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SINGAPOREAN AUDIT QUALITY AND THE COMPLEXITY OF FRS 36 DISCLOSURES REQUIREMENTS

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Theories of audit quality hypothesize higher quality audits associated with larger audit firms. The relationship between size and quality is derived from DeAngelo (1981) which is widely cited in the literatures as the basis for pooling big and small auditors when testing for audit quality differences among auditors. This study addresses this concern empirically by investigating the influence of audit quality on the use of the yearly goodwill impairment testing. Specifically, this study focuses on compliance with the requirements under FRS 36 among the Singapore firms whose 2005, 2006 and 2007 financial accounts have been audited by Big-4 or non Big-4 auditors. Consequently, this study constructed an appropriate methodology that able to distinguish audit quality between Big 4 and non Big-4 audit firms and attempt to question the homogenous audit quality assumption. The results of the study, using six analytical frames reveal that compliance level and disclosure quality are systematically failed to comply with even basic elements of the FRS 36 disclosure requirements in relation to goodwill impairment testing.

Field of Research: Financial Reporting Standard, Audit

1. Introduction

The concern about the quality of accounting numbers and its relation with the quality of the auditing process is increasing over time following periodical clusters of business failures, frauds, and the litigation (Chambers, 1999, Tie, 1999, Ebrahim, 2001). The auditing process is supposed and expected to serve as a monitoring device (Wallace, 2004) that will reduce managers' incentives to manipulate the business operation. Prior studies into the quality of audits by audit suppliers assume that larger size audit firms can provide better monitoring and have greater expertise relative to clients' financial statements than smaller audit firms (DeAngelo, 1981, Lennox, 1999a, 1999b, Ashbaugh and Warfield, 2003). This aura of quality has been argued to stem not just from the technical expertise and processes brought to bear by larger firms, but also because large firms enjoy better reputations, have higher brand equity and are likely to be highly concerned to protect these (DeAngelo, 1981, Dodd et al., 1984, Nasser et al., 2006).

As the decision by Accounting Standards Council (ASC) to adopt the new and revised financial reporting standards (FRS) which are modelled closely with IFRS, it believed that this decision significantly increase the opportunity for research into the impact of expertise disruption on

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audit quality. As that, auditor incentives to enforce compliance with the standard by their client firms and limit the extent of discretion exercised by client firm management for earnings management purposes, are likely to result in less misreporting. To help test the hypothesis of audit firm size versus audit quality, this study adds to the literature by empirically examining whether Big-4 auditors are more likely to provide higher quality financial disclosures than non Big-4 auditors by examining the highly technical disclosure requirements under the goodwill impairment testing provisions among a sample of Singaporean listed firms over a three year period of observation. Specifically, the degree of technical compliance with the disclosure requirements of FRS 36 is used as a proxy for measuring the degree and variances between the auditors in relation to the complex provisions of the IFRS impairment testing regime.

This study is part of the larger research and the results reported later are based on three consecutive years of 2005, 2006 and 2007. The primary reason for choosing these particular years is that the Standard related to impairment of assets have been applied in Singapore for the annual period beginning on or after 1 July 2004. Therefore, the 2005 annual reports represents the first year in which substantial quantities of financial statements prepared by Singapore firms in accordance with the requirements of the Standard have become available for inspection, whereas the 2007 annual reports were the latest information available at the time of data collection.

This study is organized as follows. Section 2 presents the related literature review and followed by Section 3, which identifies the sample selection and methodology used of the study. Section 4 examines the audit quality as assess from the level of compliance and quality of disclosure, and finally Section 5 provides a summary of the findings and a conclusion.

