

# Goodwill Impairment Disclosure Quality: Adoption of IFRS by Japanese companies

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**Abstract**—This study investigated whether Japanese companies comply with the accounting rule for goodwill impairment based on annual security reports of Japanese companies adopting International Financial Reporting Standards (IFRS). To investigate this issue, accounting standards for goodwill impairment are organized to specify the points influencing the impairment of goodwill decisions and calculation of goodwill impairment loss. Subsequently, the actual conditions of companies adopting IFRS is provided by ranking the quality of the disclosure information based on these points. As a result, this study finds that Japanese companies did not comply with some IFRS rules and the usefulness of accounting information for goodwill impairment is likely to be reduced.

**Keywords**— Disclosure, Goodwill, IFRS, Impairment

## I. INTRODUCTION

THE argument regarding accounting for goodwill that arises from business combination has become increasingly salient since the International Accounting Standards Board (IASB) changed the accounting for goodwill from “amortization and impairment” to “only of impairment” in the International Financial Reporting Standards (IFRS). As a general rule, however, the Japanese Generally Accepted Accounting Principles (JGAAP) apply amortization using the straight-line method for a period not exceeding 20 years, only when the signs of impairment are recognized and an impairment procedure is required.

The impairment method that IFRS requires is more complicated than the amortization method, which has room for subjective judgment. Thus, variations can exist in the quality of information disclosed among companies. Doubts arise regarding the usefulness of the goodwill information disclosed according to IFRS if the extent of variation is serious.

The Accounting Standards Board of Japan (ASBJ) has argued with the “only of impairment” method, and applied the amortization method in Japan's Modified International Standards (JMIS) published in 2015. On the other hand, companies that have fulfilled certain conditions can adopt pure IFRS, and more than 80 such companies currently choose this approach.

This study investigated whether Japanese companies observe the rule of accounting for goodwill impairment using annual security reports of Japanese companies adopting pure IFRS.

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The existence of companies that do not comply with this rule cause a significant variation in the quality of goodwill accounting information, with the result that comparability is impaired. As investigation procedures, this study organizes accounting standards for goodwill impairment to specify the points influencing the impairment of goodwill decisions and calculation of goodwill impairment loss. As a result, the points are the settings of cash generating units (CGUs) and recoverable value calculation methods. Subsequently, the actual condition of the companies adopting IFRS is provided by ranking the quality of the disclosure information based on the aforementioned points.

## II. GOODWILL IMPAIRMENT TREATMENT IN IFRS

### A. Rules for goodwill impairment treatment

International Accounting Standard 36 “Impairment of Assets” (IAS36) prescribes impairment of assets including goodwill, the rules of which are as follows.

#### 1) Allocating goodwill to cash-generating units [1]

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's CGUs, or groups of CGUs, that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units or groups of units. Each unit or group of units to which the goodwill is so allocated shall:

- i represent the lowest level within the entity at which the goodwill is monitored for internal management purposes; and
- ii not be larger than an operating segment as defined by paragraph 5 of IFRS 8 “Operating Segments” before aggregation.

Goodwill recognized in a business combination is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized. Goodwill does not generate cash flows independently of other assets or groups of assets, and often contributes to the cash flows of multiple cash-generating units. Goodwill sometimes cannot be allocated on a non-arbitrary basis to individual cash-generating units, but only to groups of cash-generating units [1]. There is room for arbitrariness into the settings for that group as a result.

#### 2) Testing cash-generating units with goodwill for impairment [1]

A cash-generating unit to which goodwill has been allocated

shall be tested for impairment annually, and whenever there is an indication that the unit may be impaired, by comparing the carrying amount of the unit, including the goodwill, with the recoverable amount of the unit. If the carrying amount of the unit exceeds the recoverable amount of the unit, the entity shall recognize the impairment loss in accordance with paragraph 104.

### 3) Impairment loss for a cash-generating unit [1]

The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order:

- i first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and
- ii then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units).

Fig. 1 outlines the process of goodwill impairment based on IAS36 provisions.

