

Performance Evaluation and International Transfer Pricing in Foreign Subsidiaries of Japanese Companies

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Abstract

This paper aims to analyse the results of a questionnaire survey concerning international transfer pricing and performance evaluation in foreign subsidiaries of Japanese companies. Sato (1991) provided the foundation questions for this survey, and several different results from those of Sato (1991) have become apparent, for example: changes in the purposes for which Japanese companies establish and maintain foreign subsidiaries; the increased importance of performance evaluation of local managers and the use of both financial and non-financial indicators for performance evaluation. The paper also examines who determines the international transfer pricing and explores how it is calculated, including comparisons with Sato (1991) and others. The results show that international transfer pricing is now determined by headquarters under the company policies of maximization of group profits and observance of tax laws, and is calculated using company standards as opposed to taxation standards. The correlation between the purpose of performance evaluation and financial indicators has also been examined. Japanese companies prefer to use financial indicators such as profit and sales for performance evaluation, with less emphasis on financial indicators of capital efficiency such as ROI and ROE. Moreover, Japanese companies do not only depend on financial indicators for performance evaluation, but also on other methods such as non-financial indicators.

Introduction

By necessity, as the business environment changes, multinational companies must modify existing transfer pricing systems or devise new ones, and Japanese multinational companies are no exception. During a period of rapid growth, and

despite a recessionary period between 1991 and 2008, business practices in Japan changed significantly in nature. This has been characterised by Haraguchi (2007) by increased levels of investment and a shift in investment targets:

Previously, investment destinations were mostly countries in North America, and members of ASEAN, such as Thailand, Malaysia, and Indonesia. Since the latter half of 1990s, China and Vietnam have become the most frequent investment destinations of Japanese companies. (Haraguchi, 2007, p.71).

International transfer pricing plays an important role in acquiring competitive domination from the corporate management perspective. Since the 1980's, increased levels of business transactions have encountered differences in business practices and governmental regulations between countries. The frequency of transactions between Japanese companies and their foreign subsidiaries has also become more frequent. Because the choice of transfer pricing affects the allocation of profit among divisions of a company, management is rightly concerned about the impact of international transfer pricing on corporate taxation and on performance evaluation.

Since the choice of transfer pricing changes taxes paid in different countries, transfer pricing is also a major concern for fiscal authorities. At the very least, tax authorities do not want multinational entities to use transfer prices as a means for reducing taxable profits in their jurisdiction. Thus transfer pricing taxation has been increasingly monitored since the latter part of the 1990's.

Performance evaluation of foreign subsidiaries is also an important factor in international transfer pricing. As international transfer prices have an impact on the measurement method of both revenues (for suppliers) and costs (for buyers), there will be important impacts on performance evaluation (Miyamoto, 1983). The United States is not alone in regarding Return on Investment (ROI) as an appropriate indicator for performance evaluation of foreign subsidiaries (Choi & Mueller, 1984), and transfer pricing is an ingredient in determining the return. Sakurai (2009) argues that international transfer pricing will affect future business decisions and performance evaluations.

Several studies have examined international transfer pricing and performance evaluation in Japanese companies (Sato, 1991 & 1992; Shimizu, 1999; Ito, 2004; Ueno, 2007). It has been almost two decades since Sato (1991) published his milestone study that explored transfer pricing practices of Japanese companies at the time. Although much other research has been presented since then, the literature is still missing a number of important issues. For example, strategies, policies and standards, and their effects on the determination of cross border transfer prices, are still under-developed.

Many studies on international transfer pricing from the perspective of international taxation have been published since 1988 in Western countries (for example, Feinschreiber, 1993; Ernst & Young, 1999). Sakurai (2009) found that European and American literature tends to focus on international transfer pricing mainly as it affects taxation.

Based on the theoretical studies referenced in the following section, and considering Japanese multinationals, two principal questions arise with regard to international transfer pricing. First, from the viewpoint of management accounting, how do parent companies control foreign subsidiaries through transfer pricing? Second, from the viewpoint of international taxation, how is international transfer pricing calculated?

This paper aims to analyse the results of a questionnaire survey concerning international transfer pricing and performance evaluation in foreign subsidiaries of Japanese companies. Sato (1991) provided the foundation questions for this survey, and several different results from those of Sato (1991) have become apparent, for example, changes in the purposes for which Japanese companies establish and maintain foreign subsidiaries. The paper also examines who determines the international transfer pricing and explores how it is calculated. The results show that international transfer pricing is determined by headquarters and is calculated using company standards as opposed to taxation standards. A further test shows that Japanese companies prefer to use financial indicators such as profit and sales for performance evaluation, with less emphasis on financial indicators of capital efficiency such as ROI and ROE.

Following a discussion of relevant literature, the paper will provide a research method and present the results of an empirical study, comparing the results with those of Sato (1991) as they relate to performance evaluation of foreign subsidiaries. This identifies changes which have come about over the years since his important study. Next, other empirical findings about international transfer pricing are analyzed. The characteristics of taxation standards frequently used in Japanese companies are explored, as the execution of transfer pricing taxation has been strengthened by years. Then the paper correlates performance evaluation and financial indicators leading to a classification of companies based on their use of financial indicators. The results are then discussed, followed by concluding remarks.

