autocratic or persuasive.

By definition, the higher PDI is, the higher Power Distance becomes. The formula used is as follows:

PDI=135	−25×B46 (mean)	−A54 (3: %)	+A55 (1+2: %)
	Employee afraid to Disagree with managers	Preferred managers managers consultative	Perceived managers as autocratic or persuasive

The constant 135 has been added to give the index value a certain range. The actual range of PDI is 11≦PDI≦94, while theoretical range is -90≦PDI≦210. The full questions of B46, A54, and A55, which composite the formula, are shown in Appendix 1.

(b) UAI (Uncertainty Avoidance Index)

As for Avoidance of Uncertainty, UAI is employed which is designed to become higher when the followings become higher:

(1) The degree the employees considering that company rules should not be broken even if they think it is in the company's best interests.
(2) The ratio of those who think to continue working with the present company more than another five years.
(3) Frequency they feel nervous or tense at work.

"Stress" question is introduced in (3), since following relations are observed in which (3) relates to (1) and (2), two means to avoid uncertainties, via the anxiety level and the desire for safety:

(3) ← anxiety level → desire for safety → (1) and (2)

The used formula is as follows:

UAI=300	−30×B60 (mean)	−A43 (1+2: %)	−40×A37 (mean)
	Rule orientation	Continue working less than five years	Nervous/ tense at work

The actual range of UAI is 8≦UAI≦112, while its theoretical range is -150≦UAI ≦230. UAI was correlated to the average age of the respondents. UAI has been compiled on the basis of the country mean scores for three questions, i.e., B60 (rule orientation) and A43 (continue working less than five years) as well as A37 (nervous/ tense at work) which is relative to the former two variables.

2. Survey of Japanese Multinationals

If indexes such as four dimensions addressed by Hofstede (1980) are relevant to

evaluate cultural aspects, the strength of corporate culture as pointed out by Deal & Kennedy (1982) may be measured by focusing on the variance of such indexes over forty countries within a multinational. Or on the contrary, the strength of a national culture may be measured by focusing on the variance of such indexes of multiple companies within a given country. With the latter in our perspective, two surveys on Japanese companies are presented hereafter.

In order to compare with Hofstede's survey of IBM, IT96 (Information Technology 1996) survey was first conducted to cover three major Japanese computer manufacturers (Companies F, N, and T) from January to March of 1996 (Takahashi, 1997a, ch.1). In the beginning, this survey was designed as a part of the international comparative study jointly working with Professor Erling S. Andersen of Norwegian School of Management. The original questionnaire is written in Japanese (see Appendix in detail). The questionnaires were sent to information technology engineers working either in the information processing divisions or in the affiliated subsidiaries in the relative arena. Information technology engineers include those engineers as following:

1) Project managers as well as other managers
2) Application engineers and production engineers
3) System analysts and system auditing engineers
4) Network specialists and data specialists
5) Programmers

Several other types of employees, mostly instructors, also responded but they were excluded from the analysis.

The questionnaires were sent to 1,314 employees in total (Company F, 285; Company N, 630; Company T, 399). We obtained 1,022 respondents' data from the questionnaires in total (Company F, 215; Company N, 438; Company T, 369). The response rate was 77.8%.

Both PDI and UAI were computed by using the same formula and the same questions as Hofstede's. As for questions A54 and A55, 1970-1973 version was employed. We compare the averages of indexes for three Japanese companies, Companies F, N and T. From the one-way analysis of variance, there exist significant differential effects for each index: F=3.19 (p=0.0415) for PDI and F=6.22 (p=0.0021) for UAI. But these Japanese companies are almost identical in IBM's data of forty countries. In order to compare with IBM's averages, the averages of PDI's and UAI's of three Japanese companies are plotted in Figure 1. This figure shows that the location of three Japanese companies (Companies F, N and T) are almost identical in comparison with other forty countries. The averages of the three companies are high: 95 for PDI and 79 for UAI. Hence we obtain the following finding:

Finding 1. Three Japanese companies are high both in PDI and UAI in common. Among the three companies, however, there exist significant differential effects for each index.