2. Literature Review

Theories of auditor quality, including those based on “deep pockets”, “better resources” and “firm branding” has been commonplace to postulate higher quality audits associated with larger audit firms. This relationship between size and quality is derived from the theory of DeAngelo (1981) who tested for differences among auditors along a number of dimensions. The DeAngelo theory has received empirical support from many scholars whose results provide consistent evidence that the big auditor firms, generally, provide a higher quality audit than their counterparts (Davidson and Neu, 1993, Mutchler et al., 1997, Becker et al., 1998, Colbert and Murray, 1998, Lennox, 1999b, Street and Gray, 2002, Hodgdon et al., 2009). Basically, this relationship means that the larger the audit firm size, the greater the quality of audit in firm’s financial report. While prior research has polarised the issue of quality differentials among large and small size audit firms, several researchers have found no evidence of audit quality differentials among large auditors, suggesting that audit quality among large firms is homogenous (e.g. Simunic, 1980, Nichols and Smith, 1983, Wyer et al., 1988, Eisenberg and Macey, 2003, Ali et al., 2004, Tilis, 2005). Thus, while the preponderance of views within the audit quality literature appears to continue to support the proposition that the quality of audits undertaken by large firms exceeds that of audits carried out by smaller firms, there is little evidence strongly supportive of quality differentials between large firms. For that reason, at least in the minds of some authors, events such as the bankruptcy of Enron and the related

collapse of Arthur Anderson have undermined confidence in the assertion that large audit firms are associated with higher audit quality.

From an auditor's perspective, in encourage compliance of IFRS, the role of independent audit and audit quality become important first-line responses (Hodgdon et al., 2009). However, it is not clear that enhanced disclosure challenges, particularly those with greatest impact in the notes to the accounts, are universally well dealt with in the context of financial statement audits. A study by Libby *et al.* (2006) signify on auditor tolerance for misstatement on financial reporting indicated a far higher level of sensitivity on the part of Big-4 audit firm partners to adjustments impacting the balance sheet and or profit and loss statements than those whose impact was limited to the notes only. If these results are generalized beyond the setting in which they were generated, then this study suggests that the implementation of FRS 36, replete as it is with complex note form disclosure requirements, represents a useful focal point for research which may yield interesting insights into audit quality in the face of change and complexity.

For the purposes of this study, a number of note form disclosures are of particular interest. The first of these is relate to the role of CGUs as defined under FRS 36, and the second relate to the key assumptions surrounding the estimation of recoverable amounts. The data and methodology is discussed in the next section.

3. Data and Methodology

This study covers the first three years of reporting post IFRS adoption in Singapore. DataStream was used to identify firms listed on the Singapore Stock Exchange (SGX) in each of the three years' post adoption, being 2005, 2006 and 2007. Given that the focal point of this research is the complex note form disclosures related to goodwill impairment testing under FRS 36, then only firms with goodwill were of interest. Accordingly, the final sample comprised 168 firms that were listed across the entire period of interest and which had goodwill in each of the three years. At the date of sampling, the 168 firms included in the final sample controlled assets valued at $708,453, $781,494 and $886,975 million, which included total goodwill of $27,018, $34,234 and $33,763 million for 2005, 2006 and 2007 respectively. Table 1 sets out basic descriptive data relating to the research sample for the years investigated, while Table 2 shows the number of firms audited by each of the Big-4 and non Big-4 auditor included RSM Chio Lim, Baker Tilly TFWLCL, BDO Raffles, Foo Kon Tan Grant Thornton, Grant Thornton, Howrat First Trust, LTC & Associates, Mazars Moores Rowland LLP, Moore Stephens, Nexia Tan & Sitoh, Paul Wan & Co. and Ng, Lee & Associates – DFK., by industry sector. Meanwhile, Table 3 summarizes the key descriptive of the sample classified by auditor. It is worth noting that in the Singaporean market, financial sector firms are exclusively audit by Big-4 auditors. Additionally, the proportion of goodwill relative to assets, on average, for clients of Deloitte had the highest percentage compared to other auditors. As a result, it is indicated that the potential earnings sensitivity of Deloitte clients to impairment losses on goodwill write downs was on average higher than for clients of other audit firms as measured through the ratio of goodwill over net profit before tax.