Literature Review

Several empirical studies have examined various aspects of international transfer pricing in Japan (Sato, 1991 and 1992; Shimizu, 1999; Ito, 2004; Ueno,

2007). Miyamoto (1983) classified international transfer pricing into three types: efficient transfer pricing, neutral transfer pricing, and arm's length pricing. Companies following efficient transfer pricing aim to maximize the firm's profits, whereas those using neutral transfer pricing strive to neutrally and correctly measure the profitability of foreign subsidiaries. Companies adopting arm's length pricing determine transfer prices based on arm's length negotiations. In common with tax authorities of other member countries of the Organization for Economic Co-operation and Development (OECD), the Japanese tax authority requires international transfer pricing to be determined according to an "arm's length standard" (Miyamoto, 1983).

Ernst & Young (1999) surveyed calculation methods for transfer prices of multinational companies in 19 countries and their 124 foreign subsidiaries. The survey showed that among other findings, the CUP method (Comparable Uncontrolled Price) was not as widely used as in previous years, and the CPM method (Comparable Profits Method) and PS method (Profit Split Method) were frequently adopted in its place. However, the nature of taxation and transfer pricing of Japanese multinational companies were not explored in the study.

Sato (1991) surveyed 245 manufacturing companies, with approximately 48% as a response rate. The study identified conditions of transfer pricing of foreign subsidiaries at that time, with Japanese companies preferring to use financial indicators of profit and sales for performance evaluation, and non-financial indicators for quality of management and market share. As for the calculation standards of international transfer pricing, cost-plus pricing was the most frequently used, followed by market-based pricing.

Shimizu (1999) surveyed 740 manufacturing listed companies from the Tokyo Stock Exchange in September 1998, with a response rate of 15.9% (118 companies). This study focused on the strategies of the multinational companies, aiming to find a performance evaluation system adjusted to the strategies. Based on the corporate strategies, cluster analysis was used to determine the features of performance evaluation indicators in each cluster. In the cluster with decentralised companies, the indicators relating to "profit" were preferred for evaluating the performance of foreign subsidiaries. In the cluster with more centralised companies, the indicators related to "budget" were preferred. The cluster with both centralised and decentralised companies displayed many non-financial indicators being used. Further, there were significant differences in the policies of international transfer prices between the clusters.

Ito (2004) surveyed 181 electronic equipment listed companies and 60 transport equipment listed companies in 1999, also from the Tokyo Stock Exchange,

attempting to relate research and development spending relative to international transfer pricing and technology transfer. With respect to transfer prices for technology transfers, calculations should use profit methods for taxation purposes. However, the profit method is difficult due to the need for comparative profit achievements between companies. In addition, the issue of whether to allocate research and development (R&D) spending by parent companies is important. If so, the method to be used also has an impact. It appears that R&D spending is correlated with transfer prices, and is important for corporate management.

Ueno (2007) describes the results of a questionnaire survey carried out by the multinational committee of Japanese Association of Management Accounting. In February 2004, 523 listed companies were approached (excluding the construction industry, the finance industry, and real estate businesses). Based on the result, Ueno (2007) characterized the calculation methods of international transfer pricing from two points of view: the processes of instruction and negotiation, and the standards of cost pricing and market-based pricing. These studies tried to clarify actual conditions underlying uses of different international transfer pricing systems.

Domestic and international business environments have changed dramatically since Sato (1991) published his milestone study two decades ago. Traditionally, the performance of the parent company was considered to be more important than that of the subsidiary in Japanese enterprises. Yet now, the performance of the group, through consolidated management, is more important than that of the stand-alone parent company (Ogawa and Yabe, 1999).

Further support for this change is given by Tobita (2006) who says "...the disclosure system of consolidated financial statements from the period of March 2000 looks like an important opportunity for the changing of group strategies in Japanese enterprises" (Tobita, 2006, p. 145). Against such a background, it is supposed that maximization of group profits becomes the focus of international transfer prices. Consequently, the calculation methods of international transfer prices will also be influenced by this objective.

Moreover, current taxation rules regarding transfer pricing were introduced in Japan in 1986. The institutionalization and the execution of these rules are strengthened through globalization of corporate activities and the diversification of international transactions. Tax issues relating to international transfer prices have been occurring more frequently, since changes to the business environment influence not only international transfer prices but also profit distribution and performance evaluation in parent companies and foreign subsidiaries.

Thus the first issue of this study is to examine the effects of current global environments on transfer pricing. Despite more intense global competition, foreign subsidiaries of Japanese companies have managed to keep a position of competitive domination. It is imperative, therefore, for Japanese companies to continue to control foreign subsidiaries effectively. As a consequence of this, it is important to investigate features of performance evaluation not clarified by the studies mentioned above.

For multinational companies to impose transfer pricing, considerable time and money are involved, and so the classification of calculation methods of international transfer prices forms the second issue of this study. The effects on taxation of such calculations are also included.