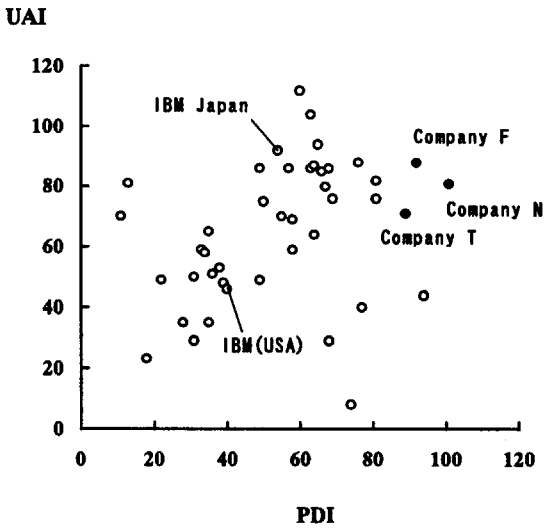

Figure 1. UAI (Uncertainty Avoidance Index) and PDI (Power Distance Index) (IT96)
Source: Results of IT96 plotted on Hofstede's (1980) Figure 7.2 simplified by authors.

Independently of IT96, we conducted IMS96 (International Morale Survey 1996) from December 1996 to January 1997. This survey focused on the engineers working with Company N's 13 subsidiaries in nine overseas countries. We selected the subsidiaries in which English is used extensively. The questionnaire includes same questions as IT96 but in English. We obtained 699 respondents' data from the questionnaires (48.5% response rate) as follows: USA, 122; Canada, 22; England, 271; Ireland, 27; Thailand, 48; Singapore, 50; Hong Kong, 44; Malaysia, 48; Philippines, 67.

In order to compare with IBM's averages, Company N's averages of PDI's and UAI's of nine countries are plotted in Figure 2. From this figure, we obtain the following finding:

Finding 2. For each country, the difference between IBM and Company N lacks consistency.

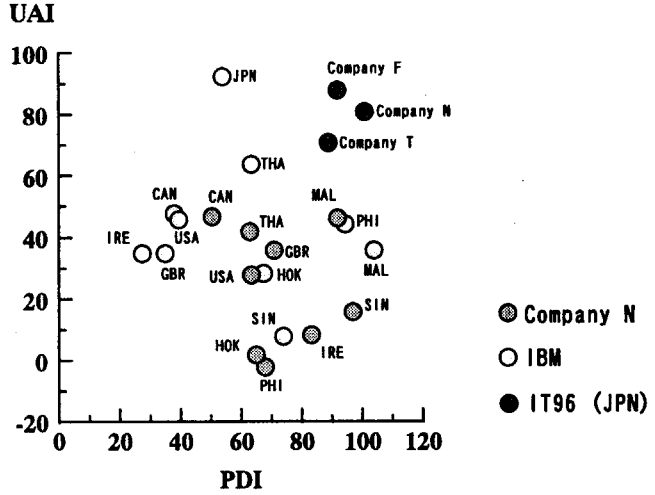

Figure 2. Comparison of IBM and IMS96 Survey Results.
Source: Results of IMS96 and IT96 plotted on Hofstede's (1980) Figure 7.2 simplified by authors.

Country code:

CAN: Canada	GBR: Great Britain	HOK: Hong Kong	IRE: Ireland
PN: Japan	MAL: Malaysia	PHI: Philippines	SIN: Singapore
THA: Thailand	USA: United States of America		

Skeptics will naturally raise the question whether corporate culture and national culture exist or not. It may have to be noted that nearly three decades have passed since IBM survey was conducted. IMS96 may be limited due to its small size. Remarks should also be made, however, to the relatively small size of Hofstede's survey as far as some countries are concerned. He had only 88, 58 and 80 respondents from Hong Kong, Singapore and Thailand respectively.