A vital empirical frame of analysis under this study is to measure the extent to which the clients of Big 4 and non-Big 4 audit firms strictly adhere to the complex disclosure requirements under FRS 36. Through this analysis, this study is able to produce a potential variation in the audit quality and consistency in current practice of goodwill impairment disclosure among the Singapore listed firms. As that, this study adopted a methodology from previous goodwill compliance and audit quality studies by Carlin *et al*., (2007b, 2007a). Their study proposed six analytical frames to measure the degree and variances in audit quality. The six analytical frames procedures are explain as follows;

First, categorizing each firms according to the choice of method employed in estimating the recoverable amount of CGU assets and sorted by auditor. These allowable choices of method include a value in use approach to recoverable amount estimation, a fair value approach or a combination of these two (that is, the use of value in use in some CGUs and the recourse to fair values in others).

Second, the firms were sorted by audit firm, according to whether they allocate all the value of goodwill to the CGUs, for the purpose of impairment testing or whether there is no meaningful information indicates that how or if the value of goodwill being allocate to CGUs. If the total disclosed goodwill of the firm is less than the total value of goodwill allocated to CGUs, the quality and completeness of disclosure is classified as lower, and vice versa. It is a basic requirement of FRS 36 that allowing financial statement user groups to reconcile between the headline values ascribed to goodwill on balance sheet and the subcomponents of that balance split between CGUs.

Third, the firms were sorted by audit firm according to the relationship between the number of industry segments they defined for reporting purposes and the number of CGUs defined for the purposes of goodwill impairment testing. The important aspect in this analytical frame is to look at the CGU aggregation behaviour.

Fourth, compare the number of CGUs and business segments for firms according to audit firm identity. This analysis builds upon the procedure described in step three (above). This is done by calculation of the CGU to business segment ratio for each firm where effective disclosure existed to support such a calculation. The important aspect in this analytical frame is to look at the level of aggregation of CGUs by those firms.

Since most of the sample employed value in use method, the fifth analytical frame is built to inspect the keys assumption that the recoverable amount of CGU has been estimated. The firms were sorted by audit firm, according to the disclosure quality of discount rates used in the impairment testing process. The “multi-classification taxonomy” was applied for discount rates disclosure where each firm in the sample to allocate to one of four categories i.e. “multiple explicit discount rates”, “single explicit discount rates”, “range of discount rate”, and “no effective disclosure”.

The final the sixth analytical frame relates to rating the growth rates disclosures in a similar fashion as step five (above).

Table 1- Overview of Research Sample

Sector	Total Assets (SGD Million)			Total Goodwill (SGD Million)			Goodwill as % of Total Assets		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Commerce & Diversified (n=9)	12,457	15,101	18,798	229	219	314	1.84	1.45	1.67
Construction (n=17)	7,883	10,427	10,730	407	373	305	5.16	3.58	2.84
Drugs, Cosmetics, Healthcare & Chemicals (n=8)	1,487	1,541	2,029	35	39	68	2.38	2.53	3.35
Electrical & Electronic (n=22)	7,971	9,148	9,673	242	813	871	3.04	8.89	9.00
Financials (n=13)	539,834	601,500	689,968	7,743	13,273	13,154	1.43	2.21	1.91
Food & Beverages (n=8)	1,775	2,365	2,410	89	87	94	5.01	3.67	3.88
Machinery & Equipment (n=14)	2,187	2,211	2,482	310	241	278	14.18	10.88	11.18
Manufacturing (n=18)	23,289	28,692	27,069	5,627	4,418	4,850	24.16	15.4	17.92
Metal Product Manufacturers (n=13)	6,009	5,032	6,979	136	148	146	2.27	2.95	2.09
Miscellaneous (n=17)	16,853	19,469	24,927	1,114	3,313	2,367	6.61	17.02	9.49
Retailers, Textiles & Apparel (n=10)	2,848	3,477	3,925	429	629	628	15.04	18.09	16.01
Utilities & Transportation (n=19)	85,861	82,531	87,986	10,656	10,681	10,690	12.41	12.94	12.15
TOTAL (n=168)	**708,453**	**781,494**	**886,975**	**27,018**	**34,234**	**33,763**	**3.81**	**4.38**	**3.81**