Research Methodology

To address these issues, research based on a questionnaire survey was carried out through Fukui Prefectural University (FPU), Japan. This questionnaire survey (called FPU 2008) was aimed at examining the effects of current global environments on transfer pricing. It addressed three aspects: performance evaluation of foreign subsidiaries, international transfer pricing, and transfer pricing taxation. For comparative purposes, the survey used Sato's (1991) questions, including original questions about policies of international prices and calculation standards. Questionnaires were sent to 1010 Japanese manufacturing companies with two or more foreign subsidiaries, and were listed in the *Compendium Edition on Companies Going Abroad: the Year of 2008*. The sample included all of the 878 listed companies (Tokyo Stock Exchange). The usable responses from 115 companies were returned (13.10%).

Results

Effects of Globalisation and Performance Evaluation of Foreign Subsidiaries

This section considers similarities and differences in factors affecting performance evaluation between the FPU (2008) and Sato's (1991) survey. The results of the survey are presented in a series of tables.

Table 1 shows the result of the most important purposes of establishing and maintaining foreign subsidiaries. Either at the time when Japanese companies determined to move into foreign countries or at present (2008), world strategy is considered as the most important purpose. The expectation of cheap labor has decreased from 19.30% to 13.39%, while the expectation of gaining access to an overseas market has increased from 20.18% to 25.89%.

Table 1 - Purpose for Establishing and Maintaining Foreign Subsidiaries

Purpose	Sato (1991)		FPU (2008)	
	N	R (%)	N	R (%)
World strategy	49	42.98	54	48.21
Cheap labor	22	19.30	15	13.39
High-quality labor	1	0.88	1	0.89
Overseas market	23	20.18	29	25.89
Fluctuation of exchange	0	0.00	0	0.00
Dissolution of the trade friction	0	0.00	0	0.00
Following advancement of parent company or group	10	8.77	8	7.14
Overseas resource	2	1.75	0	0.00
Preferential policies	0	0.00	1	0.89
Withdrew	0	0.00	0	0.00
Others	7	6.14	4	3.57
Total	114	100.00	112	100.00

N = number of companies, R = response rate ratio

Table 2 compares the relative importance of various purposes of performance evaluation for Sato (1991) and FPU (2008). Each item uses a four-point Likert scale, with possible answers ranging from 1 = the most important to 4 = not important. According to FPU (2008), knowing the profitability of foreign subsidiaries (Mean = 1.456) and monitoring objectives and strategies (Mean = 1.566) are important for performance evaluation, while the evaluation of performance of local managers (Mean=2.384) is not as important as the other purposes. The relative rankings are consistent with Sato's (1991).

Table 2 - Purposes for Performance Evaluation

	Sato (1991)			FPU (2008)		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
To know the condition of foreign subsidiaries	102	2.167	1.035	112	1.885	0.704
To evaluate Performance of local managers	98	3.276	0.797	111	2.384	0.786
To know the profitability of foreign subsidiaries	101	1.614	0.692	114	1.456	0.626
To check objectives and strategies	102	1.794	0.837	112	1.566	0.680

Table 3 provides Mann-Whitney U test results of the comparison between Sato (1991) and FPU (2008) to check whether these four items, despite consistent rankings, come from populations having the same distribution. There is no significant difference in three of the items, although the mean rank values of FPU (2008) are smaller than those of Sato (1991).

However, the hypothesis that there is no difference between the two surveys is rejected at the 5% significance level for the second purpose: performance evaluation of the local managers. This means that current perceptions of the importance of performance evaluation of the local managers have changed when compared to 1991. This is also confirmed by the lower value of its mean rank under FPU (2008). This could be explained by changes to the balance of Japanese to local managers in foreign subsidiaries. Sato (1991) found 75% of foreign subsidiaries had Japanese managers (with 25% being from the local population). This had changed to 58% Japanese managers (42% local) by 2008, as uncovered by our survey (results not reported in Table 3).

Table 3 - Mann-Whitney U test: Purposes of Performance Evaluation

Survey	Most Important	Important	Less Important	Not Important	N	Mean Rank	Test Statistics Significance (2-tailed)
To know condition of the foreign subsidiaries							
Sato (1991)	35	27	28	12	102	114.39	Z = -1.651 (0.099)
FPU (2008)	30	65	15	2	112	101.23	
To evaluate performance of local managers							
Sato (1991)	0	21	29	48	98	134.56	Z = -7.007 (0.000)
FPU (2008)	9	57	36	9	111	78.91	
To know the profitability of foreign subsidiaries							
Sato (1991)	50	41	9	1	101	114.97	Z = -1.754 (0.079)
FPU (2008)	68	42	2	2	114	101.82	
To check objectives and strategies							
Sato (1991)	44	39	15	4	102	114.49	Z = -1.729 (0.084)
FPU (2008)	57	46	8	1	112	101.13	

Table 4 displays results relating to setting the annual budget for foreign subsidiaries. By using a chi-square test, the data indicate that there are significant differences between the two surveys. Compared with Sato (1991), companies where the parent companies set the annual budget for foreign subsidiaries have increased from 23.97% to 51.30%. Companies whose foreign subsidiaries determine their own budget have decreased (from 33.06% to 21.74%), as have those where negotiation determines the subsidiaries' budgets (37.19% to 20.87%). It can be said that during the period of globalization, authority and power of parent companies have become more concentrated in multinational companies.