In IMS96, the averages of PDI and UAI were 71 and 28 respectively. These are different from IT96 results in Japan: The averages of PDI and UAI were 95 and 79. Particularly for UAI, the average of companies residing in Japan is considerably high, which is also the case with IBM Japan (UAI=92). Hence comes:

Finding 3. UAI is high for companies residing in Japan including IBM Japan.

This may reflect the strength of Japan's national culture. UAI, in particular, stays almost same as IBM Japan a quarter century ago, which may prove the perpetuality among the firms in Japan.

The naming of UAI as well as its definition gives impression as if rules are highly obeyed and uncertainties are avoided as much as possible in Japan since UAI is high there. Does this properly reflect the reality? The real cause of the high UAI of Japan was searched and detailed analysis of the UAI formula singled out the significance of question A43 ("How long will you continue working with the present company?"). The ratio of respondents who will continue working with the present company for less than five years to total respondents of question A43 is called "WW5 ratio" in this paper. WW5 ratio takes only 21% in total IT96, which certainly reminds the existence of "lifetime commitment" as identified by Abegglen (1958). As for the overseas subsidiaries of Company N in IMS96, the average of WW5 ratio was 57%. Since UAI was 79 for IMS and 28 for IT96, the difference was 51(=79-28), out of which this WW5 ratio alone explains almost 70% (=36/51) of the difference of the scores between the two surveys.

Hofstede (1980) revealed in its Appendix 2 (pp.411-413) the WW5 ratio for each country, while this was omitted in the abridged edition published in 1984 on which Japanese version was based. The average of eight countries, i.e., USA, Canada, England, Ireland, Thailand, Singapore, Hong Kong and Philippines, were 29%, while IBM Japan was 15%. Same computation for eight countries (excluding Malaysia because it was not included in Hofstede (1980) but included in Hofstede (1991)) based upon IMS96 is 62%, which more than doubles IBM survey data of 1970 timeframe, while the figures for Japan stays almost the same.

The fact that 70% of the UAI difference is explained by WW5 ratio reminds us of the existence of lifetime commitment in Japan or at least in the major Japanese firms. This seems to be a cultural characteristic with firms in Japan rather than with multinationals headquartered in Japan.

3. Lifetime Commitment

Visiting 19 large and 34 small factories in Japan between 1955 and 1956, Abegglen (1958) identified lifetime commitment as the fundamental difference between Japanese

factories and American ones. Lifetime commitment means that the employer do not intend to discharge the employees either temporally or permanently, while the employees commit themselves on the entrance to the company for the remainder of the working career. Lifetime commitment is a more accurate description of the actual practice than often-used lifetime employment. In USA, on the contrary, high mobility was considered desirable, according to Abegglen.

The evaluation of the Japanese management swung from the negative to the positive just like a pendulum. During 1980s, Japanese management gained international attention. Ouchi (1981) advocated Type J for Japanese firm model compared to Type A for American firm model. Type J is characterized by lifetime employment, slow evaluation and promotion, non-specialized career paths, implicit control mechanisms, collective decision making, collective responsibility and holistic concern. In contrast, Type A is characterized by short-time employment, rapid evaluation and promotion, specialized career paths, explicit control mechanisms, individual decision making, individual responsibility and segmented concern. He pointed out that in the United States high turnover was common even among the managers, who felt that three years without a significant promotion meant they failed and explored for promotion outside of the company. Such a hysterical attitude necessitated short employment and quick promotion. Furthermore, huge influx of MBAs from 4,000 in 1960 into 45,000 in 1980 also fueled the hysteria according to him.

Such characteristics still remain in USA. A study group headed by Michael Bond (Chinese Culture Connection, 1987) also identified the short-period orientation in USA, when the group analyzed the national culture by introducing Asian value index. American employees demand for explicit objectives and measurement (measurement scales and measurement results), and they tend to feel unsecured unless those are qualitatively available even for a short time period.

