Impact of Impairment Accounting on Company Behavior ; Questionnaire Research Studies on Impairment Accounting in 2009

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Abstract

Impairment Accounting Standard has been used by companies in Japan since April 1, 2005. Survey Research Committee notes that Standard has become widespread in companies, and clarifies these operational decisions at the end of fiscal year 2009. So Committee has conducted "Questionnaire Survey of Impairment Accounting in 2009" and come to three conclusions :

1. Management decision of companies was largely effected.
2. The existence of in-company guidelines has a large effect on management decisions. Most companies were prepared for impairment accounting.
3. The period of estimate is the next key concept. Collecting (Q.5) data shows the contrast. Committee thinks one of main tenets of the guideline is how to estimate cash flow. Extending the period was not for cushioning material.

Contents

Introduction

Since the fall of 2008, the Japanese economic environment has been deteriorating due to the effect of the declining US economy. Under these conditions, there are business units that have changes the expected amount of prospective business plan and interests in Japan. In this recession period, the application of Impairment Accounting Standard should give excessive influence on future net income.

Companies in Japan have applied Impairment Accounting Standard since April 1, 2005. At the end of fiscal year 2009, Standard puts down deep roots, and clarifies these operational decisions.

Survey Research Committee of the Japan Industrial Management & Accounting Institute (cf. Committee) has conducted "Questionnaire Survey of Impairment Accounting in 2009", focusing on three research areas ;

(1) How Committee will test a correlation between "having in-company guidelines" and "impacts on management decision ?"

(2) How Committee will test a correlation between "adopted accounting treatments" and "impacts on management decision ?"

(3) How Committee will test a correlation between "having in-company guidelines" and "adopted accounting treatments ?"

Committee has sent its questionnaire to companies belonging to the Japan Industrial Management & Accounting Institute. Date of Survey delivery, collection, number of sending companies, number of collecting companies are as follows.

Status of the questionnaire

・Date sent : December 3, 2009
・Response deadline : December 16, 2009
・Number of companies surveys send to : 530
・Number of companies responding : 176
・Rate of response : 33.2 %
・Means of recover : facsimile

* This research was conducted with the support of the Japan Industrial Management & Accounting Institute.

1 Formulate Hypotheses

In the analysis, Committee starts with three research hypotheses.

1-1 First Research Hypothesis

The first research hypothesis is the correlation between "having in-company guidelines" and "impacts on management decision." In formulating the first hypothesis, Committee considered that the more serious the impacts, the more necessary that companies pay sufficient attention to dealing with the new standard. And then, if impairment accounting strongly impacts on management decisions, the company develops in-company guidelines to appropriately carry out impairment accounting. Therefore, Committee hypothesizes there is a correlation between “having in-company guidelines” and “impacts on management decisions.”

Ⅰ-2 Second Research Hypothesis

The second research hypothesis is the correlation between “adopted accounting treatments” and “impacts on management decision.” In formulating the second hypothesis, Committee considered that the high-performing company tries to recognize short term losses. In contrast, an unprofitable company tries to put off recognizing losses. And then, there are many estimated factors and judgments in impairment accounting. Therefore, Committee hypothesizes there is a correlation between “adopted accounting treatments” and “impacts on management decision.” In particular, Committee looks at “estimated period of future cash flow” in accounting treatments.

Ⅰ-3 Third Research Hypothesis

The third research hypothesis is the correlation between “having in-company guidelines” and “adopted accounting treatments.” Committee formulates the third hypothesis to confirm the first and second hypotheses.

In formulating this third hypothesis, Committee considered two points. The first, as to the estimated period of future cash flow, if the company uses the statutory useful life, the guidelines are not required. Because in using the statutory useful life, there is very little that company makes judgments on it. In contrast, as the estimated period of future cash flow, if the company uses the economic life, the guidelines are required. Because in using the economic life, the company has to estimate many computational elements using its own judgment. Therefore, the longer the period of future cash flow is estimated, the more in-company guidelines are required. Because the period is longer, the estimated factors and judgments are increase. Now therefore, Committee hypothesizes there is a correlation between “having in-company guidelines” and “estimated period of future cash flow.”