Table 4 - Determination of Annual Budget for Foreign Subsidiaries

	Sato (1991)		FPU (2008)	
	N	R (%)	N	R (%)
Parent company	29	23.97	59	51.30
Local headquarters	4	3.31	1	0.87
Foreign subsidiary	40	33.06	25	21.74
Negotiation between parent company and foreign subsidiary	45	37.19	24	20.87
Others	3	2.48	6	5.22
Total	121	100.00	115	100.00

N = number of companies, R = response rate ratio

Chi-square value = 22.742, degrees of freedom = 4, P-value = 0.000

Table 5 summarises the accounting rules used for performance evaluation of foreign subsidiaries. There are many companies where local accounting rules are adopted according to both FPU (2008) as well as Sato (1991). Companies using Japanese accounting rules have increased from 5.83% to 20.00%, while companies using their own accounting rules have decreased from 15.00%

Table 5 - Accounting Rules Used for Performance Evaluation of Foreign Subsidiaries

	Sato (1991)		FPU (2008)	
	N	R (%)	N	R (%)
Local accounting rules	95	79.17	77	66.96
Japanese accounting rules	7	5.83	23	20.00
Company accounting rules	18	15.00	6	5.22
Others			9	7.83
Total	120	100.00	115	100.00

N = number of companies, R = response rate ratio

to 5.22%. It can be said that, in order to evaluate the performance of foreign subsidiaries, more companies now adopt Japanese accounting rules instead of local accounting rules.

Table 6 presents the importance of financial indicators for performance evaluation of foreign subsidiaries. These results were obtained by using a four-point Likert scale. The lower the number is, the more important the indicator is. According to FPU (2008), the financial indicators which are mostly used for performance evaluation are profit (Mean=1.345) and comparison between budget and actual result of profit (Mean=1.625). The next is sales (Mean=1.694) and comparison between budget and actual result of sales (Mean=1.864). Return on sales (Mean=1.864) is used more than ROI (Mean=2.796). Few companies adopt economic value added (EVA) (Mean=3.213) and return on equity (ROE) (Mean=2.935). As before, these relative indicators are consistent with Sato's (1991).

Table 6 - Financial Indicators Used for Performance Evaluation of Foreign Subsidiaries

	Sato (1991)			FPU (2008)		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Return on investment (ROI)	94	2.809	1.050	108	2.796	0.904
Return on sales	93	2.204	0.973	110	1.864	0.735
Profit	95	1.547	0.782	110	1.345	0.532
Sales	95	1.916	0.942	111	1.694	0.698
Comparison between Budget and Actual Result of ROI	91	3.033	0.924	108	2.917	0.877
Comparison between Budget and Actual Result of Profit	93	1.828	0.974	112	1.625	0.699
Comparison between Budget and Actual Result of Sales	95	2.137	0.974	110	1.864	0.710
Return on Equity (ROE)				107	2.935	0.850
Economic Value Added (EVA)				108	3.213	0.865

Table 7 provides the Mann-Whitney U test results of the comparison of the importance of these financial indicators for performance evaluation between those of Sato (1991) and those of FPU (2008). The financial indicator “return on sales” has increased in importance over time, with a statistically significant difference at the 5% level. This is also confirmed by the lower value of its mean rank under FPU (2008). There is no significant difference between the other financial indicators although the mean rank values of FPU (2008) are smaller than those of Sato (1991).

Table 7 - Mann-Whitney U test: Financial Indicators for Performance Evaluation of Foreign Subsidiaries

Survey	Most Important	Important	Less Important	Not Important	N	Mean Rank	Test Statistics Significance (2-tailed)
Return on investment							
Sato (1991)	13	23	27	31	94	102.80	Z = -0.308 (0.758)
FPU (2008)	6	39	34	29	108	100.37	
Return on sales							
Sato (1991)	24	38	19	12	93	112.32	Z = -2.500 (0.012)
FPU (2008)	33	64	8	5	110	93.27	
Profit							
Sato (1991)	56	30	5	4	95	109.18	Z = -1.645 (0.100)
FPU (2008)	75	32	3	0	110	97.66	
Sales							
Sato (1991)	37	38	11	9	95	109.07	Z = -1.351 (0.177)
FPU (2008)	47	53	9	2	111	98.73	
Comparison between budget and actual result of ROI							
Sato (1991)	5	22	29	35	91	104.38	Z = -1.038 (0.299)
FPU (2008)	4	34	33	37	108	96.31	
Comparison between budget and actual result of Profit							
Sato (1991)	45	27	13	8	93	107.01	Z = -0.964 (0.335)
FPU (2008)	53	51	5	3	112	99.67	
Comparison between budget and actual result of Sales							
Sato (1991)	28	37	19	11	95	110.55	Z = -1.830 (0.067)
FPU (2008)	33	62	12	3	110	96.48	

The significantly different level of the importance of the indicator “return on sales” between the two studies can be explained by reference to Kazusa (2003): “The indicator of return on sales has the same effect as the indicator of return on investment as there is a hybrid management accounting of the Japanese corporate management” (Kazusa, 2003, p. 11). Against a background of traditional budget management and Japanese corporate management, coupled with just-in-time and subcontracting practices, indicators of sales and profits provide useful information concerning asset turnover and management (Kazusa, 2003).