Identifying some American firms which are rather similar to Japanese counterparts even though they developed independently, Ouchi (1981) named those as Type Z and proposed that Type Z firms may contribute to improve productivity in USA. Without being explicitly defined by himself, Type Z can be positioned between Type A and Type J, since Type J is identical in its characteristics to Type Z except for collective responsibility, which was transformed from individual responsibility of Type Z.

It should be noted that IBM was categorized as Type Z together with Hewlett Packard and Intel. As a matter of fact, WW5 was 15% both in IBM (USA) and IBM Japan in Hofstede (1980). Hofstede (1980, Figure 1) shows UAI of IBM (USA) as 46 which is considerably lower than 92 for IBM Japan and 79 for Japanese firms in IT96. This UAI of IBM (USA), however, may be miscalculated since re-calculation based upon the original data in Hofstede (1980, Appendix) results in 61. For other countries, re-calculation in the same manner proved to be identical as originally presented in Hofstede (1980, Figure 1). If this re-calculation is correct, UAI of IBM (USA) becomes much closer to Japanese firms' data.

Negative argument against lifetime commitment has been often observed after the crash of the bubble economy in Japan. Such an argument, however, is almost identical to Abegglen (1958) of forty years ago. In his Chapter 7 entitled "Productivity in the Japanese factories," his negative view was expressed on lifetime commitment and sen-

iority wages. Productivity of Japanese factories were about 20%, or 50% at best, of that in a comparable American factories because large labor force must be maintained as fixed in size and cost because of lifetime commitment in Japan. Furthermore, a major incentive to steady and effective production was taken away. Such quality control problems, as unimaginable in USA, occurred since it was avoided by custom to attribute production failures to specific individuals.

Such a negative view was entirely deleted in his new version (Abegglen 1973). Deleting Chapter 7 in its entirety, he addressed in a newly added "Part 1: Japanese Employment System in the 1970s" that "Japanese employment system has considerable strengths, yet is commonly seen in the West as inefficient and virtually unworkable" (p.23) so that westerners tend to think self-centered. In addition, fast-growing companies can take advantage of seniority wages because recruiting young workers directly from school lower the average cost of labor while assuring most recent technological training. The choice of company was a career choice, therefore a man was likely to be thoughtful in deciding which company to join. Furthermore, lifetime commitment and "enterprise union" enabled Japan to rapidly introduce technological innovations via transferring workers internally without destructively damaging labor relationship.

This was just an era when the view on the Japanese management was turning from negative to positive. Drucker (1971) pointed out three major issues confronting American executives, to which Japanese counterparts were addressing differently from the westerners to substantiate their economic growth. Those issues included:

(1) Effective decision making: Decision by consensus was practiced in Japanese companies. It may be slowly made but quickly implemented. "Ringi" system was acclaimed.
(2) Balance between job security and productivity: Job security through lifetime commitment and seniority compensation allowed psychological security of the employees and lifetime training, which was superior than jobless compensation and seniority system in USA.
(3) Care and feeding of the young: Training and personnel evaluation functioned through informal group of university alumni groups so that communication was well established and top management could be effectively selected with multi viewpoints for a long time period.

Both (2) and (3) addressed the positive aspects of lifetime commitment. Published in 1972, *Review of Manpower Policies: Manpower Policy in Japan* of OECD pointed out lifetime commitment, seniority wages and enterprise unionism as the three principle elements of Japanese employment system. Putting aside the argument if those deserve the expression as the miracle elements, there is certainly a good reason to positively evaluate lifetime commitment. As shown above, evaluation on lifetime commitment have observed extreme swings.