Table 2 – Number of Firms Audited by Sector

Sector	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
Commerce & Diversified (n=9)	-	-	-	3	3	2	1	1	2	2	2	2	3	3	3
Construction (n=17)	2	3	3	6	4	4	3	3	3	3	3	3	3	4	4
Drugs, Cosmetics, Healthcare & Chemicals (n=8)	1	1	1	6	6	6	-	-	-	-	-	-	1	1	1
Electrical & Electronic (n=22)	5	5	5	4	3	2	4	4	4	1	2	1	8	8	10
Financials (n=13)	1	2	2	5	5	5	2	3	3	5	3	3	-	-	-
Food & Beverages (n=8)	1	1	1	2	3	3	3	2	2	2	2	2	-	-	-
Machinery & Equipment (n=14)	5	5	5	6	6	6	1	1	1	-	-	-	2	2	2
Manufacturing (n=18)	6	6	6	8	8	8	-	-	-	1	1	1	3	3	3
Metal Product Manufacturers (n=13)	2	2	2	3	3	3	2	1	1	2	2	2	4	5	5
Miscellaneous (n=17)	3	2	2	5	4	4	1	2	2	6	6	6	2	3	3
Retailers, Textiles & Apparel (n=10)	-	-	-	4	4	4	3	3	3	1	1	1	2	2	2
Utilities & Transportation (n=19)	2	2	3	6	6	6	3	4	5	5	4	2	3	3	3
TOTAL (n=168)	**28**	**29**	**30**	**58**	**55**	**53**	**23**	**24**	**26**	**28**	**26**	**23**	**31**	**34**	**36**

Table 3 - Descriptive Statistics of Firms by Auditor

Description	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
Mean Market Capitalization (SGD million)	653	971	2,785	1,586	1,977	2,685	803	2,119	2,691	3,668	2,907	1,645	135	180	327
Mean Total Assets (SGD million)	1,101	1,732	2,788	7,199	8,630	10,001	1,619	8,316	8,601	7,470	2,302	891	441	410	437
Mean Goodwill (SGD million)	210	191	514	105	211	235	33	147	139	501	506	78	9	10	12
Mean NPBT (SGD million)	48	109	274	140	212	250	79	253	324	336	267	120	14	49	90
Goodwill as % assets (financials)	0.71%	0.94%	0.39%	1.32%	2.52%	2.20%	0.42%	1.62%	1.37%	1.86%	0.33%	0.38%	-	-	-
Goodwill as % assets (non-financials)	19.21%	15.01%	22.76%	2.63%	2.53%	3.72%	3.64%	3.85%	3.82%	18.33%	23.69%	6.07%	2.02%	2.53%	2.79%
Goodwill as % assets (all sectors)	19.01%	11.03%	18.45%	1.46%	2,52%	2.36%	2.04%	1.84%	1.62%	6.70%	21.99%	5.28%	2.02%	2.53%	2.79%
Ratio of Goodwill : NPBT	4.37 : 1	1.75 : 1	1.88 : 1	0.75 : 1	0.99 : 1	0.94 : 1	0.42 : 1	0.58 : 1	0.43 : 1	1.49 : 1	1 .89 : 1	0.65 : 1	0.63 : 1	0.21 : 1	0.14 : 1

4. Empirical Results

Table 4 presents firms' choice of method in estimating the recoverable amount of CGUs. The data illustrates the dominant method was value in use and the table shows that the number of firms which did not disclose any details of the method employed have improved over the period of study from 56 firms (33%) in 2005 to 26 firms (16%) in 2006 and 21 firms (14%) in 2007. While the incidence of no effective disclosure was higher in every year as a percentage of total observations between non Big-4 firms when compared to Big-4 firms, it is noteworthy that Deloitte had the poorest record on average of all the Big-4 firms.