Ⅰ-2 Questionnaire Items

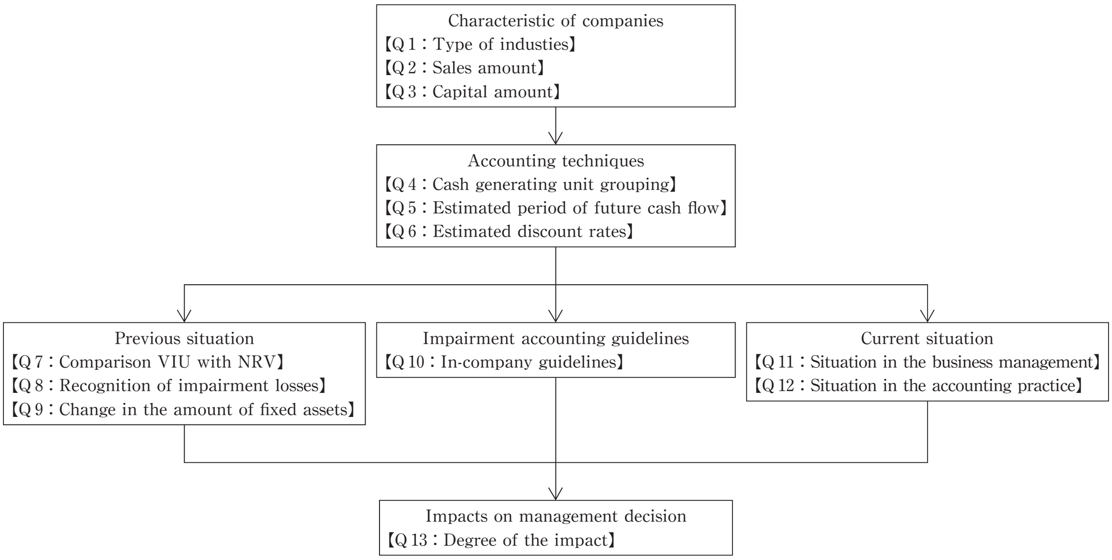
【Figure 1】illustrates the questionnaire items. As shown, thirteen items are broadly separated into six categories. Especially, in the analysis, Committee pays attention to (Q.5) (Estimated period of future cash flow), (Q.10) (Having in-company guidelines) and (Q.13) (Degree of the impacts).

The first : Characteristic of companies (Q.1, Q.2, Q.3)

The second : Accounting techniques (Q.4, Q.5, Q.6)

The third : Previous situation (Q.7, Q.

【Figure Ⅰ: Questionnaire Items】



【Table Ⅰ: Interview with the companies】

	Q5: Estimated period of future cash flow	Q10: In-company guidelines	Q13: Degree of impacts on management decision
A company	Other (Period of depreciatio)	Yes (have)	Not direct impacts
B company	Other (Period of depreciatio)	No (does not have)	Strong impacts

8, Q.9)

The forth: Impairment accounting guidelines (Q.10)

The fifth: Current situation (Q.11, Q. 12)

The last: Impacts on management decision (Q.13)

Ⅰ-5 Interview

As part of our research, Committee conducted interviews with companies 【Table 1】. From the date, Committee finds the following facts.

First, A-company has the in-company guidelines, but B-company does not. In the interview with B-company, it is obvious that B-company has in-company guidelines.

Second, Impairment Accounting Standard does not make direct impacts on A-company's management decision, but make strong impacts on B-company. In the interview with A-company, the answer comes from the facts that A-company got out of some unprofitable business and dispose of nonperforming assets to settle the bubble economy. In contrast, in the interview with B-company, the answer comes from the facts that the huge impairment losses were recognized in re-

【Table 2 Cross-collecting (Q. 13) and (Q. 10)】

		(Q. 10) : In-company guidelines		
		1. Have	2. Not have	3. Others
(Q. 13) : Impacts on management decision	1. Impacts (N=127)	81.1 %	59.3 %	66.7 %
	2. Not impacts (N=46)	18.9 %	40.7 %	33.3 %

cent recession as the fall of Lehman Brother's. B-company would not dispose the property to maintain multiple production lines if value in use (VIU) were much lower than net realizable value (NRV).

2 Verification Hypotheses : by Data Collecting

Almost two-thirds of companies said they had in-company guidelines. Committee thinks having in-company guidelines is one of Merkmal to be established. Naturally the in-company guidelines are made within the Accounting Regulation.

Committee found that the company made in-company guidelines about a main item to reduce making cost on carrying out the consolidated accounts. So Committee analyzes these companies collecting cross questions. Committee predicted most companies had guidelines because of corporate governance.