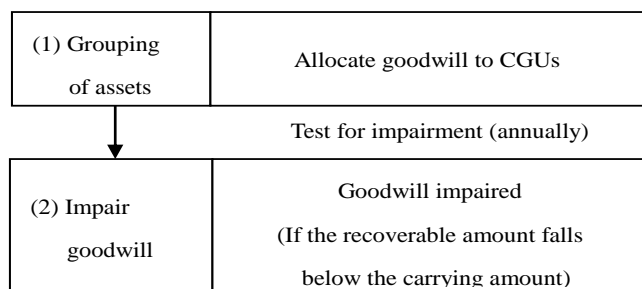


Fig. 1 Goodwill impairment processes

### B. Points influencing goodwill impairment of goodwill

The process of impairment goodwill is organized by a calculated example, and the points affecting the determination of impairment and recognition of impairment loss are revealed.

*Example:* Entity I was acquired for 860 in a business merger (100% acquired), and goodwill (carrying amount 160) was recognized. The entity has two CGUs (CGUA, CGUB), their carrying amounts are 400 and 300, respectively. The CGU recoverable amounts are 600 and 130. Goodwill allotments are 100 and 60.

TABLE I  
GOODWILL IMPAIRMENT TEST PROCEDURE

	CGUA	CGUB	Goodwill Entity I	Total
(1) Carrying amount	400	300	160	860
(2) Allotment of goodwill	100	60	—	160
(3) (1) + (2)	500	360	—	860
(4) Recoverable amount	600	130	—	—
(5) Judgment of impairment	No	Yes	—	—
(6) Impairment loss	—	(230)	—	(230)
(7) Allocation to goodwill	—	—	(160)	—
(8) Allocation to CGUs	(40)	(30)	—	—
(9) Final carrying amount	360	270	—	—

Having compared the carrying amounts of CGUs that have a goodwill amount allocated with those of recoverable amounts, CGUA does not recognize the impairment loss but CGUB is recognized 230. Impairment loss is first deducted from the carrying amount of goodwill and the goodwill balance is 0. Then the remaining impairment losses, 40 and 30 respectively, are allocated to the CGUA and CGUB.

In the goodwill impairment process, the first important points influencing the impairment of goodwill decisions is identifying the CGU. Impairment losses are recorded in cases where CGUs are set as calculation examples, but if the recoverable amount is 730 for either Group A or B, the impairment losses are not recognized. The next important point is calculation method used to determine the recoverable amount.

### C. Measuring the recoverable amount

IAS36 defines recoverable amount as the higher of an asset's or CGU's fair value less costs of disposal and its value-in-use. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Value-in-use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit [1].

In the method of measuring the recoverable amount, the fair value less costs of disposal are assumed for an active market. The sale and disposal of the cash generating unit can be determined using this method. Then, value-in-use is used in most cases.

### D. Measuring value-in-use

Value-in-use is the present value of future cash flows expected to arise from an asset or CGU. Future cash flow projections shall base on the most recent financial budgets/forecasts approved by management. Detailed, explicit and reliable financial budgets/forecasts of future cash flows for periods longer than five years are generally not available. For this reason, management's estimates of future cash flows are based on the most recent budgets/forecasts for a maximum of five years. Then cash flow projections until the end of an asset's useful life are estimated by extrapolating the cash flow projections based on the financial budgets/forecasts using a growth rate for subsequent years [1].

The discount rate is estimated from the implicit rate of current market transactions for similar assets or the weighted average cost of capital for a listed entity. Using the same discount rate for different aspects of different CGUs is not correct because the discount rate needs to reflect the inherent risk of each CGUs in the impairment test. Important points in measuring the recoverable amount are considered in the discount rate, growth rate, and forecast period settings.

## III. DATA AND METHODOLOGY

There is the possibility that this process can lead to substantial levels of arbitrary accounting because a sizeable proportion of business-specific risks and assumptions are

included in setting these parameters. This paper aims to investigate the actual condition of companies adopting the IFRS, particularly in terms of the important points in goodwill impairment process, though limited information is available to outsiders. Therefore, the actual condition of adopting IFRS is investigated indirectly by comparing information previously disclosed together with consideration of disclosures rules related to these points. Following [2], the actual disclosure conditions of following items are investigated.

