GOODWILL IMPAIRMENT TESTING UNDER IFRS – A FALSE IMPOSSIBLE SHORE?

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The transition to IFRS based reporting has resulted in fundamental departures from many of the long accepted norms embedded in indigenous GAAP systems now superseded in IFRS adopting jurisdictions. The rules relating to goodwill accounting, measurement and reporting represent an excellent case in point, the traditionally dominant capitalise and amortise regime having been disposed of in favour of an impairment testing regime pursuant to which periodic amortisation charges are no longer required. There has been much criticism of this new impairment testing regime, principally along the lines that it results in an increased potential for opportunism in financial statement preparation due to the subjective and unverifiable nature of a range of judgements necessary to the execution of the impairment testing process. In this paper, we add to the extant literature's catalogue of concerns by documenting systematic non compliance with the disclosure requirements of AASB 136 – Impairment of Assets. We argue that a key problem resulting from this phenomenon is a decline in financial statement comparability. At the policy level, we raise questions as to the implications of the complexity of the IFRS based impairment testing regime both from the preparer and audit perspective.

Keywords: Goodwill, Impairment, Financial reporting, Creative accounting, Australia

1. Introduction

Julius Caesar may not have been the first to make the observation, but it is he who is immortalised as stating that men are nearly always willing to believe what they wish – *fere libenter homines id quod volunt credunt*[1]. In like fashion, the exposition of a basis for the justification of moving from one long established reporting practice to another perhaps radically different alternative must ultimately rest on a belief or series of beliefs.

In the context of reporting standards falling under the aegis of the IASB umbrella, the belief in question is likely traceable to a central tenet of that organisation's framework for the presentation and preparation of financial statements, namely that the promulgation of reporting rules is a process whose intent is to enhance the decision usefulness of general purpose financial reports aimed at participants in capital markets (IASB, 1989).

Given the central importance of financial disclosures as a means of keeping investors informed, evaluation of whether a belief about the likely outcome of the implementation of a reporting rule may be substantiated with reference to a sound empirical foundation or may be better seen as referable to a wish represents a matter of material concern.

The history of reporting and measurement rules pertaining to goodwill, replete as it has been with fitful dalliances with a long cast of often entirely inconsistent ideas, represents an excellent case study of the consequences attendant to the failure to identify beliefs founded on no more than wishes. Thus goodwill has been at turns the courtesan, hidden from view through the obscuring veils of pooling and other devices and at others the celebrated bride promised undiminished prominence through preservation from the vicissitudes of amortisation.

So, the transition to IFRS represents the latest episode of goodwill's often turbulent story. One striking feature of this framework[2] for goodwill measurement and reporting is its order magnitude increase in complexity compared to typical prior practice[3]. Application of this system requires navigation through several layers of difficult and potentially contestable choices.

It is for this reason in particular that much of the recent literature relating to this issue focuses on the incentive compatibility problems which may be associated with the implementation of impairment based approaches to goodwill measurement and reporting (e.g; Beatty & Weber, 2006; Hayn & Hughes, 2006).

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[1] Julius Caesar, De Bello Gallico, Book 3, Section 18.

[2] Essentially the same statement can be made in relation to the US GAAP equivalent, embodied in SFAS 142 - *Goodwill and Other Intangible Assets*, issued by FASB in June 2001.

[3] In most cases, the IFRS impairment testing regime has replaced what we term "capitalise and amortise" systems of accounting for goodwill, pursuant to which goodwill was capitalised at the time of acquisition and subsequently amortised against periodic earnings over a defined period of time post acquisition. Australia's pre-IFRS regime represents a case in point. Under AASB 1013 - *Accounting for Goodwill* (issued 1988 and revised in 1996*)*, goodwill on acquisition was recognised on balance sheet then amortised on a straight line basis against earnings over a period not exceeding 20 years.

Without derogating from the importance of these findings, the focus of this paper is squarely cast on a different issue, the degree to which firms actually comply with the formal precepts of the standards governing impairment testing regimes. Prior studies appear to have been constructed on the tacit assumption of systematic standards compliance on the part of financial statement preparers.

However, at least in the case of large Australian reporting entities adopting IFRS for the first time, we present strong evidence that this assumption does not hold true. This in turn places a different complexion on the evaluation of evidence relating to the operation of impairment based reporting regimes, a possibility we explore and discuss throughout the body of the paper, which is structured as follows.

Section 2 of the paper provides some relevant background and discusses a selection of contributions to the literature pertaining to the conceptual foundation of goodwill and to goodwill impairment testing regimes. Section 3 provides an overview of the sample, data and methodology we employ for the purposes of this study. Section 4 comprises a discussion of the key empirical results, while in Section 5 we offer our conclusions and some thoughts on potential avenues for future research in this area.

2. Some Relevant Literature and Implications

Goodwill inhabits an unruly and unsettled domain. Accounting theorists have long debated and rarely agreed on its nature and source. In the process they have generated a tangled collection of mostly irreconcilable explanations.

An early example is the annuity theory favoured by More (1891). According to this approach, goodwill may be thought of as the value of an annuity stream of future profits which accrue to a new owner upon acquiring another entity.

Another approach favoured by authors including Leake (1914) has come to be known as the excess or super profits theory of goodwill. On this approach, goodwill is to be thought of as the present value of profits earned in excess of those required to provide normal rates of return on the identifiable assets of the firm.

Writing in 1929, Canning advanced what has been termed the master valuation account theory of goodwill. On this approach, goodwill may be approximated as the difference between the purchase consideration paid upon acquisition and the net value of identifiable assets received.

In the early 1950s, Nelson’s momentum theory enjoyed brief prominence. The essential thrust of this theorem is that goodwill may be thought of as the initial momentum or “push” which accrues to an acquiring firm at the point of acquisition. It was thought that acquisition transactions ought generally confer greater business momentum on acquiring parties than they had previously enjoyed due to the favourable characteristics of the newly acquired entity.

According to Sands (1963), goodwill represented the value capable of being generated by an organisation as a consequence of facing less than competition in the markets in

which it operated. On the other hand, Gynther (1969) proposed that goodwill came into being as a consequence of the existence of a range of factors which while favourable to the economic position and performance of a firm were not capable of being measured and recognised individually.

Notably, the conceptual confusion relating to goodwill is not limited to the accounting literature. Legal conceptions of goodwill as expounded by the courts have also shown considerable variation over time, and often varied substantially from those accepted at various points in time in the accounting and commercial domains.

From the early 17th century onwards, a string of cases have been decided in which courts have attempted to define the term goodwill, and to determine the circumstances in which it might arise, and what it might attach to were it to arise.

Early cases adopted a simple and relatively narrow conceptualization of the phenomenon. For example, in *Broad v Jollyfe*[4] the court took the view that goodwill represents but the selling of a man's custom, leaving another to gain it.

A later and better known case is that of *Crutwell v Lye*[5] in which Lord Chancellor Eldon offered his famous formulation that goodwill is "nothing more than the probability that the old customers will return to the old place."

This definition places strong emphasis on what may be termed "force of custom" as the basis for the existence of goodwill. On this approach, goodwill only comes into existence by virtue of those distinguishing characteristics of a particular business which increase the likelihood of repeat business, thus increasing enterprise value.