4. Leaning on Future

The very core of high UAI in Japan was identified as its lifetime commitment, which was proved to be a typical characteristic of Japanese firms in Japan not of Japane-

se multinationals overseas. Lifetime commitment continued its existence to positively contribute to Japanese firms (Takahashi 1996; 1997b). As described by Abegglen (1958) and Pascale & Athos (1981), lifetime commitment remained effective in Japanese firms, especially in major firms, for the last four decades. This important fact should be deemed rather seriously. Such a positive role should also be able to function similarly in the overseas business management context.

As for the management of the multinationals, problem resides not in lifetime commitment but rather in the high mobility. As already shown, WW5 of Japanese subsidiaries in eight countries was 62% in IMS96, which more than doubles IBM's 29% of Hofstede (1980). This difference, of course, should not be interpreted as the worldwide tendency for short-period orientation. It would be natural to feel that Company N is still less attractive and less popular than IBM and that turnover there has much room for improvement.

As a matter of fact, Japanese subsidiaries in USA show higher mobility than domestic American firms. Pascale (1978) conducted a series of questionnaire, interview as well as document surveys of both American- and Japanese-managed firms in the United States (11 firms respectively) after matching the type of industry, unionization, plant age as well as technological variables. Consequently, several characteristic differences were typified with Japanese-managed firms in communication arena. They expended on social and recreation programs more than twice than American-managed firms. Average number of workers per first line supervisor was 14.8 there in comparison to 29.1 of American-managed firms did. 66% of workers interacted with peers in Japanese-managed firms during 20 minutes observation period, while the figure was 44% for American-managed ones. Despite of all the figures to support better communication in Japanese firms, employee satisfaction showed no significant differences. On the contrary, absenteeism, tardiness and voluntary turnover was higher in Japanese-managed firms than in American-managed ones.

Addressing the importance of the "leaning on future principle" as a weight factor relative to the relationship between the self and the firm, Takahashi (1997b) created PI (perspective index), which is presented by an integer between 0 and 5 (see Appendix in detail). PI effectively explains the employee's intention to exit, which was verified examining the data of 4,500 white-collar employees of Japanese firms. The higher PI is, the lower the "intention to exit" ratio is. This is a clear, almost straight linear relation with R^2=0.9975.

Data of IT96 and IMS96 was classified by the value of PI into six groups such as PI=0, PI=1, ..., PI=5 in order to calculate WW5 ratio for each group. Hence we obtain Table 1 and Figure 3. Despite of the limited size of sample, a clear linear relationship is identified between PI and WW5 ratio with R^2=0.9603 (IT96) and 0.9757 (IMS96) respectively. Those employees consider to keep working less than five years when their perspective on the future is low.

Table 1. PI (perspective index) and WW5 ratio (IT96, IMS96)

(A) WW5 ratio for each PI (perspective index).

	PI (perspective index)						
	0	1	2	3	4	5	Total
IT96	35.75	26.38	21.46	10.71	11.46	0.00	22.20
(Japan)	(207)	(235)	(205)	(140)	(96)	(45)	(928)
IMS96	81.54	70.37	60.11	43.08	41.84	28.57	56.50
(9 countries)	(65)	(135)	(183)	(130)	(98)	(35)	(646)

The numbers of respondents are within parentheses.

(B) Regression analysis of WW5 ratio on PI (perspective index).

	Variables	Coefficient	S.E.	t	Significance	R^2	Adjusted R^2	F(1,4)
IT96	PI	-6.693	0.680	-9.843	0.0006	0.9603	0.9504	96.876
(Japan)	Constant	34.360	2.059	31.882	0.0001			
IMS96	PI	-10.499	0.829	-12.663	0.0002	0.9757	0.9696	160.363
(9countries)	Constant	80.500	2.510	7.768	0.0015			