- 1) Transparency of disclosure for the carrying amount of goodwill allocated to the CGUs;
- 2) Size of CGUs to which goodwill is allocated;
- 3) Method Employed to Determine Recoverable Amount; and
- 4) Disclosure of the discount rate, growth rate, forecast period and if the unit's recoverable amount is based on value-in-use.

The data were collected by the following procedure. First, the 85 listed companies adopting IFRS as of March 2016 are identified. In constructing the final research sample of 68 firms, 17 firms were excluded because of no goodwill information was provided in the respective annual reports. In order to facilitate analysis of the final research sample, the 68 firms were divided into seven industrial groups. The total assets of the final-sample firms was ¥164,640 billion, which included goodwill of ¥8,881 billion. An overview of the research sample broken down by assigned sector, the yen value of firm assets within the sector, and the yen value of goodwill for each sector is shown in Table II.

TABLE II  
OVERVIEW OF RESEARCH SAMPLE

Sector	Total Assets (¥ million)	Total Goodwill (¥ million)	Goodwill as % of Total Assets
Manufacturing( <i>n</i> =35)	48,604,882	4,068,589	8.37%
Information & Communication( <i>n</i> =7)	27,184,288	2,320,307	8.54%
Transport and postal activities( <i>n</i> =1)	464,399	29,542	6.36%
Wholesale & Retail Trade( <i>n</i> =12)	42,816,991	776,697	1.81%
Finance & Insurance( <i>n</i> =4)	36,642,877	246,398	0.67%
Real Estate( <i>n</i> =1)	1,013,527	198,297	19.57%
Services( <i>n</i> =8)	7,913,915	1,241,675	15.69%
Total( <i>n</i> =68)	164,640,879	8,881,505	5.39%

#### IV. RESULTS AND DISCUSSION

##### A. Transparency of disclosure for the carrying amount of goodwill allocated to the CGUs

This study investigates the quality of disclosure for the carrying amount of goodwill allocated to the CGUs, which IAS36 requires firms to disclose [1]. The quality of each company's disclosed information is assessed by comparing the total reported value of each sample firm's goodwill to the sum of the goodwill values disclosed as having been allocated to that firm's defined CGUs. Firms for whom these values are completely reconcilable are fully compliant with the disclosure

requirement of IAS36; they can be considered as offering high-quality disclosure. Where a firm's total disclosed goodwill does not reconcile with the total value of goodwill allocated to CGUs, the quality of disclosure is judged to be lower than where complete reconciliation is possible.

TABLE III  
CGU ALLOCATION COMPLIANCE BY SECTOR

Sector	Consistant	Inconsistant	No disclosure
Manufacturing( <i>n</i> =35)	14	11	10
Information & Communication( <i>n</i> =7)	7	—	—
Transport and postal activities( <i>n</i> =1)	—	1	—
Wholesale & Retail Trade( <i>n</i> =12)	6	4	2
Finance & Insurance( <i>n</i> =4)	1	2	1
Real Estate( <i>n</i> =1)	1	—	—
Services( <i>n</i> =8)	7	1	—
Total( <i>n</i> =68)	36	19	13

The first category of Table III consists of the 36 firms for whom values could be completely reconciled. These firms are assessed as being fully compliant with the disclosure requirements of IAS36. The second category contains 19 firms where the reported value of goodwill did not reconcile with the value of goodwill allocated to CGUs. The disclosure quality of firms in the first category is higher than that of those in the second. Firms in the second category are assessed as being ostensibly compliant with the requirement because disclosure of the balance is avoided from the aspect of materiality. However, the value of goodwill allocated by seven firms in the latter category is less than half of the goodwill's reported value. It is clarified that the disclosure transparency of these firms is particularly low. The third category comprised 13 firms for whom it was not possible to find a connection between the value of reported goodwill and any of the firm's defined CGUs. These firms are assessed as not having complied with the requirement. One of those firms, the value of reported goodwill is more than 20% of total assets.

