

ACCOUNTING FOR ASSETS IMPAIRMENT: CREATIVE IMPAIRMENT STRATEGY ON DISCOUNT RATE DISCLOSURE

Nur Hidayah Laili & Khairil Faizal Khairi (Corresponding author)
Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia, 71800
Bandar Baru Nilai, Negeri Sembilan, Malaysia
Tel: +6067986427 E-mail: khairil@usim.edu.my

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Abstract

Discount rates selection represent a centrally material factor impacting in goodwill valuation decisions. This study examines the consistency of opportunistic behavior in documenting the variances between discount rates used by companies and independently generated estimates of company specific, risk-adjusted discount rates. This study examines the selection of 20 top listed companies on Bursa Malaysia that have released their 2010 and 2011 annual reports with reported goodwill and analyzed using the CAPM and goodwill intensity. The dominant pattern was for observed discount rates to be lower rather than higher than the estimated value, with 15 (75%) companies of the 20 both in 2010 and 2011 in excess of 150 bps lower than independent risk-adjusted estimate. Therefore, the data provided evidence of the use of aggressively low discount rates, with the result that CGU asset portfolio recoverable amount values will have been overestimated and potential goodwill impairment losses deferred or avoided.

Keywords: Discount Rates, Value in Use Method, Goodwill Impairment Testing, Goodwill Intensity, FRS 136, Bursa Malaysia.

1. Introduction

Discount rates selection signify a centrally material feature impacting in goodwill valuation decisions subsequent to the 2006 introduction of International Financial Reporting Standards (IFRS) in Malaysia. The selection of discount rates is believed to be a key important factor contributing to the outcome of impairment assessment, especially when the companies facing the recent downturn in the economy

environment. The discount rates selection create a high probability that many companies will be forced to write down impaired goodwill arising from boom period acquisitions. Therefore, evidence of bias in discount rate selection is likely to be a main consideration to investors, policymakers and corporate regulators especially when companies employed the value in use method in determining the recoverable amount of CGU or group of CGUs. In addition, the selection of appropriate discount rates serves as guidance to potentially avoid substantial measurement errors and make earnings management possible (Husmann & Schmidt, 2008)

The concept of value in use method, based on the risk-adjusted present value of the future cash flows, has been subject to limited theoretical or empirical analysis. Watts has suggested that asset impairment testing regimes, such as those embedded in the Statement of Financial Accounting Standard (SFAS) 142 – Goodwill and Other Intangible Assets and International Accounting Standard (IAS) 36 – Impairment of Assets, are flawed in that they offer financial statement preparers an environment in which they may opportunistically exercise discretion to the detriment of transparency, comparability and decision usefulness (Watts, 2003). In other words, the goodwill standard traditionally involve with considerable discretion about how to assess the true value of the company's goodwill through the calculation of the recoverable amount (Caplan & Harris, 2002; Francis et al., 1996; Sellhorn, 2004.).

Consequently, this study examines the consistency of opportunistic behavior in documenting the variances between discount rates used by companies for the purposes of impairment testing and independently generated estimates of company specific, risk-adjusted discount rates. The CAPM is chosen because it is consistent with the requirement of FRS 136 and the model itself has a potential to describe the relationship between risk and expected return and is used in pricing of risky securities.

The remainder of this study is structured as follows. Next section reviews the literature in relation to this study. The details of the data sample and methodology employed are describes in the following section. Then, the overview and discussion of the key results are presented. The last section offers conclusions and provides implications for future research.

2. Literature Review

The new requirements of accounting for goodwill impairment are not only measuring the difference between market capitalization and net book value. However, it requires

a thorough knowledge of asset valuation methodology and price allocation (Seetharaman et al., 2006). This complexity has led to much debate in the accounting literatures (e.g. Wilson, 1996; Alfredson, 2001; Chen et al., 2004; Bens, 2006; Anatharaman, 2007; Cooper, 2007).