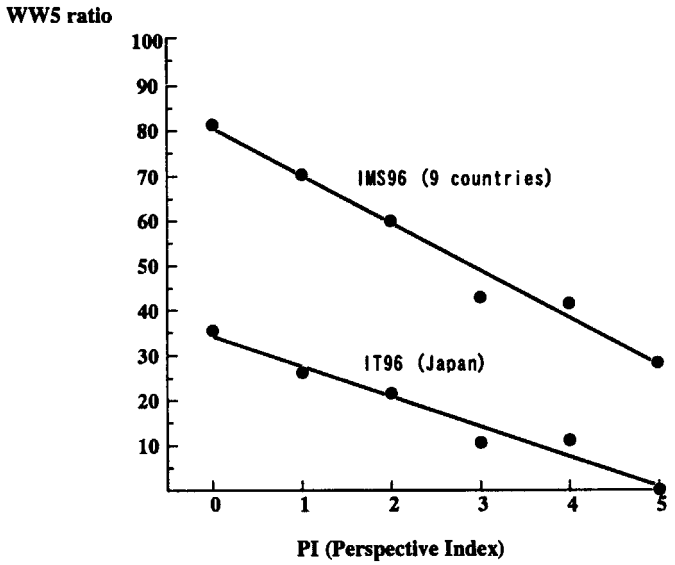

Figure 3. PI (perspective index) and WW5 ratio (IT96, IMS96).

This correlation between PI and WW5 ratio is also observed in countries other than Japan. Each country is located by PI average and WW5 ratio in Figure 4. From the one-way analysis of variance, there exist significant differential effects for each index: F=7.83 (p=0.0001) for PI and F=5.58 (p=0.0001) for WW5 ratio. As for nine countries except Japan, there is weak negative correlation (r =-0.49, p=0.1783), which proves the fact that the lower PI is, the higher WW5 ratio is. As for the three Japanese firms (Companies F, N and T), there exist significant differential effects for each index: F=16.53 (p=0.0001) for PI and F=7.52 (p=0.0006) for WW5 ratio. But all three are out of the range compared with the overseas nine countries.

Figure 3 clearly shows the fact that the regression line for Japanese firms (IT96) is

shifted downward, compared to overseas countries (IMS96), for nearly forty points. Even though there may be subtle nuance differences due to the translation of the questions that may need further examination, this constant portion can be said to represent the characteristics of Japanese national culture just as described in our Finding 3. As shown in Figure 4, Japan shows higher WW5 ratio even though PI is not higher than in overseas subsidiaries. This again may represent the unique nature of the Japanese national culture, or more specifically its lifetime commitment.

Based upon the above analysis, the differences of the mobility among overseas subsidiaries can be explained in a multinational firm (Company N), while the existence of lifetime commitment in Japan can be identified.

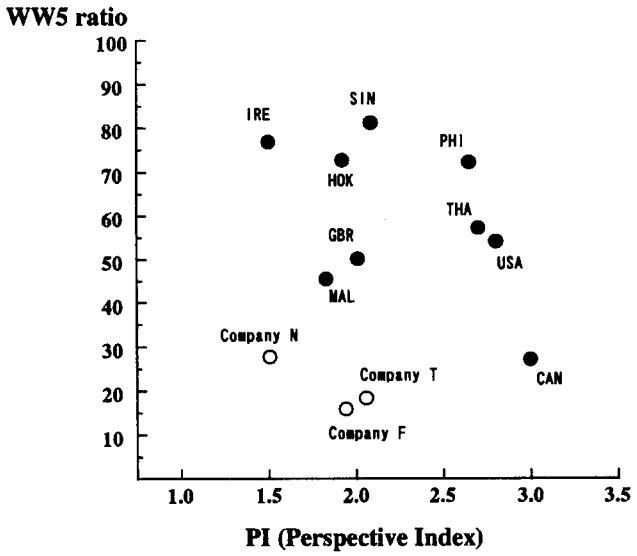

Figure 4. PI (perspective index) and WW5 ratio (IT96○, IMS96●).

【References】

Abegglen, James C., *The Japanese Factory: Aspects of Its Social Organization*. Free Press, Glencoe, Ill, 1958.