2-1 Relation between (Q.10) and (Q.13)

Of the replying companies having guidelines, over 80 percent of them felt Impairment Accounting Standard impacted on management decisions (cf.【Table 2】).

Committee thinks that having impacts on management lead to having guidelines, not vice versa. Committee points this is characteristic of corporate behavior in Japan ; they prepare for new accounting standards with serious impacts. One of such actions is setting in-company guidelines.

Committee formulates the first hypothesis.

H_{1-0} : Null hypothesis

"Whether companies have impacts on the management decision making is unrelated to having guidelines."

Committee makes an alternative hypothesis to inspect this.

H_{1-1} : Alternative hypothesis

"The companies with guidelines, these guidelines are strongly influence management decision making."

Committee demanded a coefficient of the correlation of Pearson.

The coefficient of correlation between (Q.10) and (Q.13) is '0.18.' The level of significance is '0.02' (cf.【Table 3】). Therefore, the correlation of both tests is supported. "In companies having guidelines, management decision making is

【Table 3 Relation between (Q. 10) and (Q. 13)】

Pearson χ^2	(Q. 10)	(Q. 13)
Correlation of Pearson	1	0.177574388
The level of significance (both sides)		0.019423546
N	175	173

【Table 4 Relation between (Q. 13) and (Q. 5)】

Pearson χ^2	(Q. 5)	(Q. 13)
Correlation of Pearson	1	−0.117354962
The level of significance (both sides)		0.20962277
N	116	116

strongly influenced by them." In addition, a strong correlation is accepted in both tests.

2-2 Relation between (Q.13) and (Q.5)

Committee formulates a second hypothesis.

H_{2-0} : Null hypothesis

"The length of the estimate period is unrelated to the influence on management decision making."

Committee makes an alternative hypothesis to inspect this.

H_{2-1} : Alternative hypothesis

"The length of the estimate period is related to influence on management decision."

Committee demanded a coefficient of correlation of Pearson.

The coefficient of correlation between (Q5) and (Q10) is '-0.12.' Because a level of significance is '0.21,' the correlation of both test is supported (cf.【Table 4】).

"The length of the estimate period is related to influence on management decision." As for the influence on management decision making and the length of the estimate period, the correlation is accepted.

2-3. Relation (Q.10) and (Q.5)

Committee analyzed the relations of two elements confirmed as a Merkmal. Committee formulates third hypothesis.

H_{3-0} : Null hypothesis

"It is unrelated to the influence on management decision making whether a company has in-company guidelines."

Committee makes the next alternative hypothesis to inspect this.

H_{3-1} : Alternative hypothesis

"It affects influence on management decision making greatly whether a company has in-company guidelines."

Committee demanded a coefficient of correlation of Pearson.

The coefficient of correlation between (Q.5) and (Q10) is '-0.14.' The level of significance of the coefficient of correlation was '0.13', and the correlation of both

【Table 5 Relation between (Q. 10) and (Q. 5)】

		(Q. 10) : In-company guidelines	
		1. Have	2. Not have
(Q. 5) : Period of estimate	Under 3 years	1	2
	Almost 3 years	4	3
	Almost 5 years	10	14
	Almost 7 years	9	2
	Almost 10 years	11	8
	Over 10 years	32	17
	Others (Most replied economic life)	44	13

【Table 6 Relation between (Q. 5) and (Q. 10)】

Pearson χ^2	(Q. 5)	(Q. 10)
Correlation of Pearson	1	−0.144698268
The level of significance (both sides)		0.126234512
N	116	113

test was supported (cf.【Table 6】). "The length of the estimate period is related to influence on management decision."

The companies do not apply statutory useful life mechanically, and they uses substantial economic useful life, Committee predicted. The companies conduct an investigation into individual operation assets on applying impairment accounting, then review it and make preparations. The adequacy of the estimate period is greatly related to in-company guidelines.

2-4. Impacts on Management Decision

One group (Q.13) and the other (Q.5) are equally matched in "almost 7 years" (cf.【Table 7】). Immediately, extending the estimate period may reduce impacts. But Committee does not think so. They are not cushioning material. As a result, companies choose proper period and the period was extend. Committee confirmed this action in interviews.

2-5. Impairment Accounting Firmly Establish in Practice

Committee points out an interesting finding in cross-responses to question (Q. 9) and (Q.12) (cf.【Table 8】). Committee asks rate of change for fixed assets in (Q. 9). Companies which choose choice-5 in (Q.12) think impairment accounting is firmly established in practice. Their rate for (Q.9) is '87.16.'