The valuation of goodwill under FRS 136 reflects the underlying economic and a business condition as the reporting is based on current events that affect the business (Moehrle & Reynolds-Moehrle, 2001). This should provide users of financial statements with a better understanding of the expectations and changes in the assets over time, therefore improving their ability to assess future growth and future earnings (Jerman & Manzin, 2008). Yet, the valuation of goodwill impairment is not easy and indeed, impairment testing has been categorized as one of the five most difficult challenges arising from the transition to IFRS (Hoogendoorn, 2006). This is due to the determination of impairment of goodwill that requires significant judgment and estimates and leaves ample room for management interpretation, judgment and bias (Herz et al. 2001).

Judgment and estimation pertains to the identification of CGUs, the assessment of the recoverable amount of the unit, the selection of appropriate market value benchmarks and the selection of key valuation model input parameters including growth rates and risk-adjusted discount rates (Lonergan, 2007). These assumptions adopted in each of these factors have the ability to materially impact outcome of impairment assessment exercises undertaken by reporting entities, especially when using VIU method in estimating the recoverable amount of CGUs. This is consistent from previous studies on different geographical sample where comparing both of the techniques, the VIU method is substantially higher frequency application used among the companies because of the flexibility in the valuation process (Khairi et al. 2012; Carlin et al. 2009; Carlin et al. 2007b; Tran, 2011).

Value in use method can be determined from internal cash flow projections. In fact, the cash flow projections used in the valuation should be taken from the management-approved budgets and forecasts, generally for up to a maximum of the next five years, unless a longer period can be justified, and by extrapolating, using a steady or declining growth rate for subsequent periods.

However, cash flow projections should relate to the CGU in its current condition; future uncommitted restructurings and expenditures to enhance performance should not be anticipated. The expected future cash flows are then discounted to their net

present value to determine value in use, using a discount rate that will include a risk free rate adjusted by any risks specific to the CGU's future unadjusted cash flow estimates.

The determination of CGU's value in use requires the construction of discounted cash flow models, a fact that necessitates a view on the part of reporting entities on factors such as timing of expected cash flows, growth trajectories and risk. The cash flows are estimated with certain assumption that is reflecting this variable. Regarding the importance of discount rates disclosures, Carlin & Finch (2009a) revealed that net present value estimates for recoverable amount can be highly sensitive even to small changes in the discount rates. In order to construct the discounted cash flow model that is used in estimating the CGU recoverable amount, FRS 136 has detailed key inputs and assumptions for companies to use as a specific guideline for testing impairment.

Specifically, referring to FRS 136.55, the discount rate should reflect the time value of money and the risks specific to the asset, in so far as the future cash flow estimates have not been adjusted for these risks. This requirement is consistent with the assumption included in FRS 136.A19 stated that the discount rate is independent of the entity's capital structure and the way entity financed the purchase of the asset. The significant difference between present value under FRS 136 (implement in value in use method) and the present values used in the common DCF models lies in the requirement to use pre-tax amounts for both the future cash flows to be discounted and the discount rate.¹ The detailed explanation of this requirement is stated in the Basis for Conclusion of IAS 36 which stipulates that IAS 36's require to use pre-tax cash flows and discount rates in three separate sections: 'consideration of future tax cash flows' (IAS 36.BC 81-BC 84), 'determining a pre-tax discount rate' (IAS 36.BC 85) and 'interaction with IAS 12' (IAS 36.BC 86 - BC 89).

According to these sections of the Basis for Conclusions, future tax cash flows can affect the recoverable amount in two ways. One is by temporary differences between an asset's tax base and its carrying amount. These temporary differences are covered by, and accounted for, in accordance with IAS 12. More relevant in the context of IAS 36 is the second method mentioned in IAS 36.BC 81(b): 'future tax cash flows that would result (even) if the tax base of the asset were equal to its recoverable amount'.

Intriguingly, IAS 36.BC 84 goes to state that ‘in principle’, value in use should include those cash flows, but then gives two counter-reasons. First, to avoid double counting, the effect of temporary differences needs to be excluded. Secondly, determining value in use would require an ‘iterative and possibly complex computation’. The interaction with IAS 12 and potential double counting is a straightforward issue, and using a pre-tax discount rate simply follows from using pre-tax cash flows.