Performance of foreign subsidiaries is not only evaluated using financial measures but also by non-financial indicators. Table 8 shows the importance of non-financial indicators for performance evaluation, again by using a four-point Likert scale. The lower the number is, the more important the indicator is. According to Sato (1991), non-financial indicators such as market share (Mean=1.821) and quality of management (Mean=1.835) are similarly important. However, a gap appears in FPU (2008), with quality of management (Mean=1.773) being considered to be the most important indicator, followed by market share (Mean=2.229). The other factors retain the same relative positions between the two surveys.

Table 8 - Non-Financial Indicators for Performance Evaluation

	Sato (1991)			FPU (2008)		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Quality of management	103	1.835	1.030	110	1.773	0.853
Employee turnover rate	95	3.242	0.859	107	3.065	0.743
Cooperation with parent company and group enterprise	104	2.385	1.055	108	2.269	0.860
Relationship with local government	95	2.677	1.008	108	2.713	0.821
Market share	106	1.821	1.012	109	2.229	0.959

Table 9 presents the Mann-Whitney U tests relating to the importance of non-financial indicators for performance evaluation between Sato (1991) and FPU (2008). There is a significant difference in the result for market share at the 5% level. This indicator has decreased compared to Sato’s 1991 results, also confirmed through a higher mean rank value seen in FPU (2008). Employee turnover is very close to this level of significance indicating that the rate of employee turnover is now more important when compared to 1991. There is no significant difference between the other non-financial indicators although the mean rank values of FPU (2008) are sometimes lower and higher than those of Sato (1991).

Table 9 - Mann-Whitney U test: Non-Financial Indicators for Performance Evaluation

Survey	Most Important	Important	Less Important	Not Important	N	Mean Rank	Test Statistics Significance (2-tailed)
Quality of management							
Sato (1991)	51	31	8	13	103	106.34	Z = -0.163 (0.871)
FPU (2008)	48	46	9	7	110	107.61	
Employee turnover rate							
Sato (1991)	3	17	29	46	95	109.41	Z = -1.937 (0.053)
FPU (2008)	0	26	48	33	107	94.48	
Cooperation with parent company and group enterprise							
Sato (1991)	24	37	22	21	104	109.09	Z = -0.635 (0.526)
FPU (2008)	19	51	28	10	108	104.00	
Relationship with local government							
Sato (1991)	12	35	27	25	95	102.34	Z = -0.402 (0.688)
FPU (2008)	5	41	42	20	108	105.52	
Market share							
Sato (1991)	53	31	10	12	106	93.64	Z = -3.526 (0.000)
FPU (2008)	25	49	20	15	109	121.96	

International Transfer Pricing

In this section, the policies and standards that Japanese companies used to determine their international transfer prices will be described. Tables 10 and 13 compare the results between those of FPU (2008) and Sato (1991). The other tables only show the results of the FPU (2008) survey, as Sato (1991) did not carry out these tests.

Table 10 presents the way in which international transfer pricing is determined. Through a comparison of the two surveys, it can be seen that companies that use negotiation to determine international transfer pricing have decreased, while those with headquarters authority have increased.

Table 10 - Determination of International Transfer Pricing

	Sato (1991)		FPU (2008)	
	N	R (%)	N	R (%)
Headquarters	44	37.61	77	66.95
Foreign subsidiary	0	0.00	1	0.87
Negotiation of both sides	73	62.39	37	32.17
Total	117	100.00	115	100.00

N = number of companies, R = response rate ratio

Chi-square value = 21.766, degrees of freedom = 2, P-value = 0.000

According to Miyamoto (1983), "... policies made by multinational companies give important effects to the determination of international transfer pricing" (p. 122). Using the same six items of policies as Miyamoto, respondents were asked to select the three most important items. As seen in Table 11, maximization of group profits (36.25%) is the most important policy determinant, followed by observance of tax laws (28.75%) and competitiveness of foreign subsidiary (23.33%).

Table 11 - Purposes of International Transfer Pricing

	N	R (%)
Maximization of group profits	87	36.25
Performance evaluation of foreign subsidiary	15	6.25
Performance evaluation of Local manager	2	0.83
Observance of tax laws	69	28.75
Competitiveness of foreign subsidiary	56	23.33
Demand for finance of overseas subsidiary	9	3.75
Others	2	0.83
Total	240	100.00

N = number of companies, R = response rate ratio

This differs from the main purposes of international transfer prices according to Kobata and Shimizu (1996) and Shimizu (1999). These two studies ranked competitiveness of foreign subsidiary, maximisation of group profits and maximisation of foreign subsidiary in that order.

According to FPU (2008), maximization of group profits has become the most important purpose, created through shifts to the disclosure system of consolidated financial statements since the year 2000. Also, stronger restrictions to transfer pricing taxation regulations encourage enterprises to pay more attention to taxation standards in order to reduce risks and costs of the dual taxation. Therefore, it can be understood that the maximization of group profits under the observation of taxation rules has now become the most important purpose of international transfer prices.