They probably reviewed assets to hold. They sold unnecessary assets and abolished any new business plan that did not have high profitability. All factors effected the rates were not in impairment

【Table 7 Cross-collecting (Q. 5) and Q. 13)】

		(Q. 13) : Effect on management decision	
		Effect	No effect
(Q. 5) : Term (period) of estimate	Under 3 years	0.8 %	4.3 %
	Almost 3 years	3.1 %	6.5 %
	Almost 5 years	12.6 %	19.6 %
	Almost 7 years	6.3 %	6.5 %
	Almost 10 years	12.6 %	8.7 %
	Over 10 years	31.5 %	21.7 %
	Others	33.1 %	32.6 %

【Table 8 Cross-collecting (Q. 12) and (Q. 9)】

	Average on (Q. 9)
(Q. 12-4) : Not familiar with new procedure	106.14
(Q. 12-5) : Firmly establish in practice	87.16
(Q. 12-6) : Not want to believe the cost without payment	100.50

accounting.

Conclusion

As stated above, Committee has examined how Impairment Accounting Standard has become part of in accounting practices within the company. When Committee planned "Questionnaire Study of Impairment Accounting in 2009", it set up the three hypotheses. It has analyzed aggregated survey data based on these hypotheses, and concluded the following.

1. Management decision of companies had large impacts on some efforts.
2. Having in-company guidelines and impacts on management decision are strongly related. Most companies prepare for impairment accounting.
3. The period of estimate is the next key concept. Responses to (Q.5) shows the contrast. Committee thinks one of main points of guideline is how to estimate cash flows. Extending the period was not for cushioning material.

They have reviewed some points of assets.

They chose substantial economical useful life automatically, not statutory useful life.

Under results of company data analysis, such as the application of impairment accounting has given to decision making of companies, they have reviewed business investments. The following can was revealed from the ex-post hearing. Companies develop guidelines for Impairment Accounting Standard by incorporating business and business climate, companies. The accountants could create accounting treatments according to the guidelines.

References :

(1) YOSHIOKA Masamichi, "Fixed Assets Evaluation Theory" Moriyama Shoten (August, 2010).

(2) UJIHARA Shigeki = TOKUMAE Motonobu = YOSHIOKA Masamichi, "Accounting Theory", Moriyama Shoten (July, 2010).

(3) YOSHIOKA Masamichi = TOKUMAE Motonobu = ONO Tomohiro, 'Stability of Impairment Accounting Standard ; Questionnaire Survey about Impairment Accounting in 2009', "Industrial Management & Accounting" Vol. 70 No. 1, the Japan Industrial Management & Accounting Institute (April, 2010).

(4) YOSHIOKA Masamichi = SUGIYAMA Akiko, "Bookkeeping System Theory", Tax Accounting Association (November, 2009)

(5) YOSHIOKA Masamichi = TOKUMAE Motonobu = SUGIYAMA Akiko, "Evolution of Tax Effect Accounting Applications (2002〜2008) ; Practice Status from Introduction Period, and Maturity Period", Survey Research Series III, the Japan Industrial Management & Accounting Institute (March, 2009).

(6) TOKUMAE Motonobu, 'Questionnaire Survey about Impairment Accounting ; Effects of Applying and Proactive', "Industrial Management & Accounting" Vol. 65 No. 4, pp. 106-118, the Japan Industrial Management & Accounting Institute (January, 2006).

(7) YOSHIOKA Masamichi = TOKUMAE Motonobu=CHIBA Keiji=SUGIYAMA Akiko, "Countermeasures of Companies to New Accounting Standards ; Awareness and Actions in Introduction Period", Survey Research Series II, the Japan Industrial Management & Accounting Institute (June, 2005).

(8) YOSHIOKA Masamichi = TOKUMAE Motonobu=CHIBA Keiji=SUGIYAMA Akiko, 'Questionnaire Survey about Impairment Accounting ; Survey of Implementation Companies in introducing Impairment Accounting', "Industrial Management & Accounting" Vol. 64 No. 4, pp. 122-133, the Japan Industrial Management & Accounting Institute (January, 2005).

(9) TOKUMAE Motonobu , 'Disclosure Case Analysis of Impairment Accounting for Fixed Assets Early Application Companies', "Industrial Management & Accounting" Vol. 64 No. 3, the Japan Industrial Management & Accounting Institute (October, 2004).