However, disclosures related to discount rates have tended not to conform to the requirements of FRS 136. The discount rate and required rate of return, which are difficult to estimate with precision, can project serious limitations on the reliability of goodwill impairment measures, even if the estimates are made in good faith (Herz et al., 2001). In addition, Carlin & Finch (2009a) have proved that in practice, there are some cases where companies using value in use method failed to disclose any details of the discount rate used in estimating the recoverable amount although they are required to do so.

The importance of discount rate selection is apparent from the requirements of FRS 136. The standard makes clear that the discount rate employed for the purposes of transforming CGU future cash flow estimates to their present values are required to relate into the risk characteristics of each CGU. This engenders the expectation that companies assigning goodwill to multiple CGUs should also adopt multiple appropriate risk adjusted discount rates for the purposes of recoverable amount estimation. However, available empirical evidence in three different jurisdictions demonstrated that in a substantial number of instances, companies disclosed the application of a single discount rate as an element of the estimation of the recoverable amount of all CGUs (Carlin & Finch, 2008; Carlin et al., 2009b; Carlin & Finch, 2010).

In fact, Carlin et al. (2007a) show on two case studies that a 100 basis point increase in the discount rate will reduce the value in use by 8.5% or 14.5% respectively, depending on the investigated company. Depending on the goodwill amount on the balance sheet (high) and the amount of the net profit of the company (low), such evidence implies that changes in the discount rate could, under certain circumstances, even overturn profit into a loss.

Furthermore, companies should arrive at an appropriate discount rate in accordance with FRS 136, regardless of which starting point is used. Previous studies showed

that the use of CAPM is a popular method because of the availability of the key variables of its model (Husmann & Schmidt; Carlin & Finch, 2009a). CAPM is an established model of finance and used as an economic model for valuing stocks, securities, derivatives and/or assets by relating risk and expected return. CAPM is based on the idea that investors demand additional expected return (called the risk premium) if they are willing to accept additional risk. Sharpe (1964), Lintner (1965) and Mossin (1966) developed the earliest model attempting to estimate the expected return of capital assets in the 1960s, which is an extension of the one period mean-variance model of Markowitz (1952) and Tobin (1958).

In spite of rising criticism in the empirical academic literatures, several established studies broadly supportive of the Sharpe-Lintner-Mossin CAPM, include Fama & MacBeth (1973), Ariff & Johnson (1990) and Chen (2003). Further, CAPM is widely used both by practitioners and academics, since it provides a framework for conceptualizing of risk and required return on a risky investment (e.g. Gitman & Mercurio, 1982; Bruner et al., 1998; Gitman & Vandenberg, 2000; Graham & Harvey, 2001; Bartholdy & Peare, 2004). Because it is an established methodology (e.g. Kieso & Weygandt, 1992; Copeland et al., 2000; Boyd, 2003; Bradley & Myers, 2003; Stegink et al., 2007). CAPM was used in this study to provide meaningful information in analyzing the accuracy and appropriate discount rate for the assessment of risk specific to CGUs' asset. The next section details of the data selection procedures and methodology used.

3. Data Selection and Methodology

3.1 Data Selection

The main objective of this study is to examine the variation between discount rate used by companies for the purposes of impairment testing and independently generated estimates of company specific risk adjusted discount rates. This study examines the selection of 20 top listed companies on the Bursa Malaysia that have released their 2010 and 2011 annual reports with reported goodwill. The 2010 was chosen because it is a year after amendment have been done on the standard with the expectation that those companies really understand and be able to disclose valuable information related to the discount rate disclosure. Details of sample, value of their goodwill balances and total assets are set out in Table 1.

3.2 Methodology

This study compare the single discount rates disclosed by 20 top listed companies in Bursa Malaysia that have reported goodwill in their annual report in 2010 and 2011 with independently generated discount rates and analyzed using the CAPM and goodwill intensity.