However, the force of custom approach has been by no means the only basis upon which courts have constructed definitions of goodwill. Thus, in *Churton v Douglas*[6] Vice Chancellor Wood said:

> Goodwill must mean every advantage that has been acquired by the old firm, whether connected with the premises in which the business was previously carried on, or with the name of the firm, or with any other matter carrying with it the benefit of the business.

In *Commissioner of Inland Revenue v Muller & Co's Margarine*[7] Lord Linley held that:

> Goodwill regarded as property has no meaning, except in connection with some trade, business or calling. In that connection, I understand the word to include whatever adds value to a business by reason of situation, name, reputation, connection, introduction to old customers and agreed absence of competition or any of these things, and there may be others which do not occur to me.

[4] (1620), Cro. Jac. 596; Noy 98
[5] (1810) 17 Ves. Jr. 335
[6] (1859) 1 Johnson 174
[7] (1901) A.C 217

In both these formulations, a wide range of other matters could be relevant to determining the existence or otherwise of goodwill. These dicta appear to invite a broader approach to defining goodwill than one focused principally on the idea of goodwill as an attractor of custom. Nonetheless, the tension between the attraction of custom idea and the broader "commercial" approach is still evident in contemporary dicta pertaining to the conceptualisation of goodwill[8]

It can come as no surprise given these uncertain conceptual foundations that the domain of practise as it relates to goodwill has also exhibited considerable turmoil over time. Controversies relating to the improper use of the pooling of interests approach to acquisition accounting in order to avoid goodwill recognition, excessive in-process research & development (IPR&D) allocations and immediate post acquisition write-offs, the use of aggressive expense deferral amortisation techniques such as the inverse sum of the years' digits (ISOYD) represent a small sample of the challenges which have arisen over time (Carlin *et al.*, 2007; Carnegie & Gibson, 1987, 1992; Gibson & Francis, 1975; Wines & Ferguson, 1993).

Similarly, when contemplating the current preference on the part of standards setters for impairment testing based regimes for goodwill, it is useful to recognise that formulations for goodwill reporting based on a rejection of the classic capitalise and amortise regime are not new. Over a century ago, Dicksee opined that it was not necessary or appropriate to "depreciate" goodwill and that under normal circumstances it was appropriate to continue to hold it on the balance sheet at cost (Dicksee, 1906).

The shift to the IFRS "capitalise and test for impairment" approach and its analogues in US GAAP should therefore not be seen as a transition to an inherently new or superior technology. This much has already been made clear in a growing body of literature critical of both the conceptual foundations and practical consequences of the IFRS and US GAAP goodwill impairment testing regimes.

Watts (2003) represents an early and high profile example of some of the criticisms which have been levelled at this approach. He characterises the FASB's decision to opt for an impairment testing based regime in SFAS142 as an error in judgement likely to leave open the pathway to aggressive earnings management and systematic asset value over statements.

Other commentators, including Massoud & Rayborn (2003) have expressed similar sentiments, and questioned the desirability of a reporting framework so reliant on subjective judgements without appropriate verification checks and balances. Others have asserted the existence of obvious technical flaws in the manner in which asset impairment standards have been drafted (Haswell & Langfield-Smith, 2008).

Consistent with the concerns raised in these conceptual contributions, evidence is accumulating in the empirical literature of an array of problems associated with impairment testing regimes.

[8] See for example *Commissioner of Taxation v Murry* [1998] HCA 42. In this decision, the majority evinced a preference for the attraction of custom explanation of goodwill. In a dissenting judgment, Justice Kirby suggested that the majority's approach was outmoded and out of step with contemporary business and economic formulations of goodwill.

These include a lack of evidence that earnings numbers derived under the present regime are more value relevant than those generated under the previous capitalise and amortise regime (e.g Chen *et al.*, 2006); evidence that write off timing is consistent with managerial opportunism (Anantharaman, 2007); evidence of undue delays in recognising impairment losses (Henning *et al.*, 2004; Hayn & Hughes, 2006; Ramanna & Watts, 2007) and evidence of gaming in the manner in which goodwill is allocated between reporting units[9] in a bid to minimise the chance of forced impairment losses (Zhang & Zhang, 2007).

Contributions to the literature by practitioners have also expressed strong concerns about the operation and effect of the impairment based regime for goodwill reporting, one author recently offering the view that the IFRS impairment framework is likely to yield misleading results at odds with any discernible thread of logic or principle (Lonergan, 2007).

All of these authors express concerns, for varying reasons, about the quality of the information product emanating from the impairment testing framework for goodwill measurement and reporting. Yet in expressing their concerns, these contributors to the literature appear to have neglected the question of compliance.

That is, researchers appear to have assumed that preparers of financial statements systematically comply with the technical requirements of the accounting standards which embody the impairment testing framework and that the information quality deficiencies which are attributed to the operation of the framework result from factors such as the opportunistic exercise of discretion.

While not equating technical compliance with reporting standards and the quality or serviceability of the resulting disclosures (following Clarke, Dean & Oliver 1997; Schuetze, 1992), the degree to which firms adhere to the requirements of applicable standards must nonetheless be viewed as a matter which has the capacity to materially influence and in cases of non compliance detract from the decision usefulness of financial statements.

Fraudulent deviation from required reporting norms and standards[10] represents one well recognised species of financial reporting pathogen. The opportunistic exercise of discretion allowable within reporting frameworks represents another[11] frequently researched problem. The degree of compliance with the technical architecture of the applicable reporting framework arguably represents a separate species of pathogen, differentiable from the former two on the basis of motivational foundation.

Specifically, whereas the motivations for fraudulent and legal but opportunistic reporting choices can typically be explained with reference to the wealth transfer effects of such behaviour, no such blanket explanation can be offered in relation to the degree of technical compliance. Arguably, the possible causal factors for this

[9] Or CGUs (cash generating units) in the IFRS terminology – See Carlin *et al.*., 2007.

[10] This type of pathogen has been termed "feral accounting" by Clarke & Dean – see Clarke & Dean (2007). This was also the key interest of writers such as Briloff (e.g Briloff, 1972) – see also; Mulford & Comiskey (2002); Schilit (2002) and Smith (1992).

[11] This aspect of reporting is the focus of much of the agency based literature, for example; Healy, 1985; Watts & Zimmerman 1986 as key source contributions.

particular species of reporting pathogen may be far broader, including lack of understanding of reporting frameworks by preparers, lack of resources to fully implement the requirements of applicable standards on the part of preparers and lack of understanding and resources on the part of auditors, as examples.

Equally, the policy implications of systematic (but not fraudulently or opportunistically motivated) deviations from the precepts of mandatory reporting frameworks differ materially from those raised in cases of fraud or by dint of excessive manoeuvre space within the boundaries (or at the intersection of the boundaries) of reporting standards.

Yet, as argued above, the compliance degree question has thus far been overlooked in the context of research on impairment testing, even though the impairment testing procedures mandated under IFRS are highly complex and represent a substantial compliance challenge. Consequently it is this matter which constitutes the principal focus of the research reported in this paper. Section 3 below sets out details of the methodology employed and data drawn upon for the purposes of investigating this question.