Despite stronger taxation standards, international transfer pricing may also be calculated according to company standards. Company standards consist of cost pricing, market-based pricing and negotiated pricing (Kazusa, 1993). Taxation standards refer to calculation of international transfer pricing according to the Act on Special Measures Concerning Taxation, 1986 66-4. Taxation standards consist of three basic pricing methods (including the comparable uncontrolled price method, resale price method and cost plus method) plus profit methods (including the profit split method, transactional net margin method and comparable profits method) (Hayuka and Koga, 2004). Table 12 presents the results of the calculation standards used by the companies when determining international transfer prices. The adoption rate for company standards is 45.61%, and for tax standard is 31.58%. In other words, Japanese companies use company standards more frequently than tax standards. (Previous studies did not provide this information for comparison.)

Table 12 - Calculation Standards Used in International Transfer Pricing

	N	R (%)
Company standards	52	45.61
Taxation standards	36	31.58
Both of the standards	26	22.81
Total	114	100.00

N = number of companies, R = response rate ratio

Table 13 presents the details of the company standards which are used for the calculation of international transfer prices. Questions were asked, and multiple responses to these questions were possible. Cost-based pricing, including both cost pricing (24.77%) and cost-plus pricing (28.44%), was the most frequently used in both surveys. There were some differences, however, with the importance of cost pricing increasing over time and the importance of cost-plus pricing decreasing to almost half of its 1991 usage.

There are two kinds of “cost pricing” (marginal cost and full cost). Urabe (1974) explains that Japanese businesses used to determine domestic transfer prices by using cost pricing methods. This was because of concerns over exclusion of internal profits “... caused by in-house dealings. The costs of the finished goods could be cheaper and the customer’s demand can be met by excluding or limiting an internal profit” (Urabe, 1974, pp. 234-235). Now, because of recent changes to the disclosure system of consolidated financial statements, transactions between parent companies and subsidiaries are considered as a kind of internal dealings. Unrealized gains and losses between these entities are counterbalanced and deleted. Therefore, the numbers of Japanese enterprises that adopted “cost pricing” methods in calculating international transfer prices have increased.

Table 13 - Details of Company Standards

	Sato (1991)		FPU (2008)	
	N	R (%)	N	R (%)
Cost pricing	15	10.95	27	24.77
Cost-plus pricing	65	47.45	31	28.44
Market-based pricing	39	28.47	32	29.36
Market-based-minus pricing	15	10.95	4	3.67
Negotiated pricing			12	11.01
Others	3	2.19	3	2.75
Total	137	100.00	109	100.00

N = number of companies, R = response rate ratio

In order to explore which methods of taxation standards are used in the calculation of international transfer pricing, questions were designed with the possibility of multiple responses. Table 14 presents the number of transactions for different tax standards. Most companies adopt the comparable uncontrolled price method (126) and cost plus method (90), while fewer companies choose profit methods. Responses indicated that the comparable uncontrolled price method has the highest adoption rate of all the transactions for interest on loans, prices of final products, royalties for intangible assets and prices of intangible assets, in that order. Also, the cost plus method is the most frequently adopted for transactions on the price of raw material, half-finished products and the price of labor.

Additional Statistical Analysis

In order to improve the examination of performance evaluation and international transfer pricing, correlations were undertaken between the purposes of performance evaluation and financial indicators. The financial indicators were then classified, with the categories being used to divide companies into groups.

Table 14 - Taxation Standards by Number of Transactions

	Three basic methods				Profit methods		
	Comparable uncontrolled price method	Resale price method	Cost plus method	Profit Split Method	Transactional Net Margin Method	Comparable profits method	others
Price of final product	25	13	19	7	11	2	1
Price of raw material or half-finished product	16	5	27	4	6	2	2
Price of intangible assets	18	0	7	3	2	3	6
Royalty of intangible assets	23	0	8	4	3	3	6
Price of labor	14	0	26	1	3	3	3
Interest on loan	26	2	3	1	3	2	5
others	4	0	0	0	0	0	0
Total	126	20	90	20	28	15	23

Table 15 presents the Spearman rank-order correlation coefficients between the importance of purposes of performance evaluation and the importance of financial indicators. This non-parametric test provides the following findings.

First, there is no significant correlation between knowledge of the condition of foreign subsidiaries and all of the financial indicators. Second, there is a positive correlation between the evaluation of local managerial performance and the financial indicator that compares budget and actual profit. Third, there is a strong positive correlation between knowing the profitability of foreign subsidiaries and the financial indicators of profit and sales (at the 0.01 level), as well as the financial indicator of return on sales (at the 0.05 level). Fourth, there is a positive correlation between the importance of checking objectives and strategies and the financial indicators of comparison between budget and actual profit, and return on sales (at the 0.01 level and 0.05 level respectively).

The correlation results show that in order to know the profitability of foreign subsidiaries, Japanese companies prefer to use profit and sales as their main indicators, and return on sales as a sub indicator. Further, when evaluating the performance of local managers and checking objectives and strategies, Japanese companies prefer to use a comparison between budget and actual result of profit.