The next analytical frame of this study was constructed to compare between the reported amounts of goodwill with the sum of the amounts of goodwill allocated to those firms' CGUs. As set out in Table 5, in 2007 and 2006 in comparison to 2005, the rate of compliance among the firms increased from 56.55% in 2005 to 71.43% (2006) and 74.40% (2007) respectively. However, substantially, there were noticeably 73, 48 and 43 firms where it was not possible in any meaningful way to draw a link between the value of reported goodwill and any the firm's defined CGUs. Although those firms are audited by big auditors, the number of firms in this category was surprisingly high; comprising approximately at 43.45% (2005), 28.57% (2006) and 25.59% (2007). This result is consistent with the types of concerns raised by Wines *et al.* (2007), Dagwell *et al.* (2004), and Cearns (1999) where the allocation of goodwill to CGU or group of CGUs is a crucial process in impairment testing.

Further analysis is to examine the problem related to the aggregation of goodwill to CGUs. Table 6 shows the results of this requirement among the firms are somewhat mixed. Through an analysis of proportion of firms where CGUs are fewer than business segments or no effective disclosure (measured by percentage), firms that are audited by Ernst & Young, PWC and non Big-4 tended to improve to define fewer CGU's than segments compared to Deloitte and KPMG. However, overall, in more than 60% of all observations, auditors defined fewer CGUs than business segments or failed to provide any meaningful information related to identify of and level of goodwill to CGUs

Consistent with Table 6, Table 7 has a similar pattern whereby on average fewer CGUs than business segments are defined and reported across the sample of firms. As the table presents, where more CGUs than business segments are defined, the difference is typically marginal, with only small number of audited accounts categorize more than 1.5 CGUs per segment. Therefore, the data suggests the possibility of inappropriate CGU aggregation occurring which in turn reduces the quality of financial reporting (Wines et al., 2007, Carlin and Finch, 2008).

Table 4 – Method Employed by Firms to Determine Recoverable Amount

	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
Method	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**
Fair Value Method	1	1	1	2	2	2	1	1	2	2	2	2	1	1	1
Value in Use Method	14	23	24	35	43	44	17	19	22	19	18	16	15	20	25
Combinations of Method	-	1	1	3	6	4	-	2	-	2	1	2	-	2	1
No Effective Disclosure	13	4	4	18	4	3	5	2	2	5	5	3	15	11	9
Total (n)	**28**	**29**	**30**	**58**	**55**	**53**	**23**	**24**	**26**	**28**	**26**	**23**	**31**	**34**	**36**

Table 5 – CGU Allocation Compliance by Auditor

	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
CGU Allocation	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**	**2005**	**2006**	**2007**
Fully Compliant	10	19	24	34	41	38	13	18	19	23	21	17	15	21	27
Non-Compliant	18	10	6	24	14	15	10	6	7	5	5	6	16	13	9
Total (n)	**28**	**29**	**30**	**58**	**55**	**53**	**23**	**24**	**26**	**28**	**26**	**23**	**31**	**34**	**36**

Table 6 –Business Segments and CGU Aggregation by Auditor

Business Segments and CGU Aggregation	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
No Effective Disclosure	16	8	4	22	10	8	6	5	5	5	5	4	16	11	8
CGUs < Segments	6	10	15	28	33	29	10	12	14	17	16	12	10	15	14
CGUs = Segments	2	6	7	4	6	7	3	1	3	4	4	5	2	1	6
CGUs > Segments	4	5	4	4	6	9	4	6	4	2	1	2	3	7	8
Total	**28**	**29**	**30**	**58**	**55**	**53**	**23**	**24**	**26**	**28**	**26**	**23**	**31**	**34**	**36**
Propotion of firms where CGUs < segments or no effective disclosure (%)	**79%**	**62%**	**63%**	**86%**	**78%**	**70%**	**70%**	**71%**	**73%**	**79%**	**81%**	**70%**	**84%**	**76%**	**61%**