3. Data and Methodology

A-IFRS came into effect in Australia for firms with reporting periods on or after 1 January 2005. Consequently, a subset of listed Australian companies reported pursuant to IFRS in that year. However, since the only organisations to do so were those with a balance date of 31 December, and since this group represents a relatively small subset of the Australian listed firm population, it was necessary to construct our data sample based on 2006 data, being the first year in which IFRS was the default reporting regime for essentially all Australian listed entities.

In light of this, the research reported in this paper focuses on data drawn from a sample of 200 large Australian listed corporations which reported goodwill as comprising an element of their asset base in their 2006 consolidated financial statements.

Each of the 200 firms which comprised our final research sample was a constituent firm within the All Ordinaries Index as at December 2006. The All Ordinaries index was created, with a base date of December 31 1979, replacing the regional indices, which were independently run out of the Sydney and Melbourne stock exchanges. Administered since 2000 by Standard & Poor's, in partnership with the Australian Stock Exchange, the All Ordinaries Index is the most extensive index covering the Australian stock market comprising a maximum of 500 of the largest companies listed on the Australian Stock Exchange. While the All Ordinaries Index is no longer an institutional benchmark index, having been superseded by a more concentrated series of benchmark indices[12], the index has the largest coverage of all Australian equities

[12] The current institutional benchmark indices that track market capitalisation on the ASX are S&P/ASX20 (approximately 46% of market capitalisation for Australia in 2006), S&P/ASX50 (approximately 63% of 2006 market capitalisation), S&P/ASX100 (73%), S&P/ASX200 (78%), S&P/ASX300 (79%), S&P/ASX MidCap 50 (10%) and S&P/ASX Small Ordinaries (6%). For more

indices and typically represents more than 95% of the market capitalisation for Australia[13].

The month end market capitalisation of the Australian stock market at December 2006, was approximately $1.390 trillion[14] and comprised 1,908 listed companies and listed managed investments with tradeable equities[15]. The month end market capitalisation of the All Ordinaries Index at December 2006 was approximately $1.358 trillion[16] (97.7% of the market capitalisation for Australia) and comprised 498 listed companies and listed managed investments with tradeable equities.

The final research sample of 200 firms was selected using the following process. Commencing with the largest (by market capitalisation) and moving to each successively smaller firm, organisations were included in the research sample if they had reported under A-IFRS for 2006, and had goodwill as a component of their asset base. In constructing the final sample of 200 firms, a total of 17 firms with a combined market capitalisation of $212.8 billion were excluded because they reported under a framework other than IFRS[17] or in a currency other than Australian dollars.

A further 56 firms with a combined market capitalisation of $98.1 billion were excluded because they were listed asset holding vehicles or managed investments vehicles rather than trading enterprises. Finally, 139 firms were excluded from the sampling frame by reason of having no goodwill. Details of the 200 constituent firms comprising the final research sample, their market capitalisation and the value of their goodwill balances are set out in Appendix A.

The combined market capitalisation of the final research sample was $882.1 billion representing 63.5% of total Australian equity market capitalisation as at December 2006. In undertaking the process of sample compilation, the audited financial statements for a total of 412 listed firms were screened. These firms had a combined market capitalisation of $1.350 trillion which represented 97.12% of the total Australian equity market capitalisation as at December 2006.

For the purposes of analysis, the 200 constituent firms were arranged by their GICS industry group classification[18] and subsequently divided into 15 groups comprising organisations with related principal lines of business. At the date of sampling, the 200

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information regarding index constituents, see *"S&P Australian Indices Index Methodology"*, 2007, Standard & Poor's, Sydney.

[13] *"The S&P/ASX Map of the Market"*, 2004, Standard & Poor's, Sydney.

[14] *Source:* http://www.asx.com.au/research/market_info/historical_equity_data.htm.

[15] The number of listed companies and listed managed investments with tradeable equities comprised 1,830 domestic and 78 foreign. The total number of all listed entities at December 2006 was 2,014. This count is higher as it includes stapled securities as 2 entities, it includes some corporations with no quoted securities (or debt securities only) and temporary duplications arising from mergers, takeovers and other events.

[16] *Source*: Aspect Huntleys' Investment Information Pty. Limited.

[17] Including US GAAP, UK GAAP and NZ GAAP.

[18] GICS (Global Industry Classification Standard) is a joint Standard & Poor's/Morgan Stanley Capital International product aimed at standardising industry definitions. From 1 July 2002 all ASX listed entities have been reclassified according to GICS to bring Australia in line with the rest of the world. The Australian market has traditionally been associated with 24 industry sectors unique to this country. GICS consists of 10 Sectors aggregated from 24 Industry Groups, 67 Industries, and 147 Sub-Industries currently covering over 27,000 companies globally.

firms included in the final sample controlled assets valued at $2,341,892 million, which included goodwill of $77,874 million. An overview of the research sample broken down by assigned sector, the dollar value of firm assets within the sector, and the dollar value of goodwill for each sector is shown in Table 1, below.

Table 1– Overview of Research Sample

Sector	Total Assets ($ million)	Total Goodwill ($ million)	Goodwill as % of Total Assets
Banks & Insurance *(n=12)*	1,927,443	22,868	1.19%
Capital Goods *(n=18)*	15,599	1,646	10.55%
Commercial Services & Supplies *(n=20)*	10,894	2,090	19.19%
Consumer Services *(n=8)*	12,420	4,223	34.00%
Diversified Financials *(n=20)*	36,468	2,431	6.67%
Energy *(n=4)*	15,308	1,624	10.61%
Food, Beverage & Staples *(n=15)*	62,163	10,983	17.67%
Health Care *(n=14)*	20,119	6,291	31.27%
Materials *(n=17)*	50,738	5,874	11.58%
Media *(n=13)*	24,566	1,855	7.55%
Real Estate *(n=11)*	40,219	2,409	5.99%
Retailing *(n=18)*	11,138	1,607	14.43%
Software & Services *(n=13)*	3,519	1,957	55.60%
Technology & Telecommunication *(n=8)*	38,276	2,767	7.23%
Utilities & Transportation *(n=9)*	73,022	9,250	12.67%
TOTAL *(n=200)*	**2,341,892**	**77,874**	**3.33%**

In approaching the research question, a two layered comparative/evaluative methodology was employed. The first layer of the methodology requires a comparison to be made between the content of a firm's impairment testing disclosure and a checklist of requirements derived from the text of AASB 136. This allows disclosures to be categorised according to a bi-modal "comply" or "non-comply" taxonomy.

The second layer of the methodology looks beyond distribution of disclosures into the basic categories of "comply" and "non-comply" and recognises that within the "comply" category of disclosures there is a gradation of quality. Thus, as discussed below, an additional element of the methodology employed is the construction of multi-category disclosure quality taxonomies which provide a more nuanced perspective on disclosure practice than simple "comply" versus "non-comply" categorisations.

Bearing this in mind, several dimensions of the A-IFRS goodwill reporting regime are of potential interest and can be investigated by dint of required disclosures under AASB 136. The first relates to the role of cash generating units (henceforth CGUs) as the crucible within which the impairment testing process transpires.