THE CAPITAL ASSET PRICING MODEL (CAPM):

This model takes into account the current market assessment and the risks specific to the CGU assets, which makes it the preferred method to estimate an appropriate discount rate. Several steps are taken in calculating the CAPM as follows:

1. Obtaining the levered beta (β_L) for each company from the Worldscope DataStream database by Thomson Financial as at December 2010 and 2011. The beta measures of market risk shows the relationship between the volatility of the stock and the volatility of the market. This coefficient is based on between 23 and 35 consecutive month-end price percent changes and their relatively to a local market index.
2. Then, the levered beta (β_L) was adjusted by the book-value leverage ratio specific to each company,ⁱⁱ and the company tax rate, to derive the unlevered asset beta (β_u) using the Hamada (1972) equation shown below at Equation 1:

$$\beta_u = \beta_L / [1 + (D/E) * (1 - t)] \quad (1)$$

Where:

- β_u = the unlevered asset beta of the company
- β_L = the levered beta of the company
- D/E = the book-value leverage ratio of the companyⁱⁱⁱ
- T = company marginal tax rate, being 25% in 2010 and 2011^{iv}

3. Next, based on the unlevered asset beta (β_u) obtained above, a comparison discount rate for each company was derived using the CAPM as shown in Equation 2:

$$r_a = r_f + \beta_u * (r_m - r_f) \quad (2)$$

Where:

r_a = the expected after-tax rate of return specific to the company's assets

r_f = the long-term risk free rate

β_u = the unlevered asset beta of the company^v

$r_m - r_f$ = the market risk premium for equity shareholders

The long-term risk free rate (r_f) assumes a value of 4.00% in 2010 and 3.69% in 2011 being the average 10-year Malaysian Government Securities yield as at 2010 and 2011. The expected market risk premium for equity shareholders ($r_m - r_f$) assumes a value of 8.10% in 2010 and 8.46% in 2011. These figures are consistent with a model from Damodaran (2009) through Equation 3 below:

$$\text{Market Risk Premium} = \text{Base Premium for Mature Equity Market} + \text{Country Risk Premium} \quad (3)$$

The base premium for mature equity market is a value of 6.30% in 2010 and 6.73% in 2007^{vi}. The country risk premium from the above model is expected to reflect the extra risk (e.g. political chaos, nationalization and economic meltdowns) in a specific market and the historical data for country risk premium for Malaysia is 1.80% in 2010 and 1.73% in 2011^{vii}.

4. Finally, the expected after-tax rate of return specific to the company's assets (r_a) was adjusted to reflect a pre-tax comparison discount rate by dividing the value by 0.75, being 1 minus the company tax rate of 25% for year 2010 and 2011.

The estimated discount rates resulting from the above process were compared with those disclosed by each of the sample. Companies in the sample are allocated to one of five categories: >250bp below expectation; >150bp <250bp below expectation; within expected range (+/- 150 bp); >150bp <250bp above expectation and >250bp above expectation. Details are explained in Table 4.

GOODWILL INTENSITY:

Goodwill intensity is a measure of the sensitivity of sample companies' to changes in goodwill valuation and in particular of earnings streams to potential impairment

charges and it is measured using Equation 4 below:

$$\text{Goodwill intensity} = \text{Goodwill} / \text{Net profit before tax} \quad (4)$$

There are several indications of the position of companies related to their results in the goodwill intensity measure. The results of goodwill intensity are as follows:

1. Goodwill intensity score of greater than 1.0. Indicates a high degree of sensitivity to a current period loss as a result of an impairment expense. The greater the goodwill intensity value, the greater the risk of losses in the current period.
2. Goodwill intensity score of greater than zero but less than 1.0. Indicates a lower degree of sensitivity to a write-down in current period profit as a result of an impairment expense.
3. Goodwill intensity score of less than zero. Indicates the company is already unprofitable and any impairment expenses will only further increase current period losses.

Again, the sample in 2010 and 2011 were categorized into five categories i.e. >250 bps below expectation, >150 bps, <250 bps below expectation, within expected range +/- 150 bps, >150 bps, <250 bps above expectation and >250 bps above expectation. As an example, companies which fell between 150 and 250 bps above expectation and greater than 250 bps expectation were regarded as overstating their discount rate and vice versa. Additional analysis is to determine whether there is any significant differences exist between the five categories and to arrive at logical conclusion on the sample data. The results of the analysis are set out in section below.