##### B. Size of CGUs to which goodwill is allocated

This section seeks to gauge the adequacy of setting CGUs to which goodwill is allocated. As the example demonstrates, it is possible to avoid recognition of impairment goodwill by bringing together a low-profitability business and a high-profitability one. Thus, understanding apparent levels of CGUs as defined by reporting entities is significant. The level of CGUs shall represent the lowest level within the entity at which the goodwill is monitored for internal management purposes and not be larger than an operating segment [1]. The number of operating segments and CGUs are shown in Table IV. The point for assessing the manner in which firms define CGUs and allocate goodwill to them is to assume that the number of business segments defined by a firm represents a minimum value for the expected number of CGUs defined by that firm. If the number of segments is lower than the number of CGUs, the

possibility exists that the setting of CGUs is inadequate.

TABLE IV  
BUSINESS SEGMENTS AND CGUS BY SEGMENT

Sector	No.CGUs> No.Segment	No.CGUs= No.Segment	No disclosure
Manufacturing(n=35)	8	20	7
Information & Communication(n=7)	2	5	—
Transport and postal activities(n=1)	—	1	—
Wholesale & Retail Trade(n=12)	5	5	2
Finance & Insurance(n=4)	2	1	1
Real Estate(n=1)	—	1	—
Services(n=8)	4	4	—
Total(n=68)	21	37	10

Table IV shows that 21 firms defined a greater number of CGUs than they did business segments, while 37 firms defined an equal number of CGUs and business segments. These firms are assessed as being compliant with IAS36 requirements. However, three firms defined as few as a single CGU, suggesting the possibility of inappropriate CGU setting. While no firm defined fewer CGUs than business segments, the number of CGUs for 10 companies remains unconfirmed. However, the number of CGU can be determined, as long as IAS36 requires firms to disclose the carrying amount of goodwill allocated to their CGUs. These 10 firms are therefore assessed as not having complied with the requirement.

### C. Method Employed to Determine Recoverable Amounts

IAS36 requires firms to disclose the basis on which the unit's recoverable amount has been determined [1]. Table V shows that the frequency with which the two allowable methods for determination of the recoverable amount, namely value-in-use and fair value less costs of disposal, were adopted by firms in the research sample.

TABLE V  
METHOD EMPLOYED TO DETERMINE RECOVERABLE AMOUNT

Sector	Value in Use method	Fair Value method	Mixed metho d	No disclosure
Manufacturing(n=35)	28	3	1	3
Information & Communication(n=7)	6	—	1	—
Transport and postal activities(n=1)	1	—	—	—
Wholesale & Retail Trade(n=12)	12	—	—	—
Finance & Insurance(n=4)	4	—	—	—
Real Estate(n=1)	1	—	—	—
Services(n=8)	6	—	2	—
Total(n=68)	58	3	4	3

A full 58 sampled firms used value-in-use whereas only two firms used fair value less costs of disposal. Three firms could not confirm information concerning their calculation method of

CGUs' recoverable amounts. These firms did not disclose their calculation method on the basis that the carrying amount of goodwill has no materiality. However, disclosure is exempted only for the non-material element of goodwill. Disclosure of the full goodwill amount is not exempted even if the value is small. Thus these companies are assessed as failing to comply with the requirement.

### D. Disclosure when using value-in-use

Table V shows that most sampled firms use value-in-use to determine the recoverable amount. The entity shall disclose the information required by 1)–5) for each CGUs if the unit's recoverable amount is based on value in use [1].

- 1) each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts.
- 2) a description of management's approach to determining the value(s) assigned to each key assumption.
- 3) the period over which management has projected cash flows based on financial budgets/forecasts approved by management.
- 4) the growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts.
- 5) the discount rate(s) applied to the cash flow projections.

The elements that affect value-in-use calculations are discount rate, forecast period, and the growth rate prevailing among the above disclosure items. Quality of the value-in-use calculation can be confirmed indirectly by assessing the disclosure quality pertaining to these elements. In order to generate quality assessments, it was necessary to develop a compliance and disclosure quality taxonomy for the element-based disclosures. The applied taxonomy required allocating each sample firm to one of four dimensions: multiple rates (periods), single rates (periods), range of rates (periods), and no disclosure.

### E. Discount rate disclosure

The discount rate shall be a pre-tax rate and indicate a CGU's specific risk. In order to indicate the different business risk of every CGU, it is necessary to set discount rates with respect to the CGUs. The discount rates are shown in Table VI.