Paragraph 80 of AASB 136 requires that for the purpose of impairment testing, goodwill is to be allocated to each of the reporting entity's CGUs (or groups of CGUs) expected to benefit from the goodwill. To avoid the creation of an excessive reporting systems burden, this allocation is only required down to CGUs or groups of CGUs which represent the lowest level at which goodwill is monitored for internal management purposes.

However, to guard against inappropriate aggregation[19], paragraph 80 stipulates that the CGUs (or groups thereof) should not be larger than segments defined for the purpose of segment reporting[20].

This is important, because the number of CGUs to which goodwill is allocated for the purposes of impairment testing itself has the capacity to impact on the likelihood of an impairment loss being recognised. Where elements of a group enterprise whose cashflows are imperfectly correlated and whose risk profiles differ are fused as one CGU rather than two or more, the excess "headroom" between the estimated fair value and book value of the assets of better performing units serves as a shock absorber for the riskier or more poorly performing elements.

Were these elements disaggregated, the shock absorber effect would be removed, and the surplus of fair value over book value embedded in the less risky or stronger performing business elements could not foil deficiencies in riskier or weaker performing business elements, removing the capacity to avoid impairment writedowns.

Thus, in coming to understand the characteristics of the goodwill reporting regime, developing an image of the apparent level of "aggregation" of CGUs as defined by reporting entities is of prime significance[21]. This is pursued by comparing the number

[19] The CGU aggregation problem has also been recognised elsewhere in the literature. For example; Wines *et al..,* 2007. It is notable that the literature concerning segment reporting, which shares close parallels with aspects of the literature which touches on CGU definition also reports high variation in practice, and a tendency to report fewer rather than more sectors, given the potential competitive costs associated with these disclosures. See; Rennie & Emmanuel, 1992; Wines, 1997; Doupnik & Seese, 2001.

[20] Pursuant to AASB 114 – *Segment Reporting*.

[21] See, Carlin & Finch, 2007.

of reported controlled subsidiary entities, business segments and defined cash generating units for each firm in our sample.

The completeness and quality of disclosures relating to goodwill at the CGU level is also assessed by examining the extent to which each sample firm's total goodwill balance can be reconciled with the sum of disclosed CGU goodwill allocations. Where the total disclosed goodwill of the firm does not reconcile to the total value of goodwill allocated to CGUs, the quality and completeness of disclosure is judged to be lower than where complete reconciliation is possible.

Having examined the aggregation issue, attention is turned to manner in which recoverable amount of CGU assets has been estimated. This requires reference to fair value or value in use, and disclosure which of these reference bases has been adopted. While it is likely that in most circumstances recoverable value will be determined by reference to value in use[22], the possibility that the fair (market) value of certain asset classes may be reliably determinable, for example, by dint of the existence of active markets for assets of the class in question, means that it will on some occasions be feasible to determine recoverable amount on a fair value basis.

AASB 136 stipulates[23] that adoption of a fair value approach to the determination of recoverable amount is not dependent on the existence of an active market for the assets in question, but also makes clear the need for some reasonable basis for making a reliable estimate of the amount obtainable from the disposal of assets in arm's length transactions between knowledgeable and willing parties as a prerequisite to the adoption of this method. Consequently, the circumstances in which this choice is exercised also represent an object of potential research interest, and the frequency with which sample firms resorted to either method is reported in section four of the paper[24].

While AASB 136 calls for limited disclosure of the assumptions and processes used by an organisation which has elected to use fair value as the benchmark for impairment testing[25], several specific and detailed disclosures are called for in the event that value in use is the basis adopted for the determination of recoverable amount. These appear designed to assist financial statements users to assess the robustness of the discounted cashflow modelling process used to estimate recoverable amount, and include;

[22] The reason for this relates to the degree likelihood that appropriate market based value benchmarks are readily available as a means of assessing recoverable amount. In many instances this will not be so, resulting in value in use as the default approach to the estimation of recoverable amount.
[23] Paragraph 20.
[24] We examine the use of the fair value basis for impairment testing elsewhere – see (Carlin & Finch, 2008). We argue that there is evidence of opportunistic behaviour in the manner in which reporting entities elect to use the fair value as the basis for impairment testing rather than the far more commonly employed value in use approach.
[25] As to which, see AASB 136, paragraph 134.

(i) a description of each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit's (group of units') recoverable amount is most sensitive[26];

(ii) a description of management's approach to determining the value(s) assigned to each key assumption, whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information[27];

(iii) the period over which management has projected cash flows based on financial budgets/forecasts approved by management and, when a period greater than five years is used for a cash-generating unit (group of units), an explanation of why that longer period is justified[28];

(iv) the growth rate used to extrapolate cash flow projections beyond the period covered by the most recent budgets/forecasts, and the justification for using any growth rate that exceeds the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market to which the unit (group of units) is dedicated[29]; and

(v) the discount rate(s) applied to the cash flow projections[30].

Inspection of the assumptions made in relation to key factors such as discount rates, growth rates, forecast periods and terminal value periods supports the development of a more nuanced comprehension of the degree of conservatism or aggression inherent in the development of value in use estimates, meaning that these are also of primary interest in developing an understanding of the operation of the goodwill reporting regime. Consequently, an assessment of the disclosures relating to both discount rates and growth assumptions made by sample firms pursuant to AASB 136 is reported in section four, below.

In order to generate quality assessments, it was necessary to develop a compliance and disclosure quality taxonomy for both discount rate and growth rate based disclosures. In relation to discount rate disclosures, the taxonomy applied required the allocation of each sample firm to one of four dimensions being "multiple explicit discount rates", "single explicit discount rates", "range of discount rates" and "no effective disclosure".

Allocation of a firm to the first of these categories indicated that the firm was fully compliant with the requirements of AASB 136 in relation to discount rate disclosures, and that the degree of transparency inherent in its disclosures was sufficient to allow an external analyst to develop meaningful insights into the process of impairment

[26] AASB 136, Paragraph 134 d (i)
[27] AASB 136, Paragraph 134 d (ii)
[28] AASB 136, Paragraph 134 d (iii)
[29] AASB 136, Paragraph 134 d (iv)
[30] AASB 136, Paragraph 134 d (v)

testing employed by the sample firm. Firms assigned to this category provided details of the specific discount rate used to discount cashflows for the purpose of impairment testing for each defined CGU, and used varying discount rates as the risk characteristics of CGUs varied.

Firms were assigned to the second category "single explicit discount rate" where they provided details of a specific discount rate for each CGU, but there was no observed variation in discount rates assigned to CGUs, even though CGU risk levels were arguably different. The quality of compliance and disclosure for firms in this category was assessed as lower than that of firms in the first category.

Firms were assigned to the third category "range of discount rates", where they provided details of discount rates employed for the purpose of recoverable amount modelling and impairment testing, but rather than specifying a particular discount rate used in the context of testing for impairment in a particular CGU, simply provided details of a range of discount rates used across a range of CGUs. It is questionable whether this practice fulfils the disclosure requirements stipulated under AASB 136, and it is clear that the quality of this form of disclosure is lower than in categories one and two, above.

Finally, where the degree of information provided in relation to discount rates was so limited that it would not sustain any meaningful external evaluation, firms were assigned to a fourth category, labelled "no effective disclosure". These firms were judged not to have complied with the relevant requirements of AASB 136, and the quality of their disclosures was poor.