Table 16 presents the results of a principal component analysis which was used to explore the potential components of financial indicators for performance evaluation. A variance-covariance matrix was used as the analysis method.

Table 15 - Spearman Rank-Order Correlation between Performance Evaluation and Financial Indicators

		Importance of Financial Indicators								
		ROI	ROS	Profit	Sales	CBA of ROI	CBA of Profit	CBA of Sales	ROE	EVA
Importance of Performance Evaluation	Know condition of foreign subsidiaries	.039	.117	.133	.067	-.023	.127	.045	-.054	-.068
	Evaluate performance of local managers	.027	.143	.061	.075	-.011	.191*	.147	-.035	-.007
	Know the profitability of foreign subsidiaries	.052	.208*	.323**	.327**	.127	-.010	.180	-.015	.128
	Check objectives strategies	.023	.210*	.042	.066	.091	.246**	.077	-.130	-.046

ROS = Return on Sales; ROI = Return on Investment;

ROE = Return on Equity; EVA = Economic Value Added

CBA of ROI = Comparison between budget and actual result of ROI

CBA of Profit = Comparison between budget and actual result of Profit

CBA of sales = Comparison between budget and actual result of Sales

* significant at the 0.05 level

** significant at the 0.01 level

From Table 16, financial indicators can be classified into two components based on principal component coefficients. The first principal component comprises ROI, the comparison between budget and actual result of ROI, EVA, and ROE. Because these financial indicators take capital efficiency into consideration, they can be referred to as such, namely, indicators of capital efficiency. The second principal component consists of a comparison between budget and actual results for sales and for profit, sales, return on sales and profit. These can be referred to as financial indicators of sales-to-profit.

The companies used in this study (n = 115) were then divided into groups based on the classification of financial indicators. As a result, four clusters were determined according to the two principal component coefficients derived from the analysis above. Figure 1 presents the result displayed in a scatter plot.

Table 16 - Principal Component Analysis of Financial Indicators

	Question items	The first principal component: Financial indicators of capital efficiency	The second principal component: Financial indicators of sales-to-profit
Financial indicators of capital efficiency	ROI	.864	.055
	Comparison between budget and actual result of ROI	.840	.172
	EVA	.818	.074
	ROE	.795	.026
Financial indicators of sales-to-profit	Comparison between budget and actual result of sales	-.172	.828
	Comparison between budget and actual result of profit	-.253	.711
	Sales	-.150	.693
	Return on sales	.029	.508
	Profit	-.060	.420

Figure1 shows the number of valid cases is 106, with 9 missing cases. The features of four clusters in Figure 1 can be described as follows.

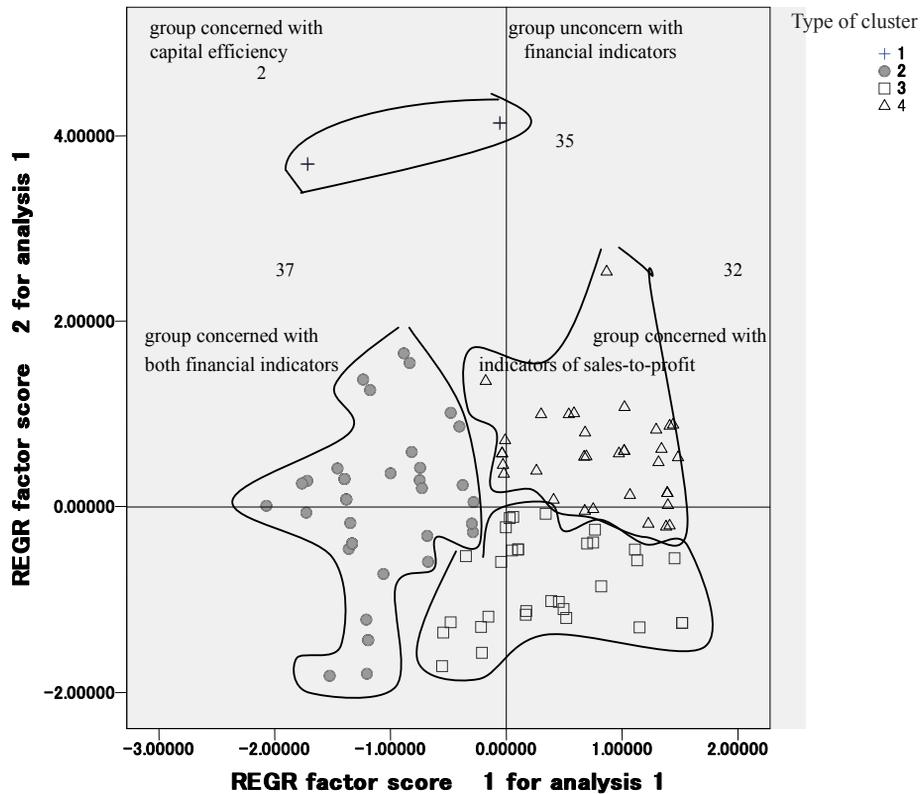
In cluster 1, the principal component coefficient of financial indicators of capital efficiency (on the X-axis) is small while the principal component coefficient of financial indicators of sales-to-profit (on the Y-axis) is large. This cluster is called “group using financial indicators of capital efficiency.” The financial indicators of capital efficiency such as ROI and ROE have not gained popularity for Japanese companies to evaluate the performance of foreign subsidiaries, as there are only 2 companies in cluster 1.