Abegglen, James C., *Management and Worker: The Japanese Solution*. Sophia University in cooperation with Kodansha International, Tokyo, 1973.

Chinese Culture Connection, "Chinese values and the search for culture-free dimensions of culture," *Journal of Cross-Cultural Psychology*, 18 (2), 143-164, 1987.

Deal, Terrence E. & Allen A. Kennedy, *Corporate Cultures: The Rites and Rituals of Corporate Life*. Addison-Wesley, Reading, Mass, 1982.

Drucker, Peter F., "What we can learn from Japanese management," *Harvard Business Review*, March-April, 110-122, 1971.

Hall, Edward T., *Beyond Culture*. Doubleday, New York, 1976.

Hofstede, Geert H., *Culture's Consequences: International Differences in Work-Related Values*. Sage, Newbury Park, Calif. Abridged ed. Sage, Beverly Hills, 1980; 1984.

Hofstede, Geert H., *Cultures and Organizations: Software of the Mind*. McGraw-Hill, London. Revised ed. McGraw-Hill, New York, 1991; 1997.

Ouchi, William G., *Theory Z: How American Business Can Meet the Japanese Chal-*

lenge. Addison-Wesley, Reading, Mass, 1981.
Ouchi, William G. & Jerry B. Johnson, "Types of organizational control and their relationship to emotional well being," *Administrative Science Quarterly*, 23, 293-317, 1978.
Pascale, Richard Tanner, "Personnel practices and employee attitudes: A study of Japanese- and American-managed firms in the United States," *Human Relations*, 31, 597-615, 1978.
Pascale, Richard Tanner & Anthony G. Athos, *The Art of Japanese Management*. Simon & Schuster, New York, 1981.
Takahashi, Nobuo, *Managerial Renaissance: Strategy Days and Organization Days*. Yuhikaku, Tokyo (in Japanese), 1995.
Takahashi, Nobuo, "Perspective and organizational equilibrium," *Organizational Science*, 29 (3), 57-68 (in Japanese), 1996.
Takahashi, Nobuo (ed.), *Management Theory of Organizational Culture*. Chuo Keizaisha, Tokyo (in Japanese), 1997a.
Takahashi, Nobuo, *Principles of Decision-Making in Japanese Firms*. University of Tokyo Press, Tokyo, (in Japanese), 1997b.

Appendix. PI (Perspective Index)

In IT96, we employed the following questions in Japanese developed by Takahashi (1996):

P1. 21 世紀の自分の会社のあるべき姿を認識している。
P2. 日々の仕事を消化するだけになっている。
P3. 上司から仕事上の目標をはっきり示されている。
P4. 長期的展望に立った仕事というより、短期的な数字合わせになりがちである。
P5. この会社にいて、自分の 10 年後の未来の姿にある程度期待がもてる。

The respondents were requested to answer by choosing either "yes" or "no". As for questions P1, P3 and P5, answer "yes" is considered to have clearer perspectives on the future, while for P2, P4, answer "no" is considered to have clearer ones. For questions P1, P3 and P5, one point is given for each answer "yes" and zero point for each "no." For questions P2 and P4, zero point is given for each answer "yes" and one point for each "no." PI is defined as the total points for the five questions.

As for IMS96, each respondent answered the following English version of the above questions.

P1. Do you have a clear vision of what your present company will be doing in the next century?
P2. Are most of your work hours spent on routine tasks?
P3. Do you always get a clear-cut sense of the objectives of your assignment from your superior?
P4. Do you feel that you are required to concentrate on attaining immediate results at the expense of longer range benefits?
P5. Can you visualize a positive future for yourself ten years from now staying at this company?

[1998 年 8 月 12 日受理]

THE ANNUAL BULLETIN
JAPAN ACADEMY OF INTERNATIONAL BUSINESS STUDIES

No. 4 November 1998

CONTENTS

ARTICLES

BRIEFS in ENGLISH