In contemplating the quality of disclosures relating to growth rates as required under AASB 136, a similar methodology was employed, with firms also characterised according to a four point taxonomy, anchored at the high quality end by the category "multiple explicit growth rates" for each CGU and "no effective disclosure" at the low quality end. Two intermediate categories "range of growth rates" and "single growth rate" for all CGUs" (in that order of assessed quality) filled out the scale. In relation to the disclosures pertaining to the length of the forecast periods, "multiple explicit forecast period" sat at the high quality end, and "no effective disclosure" at the low quality end, with "single explicit forecast period" as the intermediate category. The results of the analytical procedures employed for the purposes of the study are reported in section 4, below.

4. Results and Discussion

The first group of analytical procedures performed on the data gathered for this study focused on the use of CGUs as an element of the impairment testing process. A threshold question of interest was the degree to which the total reported value of each sample firm's goodwill could be completely reconciled to the sum of the goodwill values disclosed as having been allocated that firm's defined CGUs. Inspection of the financial reports of the two hundred firms comprising the final research sample revealed three distinct clusters of practice.

The first and dominant cluster comprised 164 firms for which a reconciliation of the type described above was possible. These were assessed as being fully compliant with the relevant disclosure requirements of AASB 136. The second cluster comprised 4 firms in relation to which all goodwill bar an immaterial portion[31] had been allocated to a CGU. These firms were assessed as being ostensibly compliant with the disclosure requirements of AASB 136. The third cluster comprised 32 firms where it was not possible in any meaningful way to draw a link between the value of reported goodwill and any of the firm's defined CGUs. These firms were assessed not to have complied with the requirements of AASB 136. These details are set out in Table 2, below.

Table 2 –CGU Allocation Compliance by Sector

Sector	**Fully compliant** *(number of firms)*	**Ostensibly compliant** *(number of firms)*	**Non-compliant** *(number of firms)*
Banks & Insurance *(n=12)*	9	-	3
Capital Goods *(n=18)*	15	-	3
Commercial Services & Supplies *(n=20)*	18	-	2
Consumer Services *(n=8)*	7	-	1
Diversified Financials *(n=20)*	14	-	6
Energy *(n=4)*	2	-	2
Food, Beverage & Staples *(n=15)*	14	1[32]	-
Health Care *(n=14)*	14	-	-
Materials *(n=17)*	14	-	3
Media *(n=13)*	9	2	2
Real Estate *(n=11)*	9	-	2
Retailing *(n=18)*	14	-	4
Software & Services *(n=13)*	10	-	3
Technology & Telecommunication *(n=8)*	7	-	1
Utilities & Transportation *(n=9)*	8	-	1
TOTAL *(n=200)*	**164**	**3**	**33**

[31] Where materiality is determined by reference to the dollar value of the reconciliation gap compared against the dollar value of total firm goodwill. This is the materiality test set out in Paragraph 134 of AASB 136.

[32] Metcash Limited (Food, Beverage & Staples) disclosed $867.158 million in goodwill at balance date, yet only allocated $857.829 million (98.9% of total goodwill) across the 7 CGUs that were tested for impairment. Village Roadshow Limited (Media) disclosed $47.493 million in goodwill yet only allocated $45.6 million (96.0%) to the 4 CGUs that were tested for impairment. APN News & Media Limited (Media) disclosed $1,740.614 million in intangible assets (comprising $212.646 million in goodwill and the balance in non-amortising intangibles including mastheads, radio licences and brands) however only $1,722,476 (99%) of this amount was allocated to the 7 CGUs that were tested for impairment.

In contemplating the results in Table 2, it is notable that slightly in excess of 15% of the sample (a group of firms reporting some $5.2 billion in goodwill) failed to provide details of the manner in which they had allocated goodwill between CGUs for the purpose of impairment testing. This is contrary to the requirements of paragraph 80 of AASB 136[33].

More than representing a mere technical breach, failure to provide details in relation to CGUs creates fundamental difficulties for financial statement users wishing to undertake independent evaluation of the robustness of valuations ascribed to goodwill by reporting entities.

An obvious problem which arises where this information is not provided is the lack of capacity on the part of the financial statement user to understand how goodwill is distributed across a business, where it is concentrated and what types of underlying business activities it is principally associated with. This results in a diminished capacity on the part of financial statement users to develop detailed reporting entity impairment risk profiles.

Potentially valuable information is also lost in the presence of the CGU aggregation problem. By defining too few CGUs relative to the true number of operating units within the organisation which generate independent streams of cashflows and with which at least some goodwill is associated, the level of disclosure transparency achieved falls, and the risk that impairment losses which should be recognised in a given period are not recognised in that period rises.

In order to gain insight into the degree to which this problem afflicts the quality of impairment testing and disclosures pursuant to AASB 136, we gathered and analysed data pertaining to the number of entities controlled by each of the firms in our sample, the number of business segments those firms reported and (where possible), the number of CGUs defined by each of the firms in our sample.

Given the expectation set out in AASB 136 that CGUs should be no larger than the related business segments defined by a reporting entity, we treat the relationship between the number of defined business segments and the number of defined CGUs as being of particular interest.

It is entirely possible that an individual firm may have more defined business segments than CGUs with which goodwill is associated. For example, a firm may have grown and diversified principally through organic means and made acquisitions only in a narrow component of its business. Under these circumstances, it would likely be the case that there would be more defined business segments than CGUs with goodwill.

Of course, an individual firm's story may also have been defined by sequential acquisition activity. Particularly where acquired subsidiaries are not tightly integrated

[33] Paragraph 80 of AASB 136 states: "For the purpose of impairment testing, goodwill...shall...be allocated to each of the acquirer's cash-generating units, or groups of cash generating units, that are 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."

post acquisition, it would be natural under these circumstances to expect the existence of a greater number of CGUs than business segments.

When contemplating the likely relationship between the number of defined business segments and defined CGUs across a significant sample, there seems little reason upon which to form an *a priori* expectation that either of these "stories" would dominate. Consequently if upon analysis of sample based data it appeared that there was a tendency on the part of reporting entities to define fewer rather than more CGUs, this could be interpreted as evidence pointing to the existence of CGU aggregation.

As the summary data in Table 3 shows, the evidence appears consistent with this proposition. Of the 171 firms in the sample which provided sufficient disclosures to permit identification of their CGUs, 71% defined the same number or fewer CGUs than business segments, while only 29% of firms defined more CGUs than segments.

Examined on an industry by industry basis, it is clear that CGU aggregation risk is not evenly distributed. For example firms in the food & beverages industry segment were far more likely than average to define fewer CGUs than business segments, as were media firms and utility & transportation firms. On the other hand, firms in the commercial services segment tended to define more CGUs.

Similarly, it is evident from the data that failure to fulfil basic disclosure requirements is not an evenly distributed phenomenon, with banks and financial services firms being over represented amongst the ranks of non effective disclosers.