In cluster 2, both of the principal component coefficients on the X-axis and Y-axes are small. Thus, cluster 2 is called “group concerned about both of financial indicators.” There are 37 companies in cluster 2. Japanese companies prefer to use financial indicators such as profit and sales for performance evaluation.

Cluster 3 shows the principal component coefficient on the X-axis to be large, with a small principal component coefficient on the Y-axis. This cluster is called “group using financial indicators of sales-to-profit”. There are 32 companies in cluster 3, indicating that Japanese companies do rely on financial indicators other than capital efficiency.

Finally, in cluster 4, the principal component coefficients on both the X-axis and the Y-axis are large. Cluster 4 is called “group unconcerned about financial indicators.” There are 35 companies in cluster 4, indicating that a significant number of companies are not particularly concerned about either type of financial indicator. By comparison, 71 companies are concerned about one or other, or both, of the principal components. Accordingly, in order to evaluate the performance of foreign subsidiaries, Japanese companies do not only depend

Figure 1 - Grouping of Companies.



The X-axis represents the first principal component coefficient.
 The Y-axis represents the second principal component coefficient.
 The smaller the principal component coefficient is, the more the important it is.
 Numbers of companies in each cluster are “2”, “37”, “35”, “32”.

on financial indicators; they also rely on other methods such as non-financial indicators (Sakurai, 2009).

Discussion and Concluding Remarks

This paper presents the results and analysis of a questionnaire survey concerning performance evaluation and international transfer pricing in foreign subsidiaries of Japanese companies. Sato (1991) provided the foundation questions for this survey, and some interesting results have become apparent.

In recent years, Japanese companies have changed some of their management strategies and activities in response to changes in the business environment. For example, with improvements in technology and economic growth in investment destinations such as China, the purposes of establishing and maintaining foreign subsidiaries have changed. Over recent years, investments aimed at using cheap labor have changed to investments hoping to gain access to the huge market in China (Wang, 2005). Foreign subsidiaries are no longer branches that carry out a single function such as manufacturing. Multinational companies further delegate functions such as research and development to foreign subsidiaries.

Results indicate the ratio of local managers in foreign subsidiaries has increased over time. At first, Japanese managers administered foreign subsidiaries. Then, once administrative systems had been implemented, local people were appointed as the managers. Moreover, in respect of the personnel management, it can be considered more effective when local people manage the local employees.

Because of the increasing reliance on local managers' experience and abilities, the importance of evaluating managerial performance has also increased. Survey results indicate that the importance of profits and sales is still the most important indicator of performance evaluation in foreign subsidiaries, reflecting results from 1991 that were placed against the background of the traditional budget management and Japanese corporate management. From the viewpoint of financial indicators of performance, the indicator of profits and return on sales has increased in recent years. From the viewpoint of non-financial indicators, quality of management is considered to be the most important indicator.

International transfer prices are determined by headquarters and under the company policies of maximization of group profits and observance of tax laws using company standards. Due to the shift in disclosure systems of consolidated financial statements, and stronger restrictions on transfer pricing taxation, the importance of group profits maximisation has grown. In order to maximize group profits, cost-based pricing methods are followed which include cost pricing and cost-plus pricing.

Changes to the system of consolidated financial statement disclosures have also affected the transactions between parent companies and subsidiaries. These are considered as a kind of internal dealing when consolidated financial statements are made, with unrealized gains and losses being counterbalanced and deleted. Therefore, more Japanese enterprises have adopted “cost pricing” for the calculation of international transfer prices. International transfer prices have a direct impact on the establishment of product costs for foreign subsidiaries. From the viewpoint of the observance of taxation standards for international transfer prices, many companies adopt three basic methods, in particular, comparable uncontrolled price method and cost plus method, while fewer companies choose profit methods.

The correlation between performance evaluation and financial indicators has also been described. Japanese companies prefer to use financial indicators such as profit and sales for performance evaluation, with less emphasis on financial indicators of capital efficiency such as ROI and ROE. Moreover, Japanese companies do not only depend on financial indicators for performance evaluation, but also include other non-financial methods.

This study has clarified changes, and the reasons for these changes, to performance evaluation of foreign subsidiaries and international transfer prices from various aspects of the changing business environments. Also, the conditions of transfer prices in Japanese companies were explored from the viewpoints of management accounting and international taxation. Some preliminary analyses have been made, and additional research is necessary in order to clearly understand the relationships explored in this study. The management of foreign subsidiaries, as well as the performance of foreign subsidiaries when taxation standards determine international transfer prices both deserve further investigation. Research into international transfer pricing using case studies could also provide interesting results. This paper presents the start of many future research opportunities

Notes

- ¹ Local headquarters are the divisions located in big cities like Shanghai and New York, which have jurisdiction over foreign subsidiaries.

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