4. Results

It was a necessary precondition for inclusion in the sample employed for the purpose of this study that companies disclosed only one discount rate. Yet, FRS 136 stipulates clearly that discount rates employed for the purposes of impairment testing should relate to the underlying risk characteristics of each CGU. Of course, in some instances, goodwill will be associated with one CGU only, meaning that for all practical purposes, only one defined discount rate will be required for the purposes of satisfying the requirements of the Standard. However, Table 2 indicates that only 5 companies (25%) in 2010 and 4 companies (20%) in 2011 disclosed only one CGU. This result suggests that top 20 companies listed in Bursa Malaysia were not fulfilling the basic requirements of FRS 136, especially on the validity of the risk homogeneity

proposition implicit in the determination that a single discount rate should be employed in the impairment testing procedure.

Additionally, it is noticeable that companies failed to comply with the requirement of the FRS 136 where they define more CGUs in determining their recoverable amount. 2 companies (10%) in 2010 and 3 companies (15%) in 2011 disclosed two CGUs for the purposes of impairment testing. Then, 12 companies (60%) in both 2010 and 2011 of observed cases disclosed three to five CGUs and only 1 company (5%) disclosed more than five CGUs in both 2010 and 2011. As a consequent, the quality of the disclosures made pursuant to FRS 136 is lessened, and the capacity of financial reporting user groups to independently evaluate and assess the extent to which values are assigned to goodwill in making their investment decision, is also diminished.

As the number of defined CGUs grows, it becomes increasingly difficult to accept the validity of the risk homogeneity proposition implicit in the determination that a single discount rate should be employed for the purposes of impairment testing. There is the possibility that even where multiple CGUs are defined, their risk characteristics are similar, in effect justifying the application of a blanket discount rate for the purpose of impairment testing. This is important because various types of operations may have differing prospects of growth, rates of profitability, and also degrees of risk. This does not reduce the appropriateness of the research method employed in this study. Again, the result in Table 2 provides evidence of the possibility that inappropriate discount rates are being employed in the impairment testing processes conducted by top 20 listed companies in Bursa that have reported goodwill in their annual report.

Where goodwill is not material, the application of inappropriate discount rates is unlikely of itself to substantially reduce the decision usefulness of information contained in financial reports. Yet, for companies included in the sample, it is evident that goodwill was material in general, particularly when benchmarked against reported before-tax earnings. Goodwill intensity^{viii} represents a measure of the sensitivity of companies to changes in goodwill valuation and in particular or earnings streams to potential impairment charges. Table 3 explains the goodwill intensity of the sample in year 2010 and 2011.

Across the sample, Table 3 reports that 5 companies (25%) in both 2010 and 2011 have goodwill intensity greater than 1.0 that indicated that those companies are high degree of sensitivity to a current period loss as a result of an impairment testing.

Specifically, Southern Steel Berhad recorded the highest of goodwill intensity of 5.444 in 2010 while Chemical Company of Malaysia Berhad is at 4.897 in 2011. In contrast, Air Asia Berhad is lowest in 2010 at 0.008 of goodwill intensity and in 2011; Tradewinds Plantations Berhad is recorded only 0.055. Both Air Asia Berhad and Tradewinds Plantations Berhad are categorized of goodwill intensity that a score greater than zero but less than 1.0 which indicates that these companies experienced of lower degree of sensitivity to a write-down in current profit as a result of an impairment expense. The most striking features from the table is Southern Steel Berhad where in 2010 the company score the highest of goodwill intensity of 5.444. Meanwhile, in 2011 the company only scores 0.243 of goodwill intensity. Thus, suggesting that significant changes in proportionate impairment of goodwill will generate misappropriate impacts on earnings.

Overall, it is apparent that the requirement to recognize an impairment charge against goodwill results has a material impact on the reported earnings. Consequently, in a bid to defend against the prospect of such an unwelcome state of affairs, it is possible that in modeling the CGU recoverable amount, some companies may have used lower than appropriate discount rates. The impact of the application of such a stratagem is to increase the likelihood that estimates of the CGU recoverable amount exceeds CGU book value and to increase the level of 'headroom' between CGU book value and recoverable amount estimates. Opportunism may potentially also manifest in the opposite direction, via the application of excessive discount rates. This is consistent with the findings of Massoud & Raiborn (2003) who described impairment testing gave flexibility to management to calculate either impairment or non-impairment occurring in the goodwill impairment process.