Table 7 – Business Segments and CGU Aggregation by Auditor

Ratio of CGUs to Business Segment	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
No Effective Disclosure	16	8	4	22	10	8	6	5	5	5	5	4	16	11	8
CGUs : Segments is between 0.00 - 0.50	6	8	11	23	22	19	8	8	11	15	13	10	9	11	11
CGUs : Segments is between 0.51 - 0.99	-	2	4	5	11	10	2	4	3	2	3	2	1	3	3
CGUs : Segments is = 1	2	6	7	4	6	7	3	1	3	4	4	5	2	2	6
CGUs : Segments is between 1.01 - 1.50	1	2	1	1	-	3	2	5	4	2	-	-	2	3	5
CGUs : Segments is > 1.50	3	3	3	3	6	6	2	1	-	-	1	2	1	4	3
Total	**28**	**29**	**30**	**58**	**55**	**53**	**23**	**24**	**26**	**28**	**26**	**23**	**31**	**34**	**36**
Mean CGU : Segment Ratio	1.15	1.09	0.96	0.67	0.87	0.97	0.82	0.80	0.67	0.56	0.56	0.71	0.77	0.92	1.00
Median CGU : Segment Ratio	0.75	1.00	0.67	0.50	0.67	0.67	0.67	0.67	0.5	0.50	0.50	0.50	0.50	0.67	0.88
Minimum CGU : Segment Ratio	0.33	0.25	0.25	0.17	0.17	0.17	0.20	0.20	0.20	0.17	0.17	0.20	0.20	0.20	0.20
Maximum CGU : Segment Ratio	4.00	5.00	5.00	3.00	7.00	7.00	2.00	2.00	1.33	1.20	1.80	2.00	2.50	2.50	4.00
% CGU : Segment Ratio > 1.01	14.29%	17.24%	13.33%	6.9%	10.91%	16.98%	17.39%	25.0%	15.4%	7.14%	3.85%	8.7%	9.68%	20.59%	22.22%

The final analytical frames relate to discount and growth rate disclosures made by the firms. The variation of discount rate disclosures among firms are detailed in Table 8. Astonishingly a number of auditor's clients appeared to provide no information related to discount rates disclosures. Additionally, the data highlights the of firms who simply discloses a single explicit discount rate used to assets the recoverable amount of each CGU, regardless of changes in risk characteristics between firm CGUs.

Furthermore, as the final analytical frames undertaken in relation to the growth rate disclosures, Table 9 provides further evidence that the Singaporean auditors have experienced difficulty in implementing FRS 36 with a substantial number of firms failing to provide any disclosures regarding CGU growth rates, despite being required to do so under the standard. The result is unexpectedly, 62, 75 and 76 out of 105, 135 and 139 firms, this are 59.05%, 55.56% and 54.68% of the observation ignoring the disclosure in relation to assumed growth rates when constructing the discounted cashflow models in determining its recoverable amount. Yet, the outcomes of the analysis on growth rate disclosure confirm there were very high degree of non-compliance by the Singapore listed firms in 2005, 2006 and 2007 into the accounting for impairment standard and at the same time increases an argument on the reliability, consistency and robustness of the impairment testing process in relation of audit firm identity.