Table 3 – Business Segments and CGU Aggregation by Segment

Sector	No. CGUs > No. Segments	No. CGUs = No. Segments	No. CGUs < No. Segments	No Effective Disclosure
Banks & Insurance *(n=12)*	3	1	5	3
Capital Goods *(n=18)*	7	6	3	2
Commercial Services & Supplies *(n=20)*	10	4	4	2
Consumer Services *(n=8)*	3	3	1	1
Diversified Financials *(n=20)*	2	4	8	6
Energy *(n=4)*	-	2	1	1
Food, Beverage & Staples *(n=15)*	3	4	8	-
Health Care *(n=14)*	4	5	5	-
Materials *(n=17)*	2	5	8	2
Media *(n=13)*	3	2	6	2
Real Estate *(n=11)*	2	3	4	2
Retailing *(n=18)*	6	4	4	4
Software & Services *(n=13)*	2	6	3	2
Technology & Telecommunication *(n=8)*	2	5	-	1
Utilities & Transportation *(n=9)*	2	1	5	1
TOTAL *(n=200)*	**51**	**55**	**65**	**29**[34]

A more granular means of achieving insights into the potential CGU aggregation problem involves construction of mean defined CGU to defined segment ratios on an industry by industry basis. The results of this analysis are set out in Table 4, and confirm the patterns evident in Table 3.

Across the sample as a whole, firms defined 0.91 CGUs for each defined business segment. Allowing for differences in industry based growth and internal reporting patterns, this suggests that on balance, CGU aggregation is a device being used by reporting entities to manage the risk and timing of goodwill impairment losses. The consequences of this type of activity could extend to overstatements of earnings and net assets, understatements of leverage and reduced reporting transparency.

[34] The firms (and their sector) that provided no effective disclosure on business segment and CGU allocation were: Adelaide Bank Limited, Australia and New Zealand Banking Group Limited, Macquarie Bank Limited, (Banks & Insurance); RCR Tomlinson Limited, Reece Australia Limited (Capital Goods); McMillan Shakespeare Limited (Commercial Services & Supplies); Transpacific Industries (Commercial Services & Supplies); Centrebet International Limited (Consumer Services); Austbrokers Holdings Limited, CVC Limited, Everest Babcock & Brown Limited, Etrade Australia Limited, Flexigroup Limited, Hunter Hall International Limited (Diversified Financials);Straits Resources Limited (Energy); Auspine Limited, Incitec Pivot Limited (Materials); Rural Press Limited, West Australian Newspapers Holdings Limited (Media); Macquarie Goodman Group, MFS Living and Leisure Group (Real Estate); ARB Corporation Limited, Fantastic Holdings Limited, Just Group Limited, Specialty Fashion Group Limited (Retailing); DWS Advanced Business Solutions Limited, Oakton Limited (Software & Services); Reverse Corp Limited (Technology & Telecommunication); APA Group (Utilities & Transportation).

Table 4 –Analysis of Controlled Entities, Segments and CGUs

Sector	Avg No. Controlled Entities	Avg No. Business Segments	Avg No. CGUs	Avg value Goodwill ($ million)	Avg Goodwill per CGU ($ million)	Ratio CGUs to Segments
Banks & Insurance *(n=12)*	87.25	4.58	4.11	1,905.66	463.54	0.90 : 1
Capital Goods *(n=18)*	26.72	2.61	3.25	91.42	28.13	1.24 : 1
Commercial Services & Supplies *(n=20)*	35.85	3.15	4.00	104.51	26.13	1.27 : 1
Consumer Services *(n=8)*	36.50	3.00	4.57	527.92	115.48	1.52 : 1
Diversified Financials *(n=20)*	27.50	2.85	2.36	121.57	51.58	0.83 : 1
Energy *(n=4)*	75.50	3.75	3.00	406.06	135.35	0.80 : 1
Food, Beverage & Staples *(n=15)*	85.53	4.13	3.47	732.17	211.20	0.84 : 1
Health Care *(n=14)*	55.36	2.86	3.36	449.33	133.84	1.18 : 1
Materials *(n=17)*	58.06	3.41	3.87	345.53	89.36	1.13 : 1
Media *(n=13)*	64.15	3.62	3.00	142.73	47.58	0.83 : 1
Real Estate *(n=11)*	59.73	3.36	3.11	218.99	70.39	0.92 : 1
Retailing *(n=18)*	63.06	3.11	3.21	89.28	27.78	1.03 : 1
Software & Services *(n=13)*	21.54	2.46	4.00	150.50	37.63	1.63 : 1
Technology & Telecommunication *(n=8)*	37.25	2.13	3.43	345.86	100.87	1.61 : 1
Utilities & Transportation *(n=9)*	67.11	3.78	2.13	1,027.76	483.65	0.56 : 1
TOTAL *(n=200)*	**51.15**	**3.22**	**3.41**	**389.37**	**133.57**	**0.91 : 1**

The issue of CGU aggregation is not the only key choice preparers wield with consequences for reporting transparency. Another choice required to be made in the process of impairment testing relates to the methodology adopted for the purpose of determining the fair value of CGU assets. Either a value in use or fair value methodology may be adopted.

As the data in Table 5 makes clear, the dominant method adopted by large Australian listed reporting entities is the value in use approach, pursuant to which the recoverable value of CGU net assets is estimated via the construction of a discounted cashflow model of CGU pre-tax cashflows. As noted in section 3, this choice has consequences for the nature and content of disclosures firms are required to make in relation to the process of impairment testing.

In particular, they are required to provide detailed disclosures relating to discount rates, growth rates and the time horizon over which cashflows are explicitly forecast in the valuation models used to support the impairment assessment exercise. Each of these factors conveys potentially useful information. Discount rate disclosures provide strong signals in relation to management's assessment of the risk profile of the various cash generating elements of the enterprise. Growth forecasts signal the degree of optimism or pessimism around future business prospects, while insight into cashflow forecast horizons assists with the development of an understanding of the

robustness of the modelling exercise and the likelihood that the terminal value component dominates the estimate of the present value of total CGU cashflows.

Table 5 –Method Employed to Determine Recoverable Amount

Sector	Fair Value Method	Value-in-use Method	Mixed Method	Method not Disclosed
Banks & Insurance *(n=12)*	4	6	1	1
Capital Goods *(n=18)*	-	17	-	1
Commercial Services & Supplies *(n=20)*	-	18	1	1
Consumer Services *(n=8)*	-	8	-	-
Diversified Financials *(n=20)*	2	12	1	5
Energy *(n=4)*	-	3	-	1
Food, Beverage & Staples *(n=15)*	1	13	-	1
Health Care *(n=14)*	1	13	-	-
Materials *(n=17)*	-	15	1	1
Media *(n=13)*	2	9	1	1
Real Estate *(n=11)*	2	6	1	2
Retailing *(n=18)*	2	13	-	3
Software & Services *(n=13)*	1	11	1	-
Technology & Telecommunication *(n=8)*	1	6	-	1
Utilities & Transportation *(n=9)*	1	7	-	1
TOTAL *(n=200)*	**17**	**157**[35]	**7**	**19**

By way of contrast, firms choosing to adopt the fair value approach to impairment testing face a lower required disclosure burden and avoid the obligation to provide details such as discount rates and assumed growth rates. The challenge presented as a consequence of the decision to adopt the fair value approach to goodwill impairment testing is to find an appropriate benchmark asset portfolio, a current price for which can be reliably observed.