The provision of the information regarding variances between independently estimated and observed actual discount rate is important because of the potential inaccuracy in estimating discount rates, especially when user groups assessing the information provided in making investment decisions. Any technique for estimating discount rates is subject to potential error, thus interpretation of variances between independently estimated and observed actual discount rates requires a degree of care. The next analytical framework used in this study is to analyze the discount rate variance. Consequently, any observed companies that fell within a band of plus or minus 150 basis point (bps) of the independently estimated discount rate were categorized as a reasonable expected range and thus not consistent with the notion of bias in the selection of discount rates.

By contrast, variances between expected and observed discount rates of a magnitude of 150 bps cannot be as readily explained as the product of estimation error, and may be consistent with the existence of systematic bias on the part of listed companies in the selection of discount rates for the purposes of impairment testing (Carlin & Finch, 2009a). Determining the appropriate ‘tolerance threshold’ is challenging, particularly bearing in mind concerns which have been raised in the literature about the high standard error terms in CAPM-based estimates of the cost of equity capital (Fama & French, 1997). This is consistent with Wang (2005) who describes goodwill impairment as involving complex estimations that are difficult to comprehend. However, there is substantial evidence that the dominant approach used by listed companies to develop their cost of capital estimates is CAPM (Graham & Harvey, 2001; Bancel & Mittoo, 2003; Brutting, 2011).

Thus in this study, the application of CAPM as a basis for cost of capital estimation likely corresponds tightly to the approaches used internally by sample companies for this purpose, justifying the use of a tighter rather than a narrower tolerance threshold. Alternative approaches could have anchored individual company tolerances to beta standard errors. Table 4 contains details of variances categorized by the magnitude and direction of the differential between estimated and observed discount rates across the sample.

Table 4 shows that only 4 (20%) companies in 2010 and 3 (15%) companies in 2011 out of 20 companies included in the sample disclosed the use of discount rates that fell in the range of 150 bps around the estimate. The proportion of companies whose discount rates fell into this category decreased by 33.33%. Only 2 (10%) companies which are Telekom Malaysia Berhad and Top Glove Corporation Berhad consistently disclosing the use of discount rates which fell in a within range of 150 bps of the estimation through 2010 to 2011. These companies are assumed to provide meaningful information in the selection of discount rates in the impairment testing process. Still, it is clear that a progressively smaller number of companies employed discount rates which would appear to have been providing meaningful information to group users in making investment decision.

In those instances where observed discount rates lay more than 150 bps from the estimated value, the dominant pattern was for observed discount rates to be lower rather than higher than estimated value. This was the case for 15 companies in both 2010 and 2011, with 14 companies (70%) in 2010 and 13 companies (65%) in 2011 in which observed discount rates were in excess of 250 bps lower than the independent

risk adjusted estimate. Therefore, the data provides evidence of the use of aggressively low discount rates, with the result that CGU asset portfolio recoverable values will have been overestimated and potential goodwill impairment losses deferred or avoided. The consequences of this type of activity could extend to overstatements of earnings and net assets, understatements of leverage and reduced reporting transparency.

By contrast, only 1 (5%) company (Axiata Group Berhad) in 2010 and 2 (10%) companies (Axiata Group Berhad and AirAsia Berhad) in 2011 disclosed discount rates that lay substantially above the discount rates estimates. Companies that fell into this category used higher pre-tax discount rates that could be considered 'incongruously low'. However, opportunism may potentially lead to results in the opposite direction, via the application of excessive discount rates and thus, fail to provide any meaningful information on the goodwill impairment testing process. In other words, those companies' recoverable amount is below the CGU book value and they are in a low profit position. The management of those companies usually have chosen their desired profit at an early stage and used the impairment process as an income manipulation and smoothing device in the company's financial reporting. Based on the above results, it proved that under the new goodwill impairment regime, companies now have a greater volatility in earnings and traditional measures of return.