《Questionnaire and Collected Results》

Q.1 : Which type of industry is your company a part of ?

1. Fishery, Agriculture and Forestry	2. Mining	3. Construction	4. Food
0	2	12	13
5. Textile and Apparels	6. Pulp and Paper	7. Chemicals	8. Oil and Coal Products
2	1	28	3
9. Rubber Products	10. Glass and Ceramics Products	11. Iron and Steel	12. Nonferrous Metal
0	4	3	3
13. Metal Products	14. Machinery	15. Electric Appliances	16. Transportation Equipments
2	3	15	5
17. Precision Instruments	18. Other Products	19. Wholesale and Retail Trade	20. Financing Business and Insurance
4	7	28	3
21. Real Estate	22. Land Transportation	23. Marine Transportation	24. Air Transportation
6	2	3	1
25. Warehouse and Harbor Transportation	26. Information and Communication	27. Electric Power and Gas	28. Service
7	3	2	13
29. No answer	Total		
1	176		

Q.2 : What is your company's sales volume ? (Individual)

	Number of Companies
Large Over 300,000 million yen	55
Middle 50,000------300,000 million yen	69
Small Under 50,000 million yen	50
No answer	2
Total	176

Q.3 : Which is the capitalization of your company ? (Individual)

	Number of Companies
Large Over 300,000 million yen	54
Middle 50,000～300,000 million yen	69
Small Under 50,000 million yen	53
Total	176

Q.4 : Which bases are considered, when assets are grouped for the cash generating unit ? (Multiple answers allowed)

1. Factory	2. Operation	3. Product	4. Region
26	112	10	26
5. Others	6. No answer	Total	
14	1	189	

Q.5 : Which estimated period is used to measure value in use ?

Under 3 years	3
Almost 3 years	7
Almost 5 years	25
Almost 7 years	11
Almost 10 years	20
Over 10 years	50
Others	59
Total	176

Q.6 : Which basis is considered to estimate discount rates in measuring value in use ?

1. Peculiar risk	14
2. Capital cost	95
3. Market average interest rate	37
4. Interest rate of the nonrecourse loan	1
5. Additional interest rate	3
6. Others	24
7. No answer	2
Total	176

Q.7 : Which was higher during the last fisical year, value in use (VIU) or net realizable value (NRV) ?

1. VIU was higher than NRV	56
2. NRV was higher than VIU	32
3. Equal	18
4. Not calculating recoverable amount	43
5. Other	22
No answer	5
Total	176

Q.8 : Has your company recognized the impairment loss ? (Multiple answers allowed)

1. No sign	17
2. Not recognized the loss	26
3. Recognized the loss on idle properties	117
4. Recognized the loss on investment properties	17
5. Recognized the loss on operation properties	70
6. Others	6
7. No answer	1
Total	254

Q.9 : After the introduction of impairment accounting, which change in the amount of fixed asset does your company fall under ?

1. Large increase	7
2. Increase	37
3. No change	28
4. Decrease	78
5. Large decrease	7
6. No answer	19
Total	176

Q.10 : Are there any impairment accounting guidelines in your company ?

1. Yes	111
2. No	59
3. Other	5
4. No answer	1
Total	176

Q.11 : In the recent business management, what does your company use the impairment accounting for ? (Multiple answers allowed.)

1. For the review of the management plan	53
2. For the provision of useful information to investors	22
3. For the review of the purpose and the degree of use fixed assets	68
4. For the consideration of the choice and concentration of the business	38
5. For the slimming of the balance sheet including a lease transaction, securitization or the sale	13
6. For the consideration to sales unutilized assets and close unprofitable sections	5
7. For the review of the capital cost and a rate of operation	22
8. Other	23
9. No answer	2
Total	292

Q.12 : Regarding the application of the impairment accounting, which recent situation does your company fall under ? (Multiple answers allowed)

1. Having better contact with subsidiaries	57
2. Increasing burden from the work of contact with and support subsidiaries	44
3. Increasing burden from the accounting practice, so need to reduce it	50
4. Not being familiar with technique of the impairment accounting yet	36
5. Establishing the technique of the impairment accounting	74
6. Not realizing the recognition of impairment loss without payment	10
7. Other	11
8. No answer	2
Total	284

Q.13 : What kind of impact does impairment accounting have an impact on your management decision making ?

1. Strong impact	17
2. Some impact	110
3. Not much impact	41
4. No impact	5
5. Other	2
6. No answer	1
Total	176