Given the limited classes of assets for which liquid markets exist or in relation to which current reference transactions are observable, perhaps the greatest surprise in the data set out in Table 5 is that 17 firms exclusively based their impairment assessments on this approach, with a further 7 disclosing that they made some use of

[35] A total of 157 firms of the 200 sample (78.5% by number) assess the recoverable amount exclusively by the value-in-use method. These firms account for a total of $58,047.047 million in goodwill (74.5% of the total sample by value). Of these firms, only eight recognised an impairment expense in 2006. These eight firms (their sector) and the amount of impairment expense are: Independent Practitioner Network Limited (Health Care) $0.117 million; Caltex Australia Limited (Energy) $0.225 million; QBE Insurance Group Limited (Banks & Insurance) $1.000 million; Leighton Holdings Limited (Capital Goods) $1.241 million; Toll Holdings Limited (Utilities & Transportation) $2.000 million; Integrated Group Limited (Commercial Services & Supplies) $4.366 million; Washington H Soul Pattinson & Company Limited (Diversified Financials) $6.000 million; and Tabcorp Holdings Limited (Consumer Services) $59.700 million.

the technique. We discuss the factors surrounding and consequences of this choice in detail elsewhere (see Carlin & Finch, 2008), but note here the potential for this choice to be exercised opportunistically to the detriment of disclosure quality.

Discount rate disclosures are central requirements in cases where firms adopt value in use as their approach to impairment evaluation. AASB 136 requires that firms disclose the discount rate(s) used[36] in the process of modelling CGU asset portfolio recoverable value, and that the discount rates applied be referable to the risks associated with the assets within each CGU. This information is of fundamental value to financial statement users wishing to independently evaluate the robustness of the impairment testing process applied by a firm. However, as the data in Table 6 demonstrates, disclosure practices in relation to discount rates leave much to be desired.

Table 6 – Discount Rate Disclosures (Value in Use and Mixed Method Firms Only)

Sector	Multiple Explicit Discount Rate (no. of firms)	Range of Discount Rates (no. of firms)	Single Explicit Discount Rate (no. of firms)	No Effective Disclosure (no. of firms)	Minimum Discount Rate (pre-tax)	Maximum Discount Rate (pre-tax)	Average Discount Rate (pre-tax)
Banks & Insurance *(n=7)*	1	1	2	3	10.5%	18.5%	13.6%
Capital Goods *(n=17)*	1	-	11	5	8.5%	17.7%	11.7%
Commercial Services & Supplies *(n=19)*	5	-	13	1	5.7%	20.1%	12.4%
Consumer Services *(n=8)*	3	1	3	1	9.5%	18.6%	12.9%
Diversified Financials *(n=13)*	1	-	8	4	6.0%	13.6%	9.9%
Energy *(n=3)*	-	1	2	-	11.7%	18.9%	14.2%
Food, Beverage & Staples *(n=13)*	1	1	10	1	8.7%	13.6%	11.2%
Health Care *(n=13)*	1	-	10	2	8.9%	17.1%	11.6%
Materials *(n=16)*	-	2	11	3	7.0%	19.0%	11.5%
Media *(n=10)*	3	3	2	2	7.7%	20.0%	12.6%
Real Estate *(n=7)*	1	-	5	1	7.5%	18.0%	10.9%
Retailing *(n=13)*	2	-	11	-	10.4%	16.6%	13.1%
Software & Services *(n=12)*	-	1	10	1	10.3%	17.0%	14.1%
Technology & Telecommunication *(n=6)*	1	1	3	1	9.0%	40.0%	19.2%
Utilities & Transportation *(n=7)*	1	-	6	-	0.0%	13.0%	9.1%
TOTAL *(n=164)*	**21**	**11**	**107**	**25**	**0.0%**	**40.0%**	**12.3%**

[36] AASB 136, Paragraph 130(g)

One striking feature of the data is the infrequency with which firms adopting the value in use approach select and explicitly disclose different discount rates for each of their defined CGUs. Instead, the most common practice is to define a single discount rate and apply this on a blanket basis to all CGUs. Given that it is most unlikely that all CGUs within these firms have substantially the same risk profile, it appears defensible to conclude that inappropriate discount rates are being used in a substantial number of impairment testing procedures.

It is also notable that approximately a fifth of those firms which disclosed that they had adopted a value in use approach to impairment testing failed to provide any meaningful disclosures in relation to the discount rates applied in the testing process, either because they were wholly silent on the question of discount rates, or because they stipulated a range of discount rates applied in the testing process, leaving financial statement users at a loss when attempting to understand the level of discount rates applied to particular CGUs[37].

A further notable feature of the data is the wide range of discount rates applied by firms within each defined industry grouping. In some cases, defined discount rates appeared to be inexplicably low – for example the firm in the commercial services and supplies segment which disclosed the use of a pre-tax discount rate of 5.7% - a rate lower than common estimates of the long run risk free rate. In another case, a firm disclosed that it had not discounted cashflows (despite the requirement to do so), meaning that the effective discount rate it had applied was 0%[38].

The consequence of this substantial variation is that the discount rates employed by the firms studied ranged between 0% at the low end and 40% at the upper end, with an arithmetic mean pre-tax discount rate of 12.3% but high dispersion around the mean.

Overall, three key themes emerge in relation to the discount rate issue. First, the non compliance rate with the basic requirement to disclose discount rates is surprisingly high. Second, most firms appear to be undertaking their impairment testing procedures using blanket whole of firm discount rates when what is required in order for the results of the impairment testing process to be robust is the application of CGU specific risk adjusted discount rates. Third, there is some 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.

In addition to the problems encountered in relation to discount rate disclosures, difficulties in relation to growth assumption disclosures were also evident. The most profound of these was the very high level of non compliance with basic disclosure requirements pertaining to growth assumptions embedded into value in use discounted cashflow models. As the data in Table 7 starkly demonstrate, in excess of 70% of firms failed to make any disclosure in relation to assumed growth rates, despite the clear and explicit requirement that they do so.

[37] In some cases the rate ranges disclosed were so wide as to be devoid of effective information content.

[38] Ironically, this firm was a member of the notoriously volatile and risky aviation industry.

Just as the dispersion of discount rates was notable, so too is the wide dispersion in assumed growth rates within industry groupings a notable feature – with surprisingly high assumed growth rates exhibiting in certain instances in "legacy" industries such as capital goods, without adequate explanation. Indeed, the lack of explanation of growth rates in cases where any disclosure in relation to assumed growth rates was made substantially lowered the quality of the information set, and represented a further deviation from the requirements of AASB 136[39].

Further, just as many firms appeared to employ inappropriate whole of enterprise discount rates, so too most firms which made meaningful disclosures in relation to growth rates used a standard whole of firm growth rate in their cashflow modelling, despite the likelihood that growth prospects vary substantially even within the various elements of an individual firm. Again, this raises questions not only about the level and nature of compliance with the precepts of accounting standards but also with the technical reliability and robustness of the impairment testing process undertaken by the firms in our sample. Table 7 is set out below.