The trend in the Table 4 is assumed to be influenced by several factors. One such possibility is the existence of a systematic bias in the independent discount rate estimates. In this case, the methodology employed plays an important role in influencing the pattern of variances between estimated and observed discount rates. A combination of methodologies was employed for multi year analysis, comprising of, first, published betas at an upper value of 3.88 (2010) and 4.2 (2011) in a bid to reduce the outliers. Second, the risk free rate employed at 4.00% (2010) and 3.69% (2011) falls at the lower end of the generally accepted range. Third, the market risk premium of 8.10% (2010) and 8.46% (2011) also falls at the low end of the generally accepted range of values assigned to this variable discount rates modeling and fourth, levered betas were transformed to unlevered betas using the Hamada equation, which is a process for estimating leverage likely to produce higher rather than lower values. As a consequence, the estimation of risk-adjusted discount rates is reduced as the unlevered betas are inferred in the analysis of the company's observed discount rates. Overall, the figures of the important elements in the methodology are in an acceptable range of values assigned to the variable discount rate modeling.

5. Conclusion

Discount rate selection represents a centrally material factor impacting valuation models. The judgment exercised by companies in discount rate selection is important in influencing the result of the impairment testing process conducted under IFRS. This is due to a strong dependence on discounted cash flow modeling as a basis for determining an asset's recoverable amount. This study focused on the use of discount rates in the IFRS goodwill impairment testing by comparing the discount rates disclosed by a sample of top 20 Malaysian companies with independently generated discount rates in 2010 and 2011.

This study provides evidence consistent with opportunism on the part of financial statement preparers, by demonstrating the existence of variances between independently generated discount rates and those disclosed by companies. The dominant pattern was for observed discount rates to be lower rather than higher than the estimated value, with 15 (75%) companies of the 20 both in 2010 and 2011 in excess of 150 bps lower than independent risk-adjusted estimate (as evident in Table 4). Therefore, the data provided evidence of the use of aggressively low discount rates, with the result that CGU asset portfolio recoverable amount values will have been overestimated and potential goodwill impairment losses deferred or avoided.

On the other hand, only 3 companies in 2010 and 4 companies in 2011 disclosed the use of discount rates that fell within the expected range, and it is clear that only a small number of sample companies employed discount rates that would provide meaningful information for group users in making investment decisions. This is consistent with Hope (2003) who assumed that if accounting standards are not complied with they will be of little value. This deficiency may result in a decreased ability for external user groups to completely assess company's performance. It also indicates that the adoption of new and complex reporting frameworks could affect the preparation and presentation of financial statements and challenge the capability of financial statement preparers and auditors. The application of FRS 136 was mandatory for all companies, yet the results showed the majority of companies failed to comply with the basic requirement of the standard.

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Tables

Table 1 – Overview of Research Sample

No	Company Name	Total Goodwill (in million)		Total Assets (in million)		Single Discount Rate 2010 2011 (%) (%)	
		2010	2011	2010	2011	2010 (%)	2011 (%)
1	MISC BERHAD	747	693	41060	38317	2.00	2.00
2	YTL CORPORATION BERHAD	4348	4570	46060	48266	5.50	6.80
3	AXIATA GROUP BERHAD	7314	7333	38101	40551	17.60	16.70
4	TELEKOM MALAYSIA BERHAD	310	310	20781	21372	12.40	12.90
5	IOI CORPORATION BERHAD	514	512	17343	19655	14.03	12.50
6	STAR PUBLICATIONS	54	79	1364	1585	7.88	7.88
7	AIRASIA BERHAD	9	149	13240	13906	10.00	13.00
8	TOP GLOVE CORPORATION	20	20	1372	1423	10.00	13.00
9	DIALOG GROUP BERHAD	5	19	894	1082	13.00	13.00
10	KFC HOLDINGS (MALAYSIA)	50	51	1583	1838	9.93	9.93
11	KPJ HEALTHCARE BERHAD	136	167	1680	1959	12.00	12.00
12	SUPERMAX CORPORATION	29	29	1065	1205	3.74	3.84
13	MALAYSIAN PACIFIC INDUSTRY	12	12	1439	1420	7.60	7.60
14	TA ANN HOLDINGS BERHAD	14	13	1566	1696	7.00	7.00
15	QSR BRANDS BHD	81	82	2410	2728	9.65	9.65
16	CHEMICAL COMPANY OF M'SIA	284	284	2010	1995	5.50	5.65
17	LION INDUSTRIES CORP	130	130	6056	6026	8.00	8.00
18	TRADEWINDS PLANTATION	26	26	3015	3800	5.00	5.00
19	SOUTHERN STEEL BERHAD	49	49	1752	2270	8.44	8.44
20	TSH RESOURCES BERHAD	51	50	1866	2008	7.35	7.35