TABLE VI  
DISCOUNT RATE DISCLOSURE

Sector	Multiple discount rates	Single discount rate	Range of discount rates	No disclosure
Manufacturing(n=29)	8	7	10	4
Information & Communication(n=7)	1	2	4	—
Transport & postal activities(n=1)	—	—	1	—
Wholesale & Retail Trade(n=12)	2	7	2	1
Finance & Insurance(n=4)	1	—	2	1
Real Estate(n=1)	—	1	—	—
Services(n=8)	4	2	2	—
Total(n=62)	16	19	21	6

The first category comprised 16 firms who disclosed discount rates for every CGUs and are thus assessed as being fully compliant with the requirement of IAS36. These firms have the highest disclosure quality. The second category comprised 19 firms who disclosed a single discount rate, and were thus assessed as being ostensibly compliant with the requirement. The disclosure quality of these firms is lower than that of firms in the first category because a discount rate needs to be set essentially for every CGU. Third category comprised 21 firms who provided a range of discount rates used across a range of CGUs, a practice with questionable ability to fulfill the disclosure requirement of IAS36. It is clear that the quality of disclosure is lower than in the two previous categories. The remaining 6 firms were unable to confirm information concerning the discount rate and are therefore assessed as not having complied with the requirement.

#### F. Growth rate and forecast period disclosure

Growth rates are shown in Table VII. The forecast period used in estimating future cash flows is generally within 5 years; a justification is required when this period is exceeded. Forecast periods are shown in Table VIII.

TABLE VII  
GROWTH RATE DISCLOSURE

Sector	Multiple growth rates	Single growth rate	Range of growth rates	No disclosure
Manufacturing(n=29)	4	9	4	12
Information & Communication(n=7)	—	2	2	3
Transport & postal activities(n=1)	—	—	1	—
Wholesale & Retail Trade(n=12)	1	2	—	9
Finance & Insurance(n=4)	1	—	1	2
Real Estate(n=1)	—	—	—	1
Services(n=8)	2	1	2	3
Total(n=62)	8	14	10	30

TABLE VIII  
FORECAST PERIOD DISCLOSURE

Sector	Multiple forecast periods	Single forecast period	Range of forecast period	No disclosure
Manufacturing(n=29)	3	9	11	6
Information & Communication(n=7)	—	3	3	1
Transport & postal activities(n=1)	—	1	—	—
Wholesale & Retail Trade(n=12)	—	7	3	2
Finance & Insurance(n=4)	—	2	1	1
Real Estate(n=1)	—	—	—	1
Services(n=8)	—	4	4	—
Total(n=62)	3	26	22	11

The first category in Table VII comprised only 8 firms who disclosed growth rates for every CGU and are thus assessed as being fully compliant with the requirement of IAS36. The

second category comprised 14 firms who disclosed a single discount rate and were assessed as being ostensibly compliant with the requirement. Third category comprised 10 firms who provided a range of growth rates used across a range of CGUs. These firms had lower quality disclosures than firms in two other categories. Surprisingly, the growth rate of 30 firms remained unconfirmed. Table VIII shows that only three firms disclosed the forecast period every CGU. Two firms in wholesale and retail trades set a forecast period exceeding ten years. These firms offered justification for this extended forecast period, but such explanations were insufficient.

#### V. CONCLUSION

This study used annual security reports of Japanese companies adopting IFRS to investigate whether Japanese companies comply with the accounting rules regarding goodwill impairment.

The first important finding concerned disclosure about the setting of CGUs. Most enterprises reported a GCU total that exceeded the number of their business segments. These firms are assessed as being compliant with the requirement of IAS36. However, for 10 companies, the number of CGUs remained unconfirmed and most such firms did not recognize goodwill impairment losses. It cannot be judged whether CGU levels were appropriate.

This study also found that the disclosure of value-in-use elements was insufficient in many firms. In particular, information on growth rates and forecast periods were inadequate. The results of this study suggest that, on the whole, the disclosures of Japanese firms do not reach the level demanded by IAS requirements in practice. However, most firms have only recently adopted IFRS, and it might be conjectured that difficulties in the adoption process led to these disclosure insufficiencies. Therefore, I will observe the progress of such disclosures in future and propose a refinement in the information disclosure process.

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