Table 8 – Analysis of Discount Rates Used to Test Impairment

Discount Rates Analysis	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
No Effective Disclosure	2	1	1	1	4	2	1	1	1	-	-	-	2	5	3
Range of Discount Rates	2	6	9	3	4	4	1	4	5	2	1	-	-	1	1
Single Explicit Discount Rate	8	16	14	28	36	34	9	10	10	12	12	10	12	16	20
Multiple Explicit Rates	2	1	1	6	5	8	6	6	6	7	6	8	1	-	2
Total (n)	**14**	**24**	**25**	**38**	**49**	**48**	**17**	**21**	**22**	**21**	**19**	**18**	**15**	**22**	**26**
Mean Discount Rate	8.85%	8.78%	9.67%	7.98%	8.88%	8.68%	10.71%	9.37%	10.23%	9.75%	9.98%	9.37%	8.31%	8.01%	8.96%
Median Discount Rate	8.50%	8.00%	9.85%	7.10%	9.50%	8.20%	9.59%	8.90%	9.15%	9.86%	10.20%	9.20%	9.00%	8.44%	9.00%
Minimum Discount Rate	3.00%	4.00%	3.80%	1.70%	2.10%	4.50%	3.50%	6.00%	6.20%	3.00%	5.02%	5.30%	2.30%	0.17%	5.30%
Maximum Discount Rate	15.00%	16.86%	16.28%	15.00%	15.00%	17.00%	28.15%	15.00%	20.00%	19.50%	24.40%	13.30%	11.83%	14.00%	13.30%

Table 9 – Analysis of Growth Rates Used to Test Impairment

Growth Rates Analysis	Deloitte			Ernst & Young			KPMG			PWC			Non Big-4		
	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007	2005	2006	2007
No Effective Disclosure	7	10	10	27	36	35	9	10	10	13	9	9	6	11	12
Range of Growth Rates	2	5	6	1	2	3	1	5	4	1	2	1	-	1	3
Single Explicit Growth Rate	5	8	7	10	11	10	4	3	5	4	5	4	8	10	10
Multiple Explicit Rates	-	1	2	-	-	-	3	3	3	3	3	4	1	-	1
Total (n)	**14**	**24**	**25**	**38**	**49**	**48**	**17**	**21**	**22**	**21**	**19**	**18**	**15**	**22**	**26**
Mean explicit forecast period (years)	5.17	5	5.68	5.79	5.32	4.93	4.56	4.95	5.29	4.75	4.57	4.83	4.14	4.65	5.78
Mean Growth Rate	4.71%	7.58%	7.38%	7.17%	6.88%	6.50%	6.98%	6.13%	4.48%	6.40%	6.35%	5.17%	5.31%	8.01%	9.76%
Median Growth Rate	5.00%	6.43%	6.13%	6.00%	5.50%	5.00%	6.35%	6.50%	5.25%	5.18%	4.20%	6.95%	4.00%	8.44%	5.50%
Minimum Growth Rate	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	3.00%	-20.00%	-39.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.00%
Maximum Growth Rate	10.00%	28.00%	40.00%	20.00%	20.00%	25.00%	18.00%	20.00%	20.00%	28.00%	20.00%	12.00%	15.00%	14.00%	39.00%

5. Conclusion

In Singapore, ASC is body responsible in formulating the goodwill accounting standard (FRS 36). Bearing the mandatory adoption of FRS 36 on or after 1 July 2004 in mind, it is interesting to analyze the characteristics and behaviour of the firms that were already anticipating FRS 36 requirements, especially with the complexity lay on the technical process with respect to disclosure requirements of the Standard. Under the FRS roof of goodwill impairment, elements including appropriate definition of CGUs, appropriate allocation of assets to CGUs, adoption of appropriate growth profiles for firm cash flows and of course, the selection of appropriate discount rate to translate estimates of future cash flows into their present economic equivalents are really complicated to put into practise. Although the theoretical guidelines of technical requirements of goodwill impairment have clearly stated in the Standard, it is evident that not all has been well in the process of translation from idea to action. The results of the study, using six analytical frames reveal that compliance level and disclosure quality among the firms who each have engaged either Big-4 or non Big-4 auditors systematically failed to comply with even basic elements of disclosure requirements in relation to goodwill impairment testing. In addition, in some specific disclosures, the results produced were extremely unusual. To assure consistency in complying the Standard and maintaining high quality of auditing process, this study suggest that auditors are involved closely in working with their clients and assist them in learning the complex standard. Given the findings of this study, there appears to be substantial value in the It would be desirable to expand the sample, something which only the passage of time will allow in meaningful quantities.

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