Details of sample, value of their goodwill balances and total assets

Table 2 – Number of Defined CGUs by Industry Sector

No	Company Name	1 CGU		2 CGU		3 CGU		4 CGUs		5 CGUs		>5 CGUs	
		2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
1	MISC BERHAD	-	-	-	-	1	-	-	1	-	-	-	-
2	YTL CORPORATION	-	-	-	-	-	-	-	-	-	-	1	1
3	AXIATA GROUP	-	-	-	-	1	1	-	-	-	-	-	-
4	TELEKOM (M)	-	-	1	1	-	-	-	-	-	-	-	-
5	IOI CORPORATION	-	-	-	-	1	1	-	-	-	-	-	-
6	STAR P'LICATION	-	-	-	-	-	-	-	-	1	1	-	-
7	AIRASIA BERHAD	1	-	-	1	-	-	-	-	-	-	-	-
8	TOP GLOVE CORP	-	-	-	-	1	1	-	-	-	-	-	-
9	DIALOG GROUP	-	-	-	-	1	1	-	-	-	-	-	-
10	KFC HOLDINGS	-	-	-	-	1	1	-	-	-	-	-	-
11	KPJ HEALTHCARE	-	-	-	-	1	-	-	1	-	-	-	-
12	SUPERMAX CORP	1	1	-	-	-	-	-	-	-	-	-	-
13	MALAYSIAN PAC	1	1	-	-	-	-	-	-	-	-	-	-
14	TA ANN HOLDINGS	-	-	-	-	-	-	-	-	1	1	-	-
15	QSR BRANDS BHD	-	-	-	-	1	1	-	-	-	-	-	-
16	CCM BERHAD	-	-	1	1	-	-	-	-	-	-	-	-
17	LION INDUSTRIES	1	1	-	-	-	-	-	-	-	-	-	-
18	TRADEWINDS PLAT	1	1	-	-	-	-	-	-	-	-	-	-
19	SOUTHERN STEEL	-	-	-	-	1	1	-	-	-	-	-	-
20	TSH RESOURCES	-	-	-	-	1	1	-	-	-	-	-	-
TOTAL		5	4	2	3	10	8	0	2	2	2	1	1

Table 3 – Company Goodwill Intensity by Industry Sector

No.	Company Name	Goodwill Intensity (Goodwill /NPBT)	
		2010	2011
1	MISC BERHAD	0.819	0.309
2	YTL CORPORATION BERHAD	1.909	1.943
3	AXIATA GROUP BERHAD	2.281	2.050
4	TELEKOM MALAYSIA BERHAD	0.228	0.310
5	IOI CORPORATION BERHAD	0.201	0.179
6	STAR PUBLICATIONS (MALAYSIA) BHD	0.208	0.315
7	AIRASIA BERHAD	0.008	0.359
8	TOP GLOVE CORPORATION BERHAD	0.066	0.138
9	DIALOG GROUP BERHAD	0.033	0.095
10	KFC HOLDINGS (MALAYSIA) BHD	0.225	0.237
11	KPJ HEALTHCARE BERHAD	1.079	1.084
12	SUPERMAX CORPORATION BERHAD	0.158	0.259
13	MALAYSIAN PACIFIC INDUSTRIES BHD	0.141	0.143
14	TA ANN HOLDINGS BERHAD	0.141	0.060
15	QSR BRANDS BHD	0.303	0.304
16	CHEMICAL COMPANY OF MALAYSIA BERHAD	4.814	4.897
17	LION INDUSTRIES CORPORATION BHD	0.279	1.226
18	TRADEWINDS PLANTATION BERHAD	0.092	0.055
19	SOUTHERN STEEL BERHAD	5.444	0.243
20	TSH RESOURCES BERHAD	0.486	0.309