Table 7 – Growth Rate Disclosures (Value in Use and Mixed Method Firms Only)

Sector	Multiple Explicit Growth Rate (no. of firms)	Range of Growth Rate (no. of firms)	Single Explicit Growth Rate (no. of firms)	No Effective Disclosure (no. of firms)	Minimum Growth Rate	Maximum Growth Rate	Average Growth Rate
Banks & Insurance *(n=7)*	-	-	-	7	*n/d*	*n/d*	*n/d*
Capital Goods *(n=17)*	-	-	3	14	2.0%	10.0%	5.67%
Commercial Services & Supplies *(n=19)*	3	-	6	10	0.0%	25.0%	5.19%
Consumer Services *(n=8)*	1	-	-	7	2.5%	4.0%	3.25%
Diversified Financials *(n=13)*	2	-	1	10	1.0%	6.0%	3.66%
Energy *(n=3)*	-	1	1	1	0.0%	10.0%	3.75%
Food, Beverage & Staples *(n=13)*	-	-	3	10	2.0%	3.0%	2.66%
Health Care *(n=13)*	-	1	5	7	2.0%	7.0%	4.68%
Materials *(n=16)*	-	1	7	8	-24.0%	10.0%	1.56%
Media *(n=10)*	-	3	1	6	0.0%	10.0%	4.20%
Real Estate *(n=7)*	-	-	1	6	*n/d*	*n/d*	*n/d* [40]
Retailing *(n=13)*	-	1	6	6	0.0%	10.0%	3.28%
Software & Services *(n=12)*	-	1	2	9	2.0%	20.0%	5.33%
Technology & Telecommunication *(n=6)*	1	1	-	4	2.0%	15.0%	8.00%
Utilities & Transportation *(n=7)*	-	-	1	6	*n/d*	*n/d*	*n/d* [41]
TOTAL *(n=164)*	**7**	**9**	**37**	**111**	**-24.0%**	**25.0%**	**4.05%**

[39] See AASB 136 Paragraph 134 d (iv).
[40] Mirvac Group disclosed a single explicit growth rate of 0.00%.
[41] Toll Holdings Limited disclosed a single explicit growth rate of 4.70%.

The final matter we reviewed in the case of firms which adopted the value in use approach related to disclosures made about the explicit cashflow forecast horizon used in their value modelling processes. Again, some 15% of firms failed to provide any meaningful information about this matter, despite the express requirement to do so under AASB 136. Though the rate of non compliance with this information requirement was substantially lower than in the case of the growth rate disclosure requirements discussed above, it is nonetheless surprisingly high given the size, access to resources and sophistication of the firms in the research sample[42].

The data suggest that the structure of the discounted cashflow models used by firms as tools for the estimation of CGU asset portfolio recoverable value tended to be simple, as evidenced by the dominant selection of a single explicit cashflow forecast horizon, followed by a terminal value perpetuity component. As Table 8 shows, 127 of 164 firms (77.5%) constructed their models in this way.

Table 8 – Disclosure of Forecast Period by Sector

Sector	Multiple explicit forecast period (no. of firms)	Single explicit forecast period (no. of firms)	No Effective Disclosure (no. of firms)	Minimum Forecast Period (years)	Maximum Forecast Period (years)	Average Forecast Period (years)
Banks & Insurance *(n=7)*	1	5	1	3	5	4.0
Capital Goods *(n=17)*	1	13	3	3	10	5.2
Commercial Services & Supplies *(n=19)*	1	17	1	2	19	5.2
Consumer Services *(n=8)*	1	6	1	3	5	4.9
Diversified Financials *(n=13)*	1	10	2	3	30	6.9
Energy *(n=3)*	-	2	1	5	10	7.5
Food, Beverage & Staples *(n=13)*	-	10	3	3	10	5.1
Health Care *(n=13)*	1	10	2	3	20	6.9
Materials *(n=16)*	1	12	3	3	30	9.5
Media *(n=10)*	2	7	1	3	5	4.7
Real Estate *(n=7)*	-	7	-	2	5	4.5
Retailing *(n=13)*	1	7	5	4	10	5.1
Software & Services *(n=12)*	-	11	1	5	15	7.2
Technology & Telecommunication *(n=6)*	1	4	1	5	10	5.5
Utilities & Transportation *(n=7)*	1	6	-	1	20	6.1
TOTAL *(n=164)*	**12**	**127**	**25**	**1**	**30**	**6.0**

[42] To say nothing of their auditors who were in more than 95% of cases drawn from the "Big 4".

Only a small number of firms (12 of 164) used more sophisticated step forecast models which have the capacity to better incorporate and reflect variations in prospective business conditions than the single phase models most firms selected. Again, this raises questions about the reliability and robustness of the models used by firms to generate critical value in use estimates and hence drive impairment assessments.

This is of particular concern when consideration is given to the nature of a range of the businesses included in the final research sample. As an example, retailing (particularly discretionary retailing) is generally viewed as an industry subject to strong cyclical forces. Yet reflection of the potential impact of these forces on enterprise (and by extension CGU) value is difficult to achieve in single step models except through the adoption of blunt devices such as modifications to discount rates or assumed growth to perpetuity rates. Nonetheless, in that industry grouping[43], single step models were the norm.

A review of the data also revealed a number of instances where the explicit cashflow forecast period adopted by firms was surprisingly short, suggesting that a number of valuation models used by firms are likely to suffer from the terminal value dominance problem so often warned against in authoritative sources on valuation methodology (e.g Copeland *et al.*, 2000 p. 273).

Indeed, the average explicit forecast period used by firms in the research sample was 6 years, substantially shorter than the recommended explicit forecast period in much of the valuation literature, largely because of the terminal value dominance problem (Ferris & Pettitt, 2002; Stewart 1990).

5. Conclusion

Our results provide evidence of systematic non compliance with the disclosure requirements of the IFRS goodwill impairment testing regime on the part of large listed Australian firms. Our results also suggest deficiencies in the technical procedures used by firms as they subject their goodwill balances to impairment assessments. Both insights advance the state of knowledge of goodwill impairment testing regimes as expounded in the extant research literature.

In a sense however, these results raise more questions than they answer. For example, is poor compliance a feature associated only with AASB 136, or a more endemic feature of the financial reporting landscape? Given the relative lack of literature on compliance levels, this seems to be an open question, though given the high complexity of accounting standards focused on matters such as business combinations, financial instruments as well as provisions and contingent liabilities (complexity being a feature these areas share in common with impairment testing), it would seem brave indeed to simply assume robust compliance levels as a matter of course.

[43] And in all of the other industry groupings.

Another pertinent question relates to whether our results may be explained as idiosyncratic artefacts of an initial implementation period. This is possible. However even if this explanation is ultimately borne out through the accumulation of additional empirical evidence showing material improvements in compliance standards in future periods, the results relating to the implementation period still offer potentially useful policy insights.

For example, the results at very least provide insight into the level of difficulty experienced by large, sophisticated and well resourced organisations in confronting the challenges associated with changing their financial reporting practices. This may be a result relevant to standard setters and regulators as they contemplate the configuration of transitional arrangements they see fit to make around the introduction of new reporting requirements. It may also assist them to form more balanced expectations as to the technical capabilities of reporting entities faced with complex change.

Of course, if our results point to a deeper problem than initial year teething difficulties, much more challenging questions arise. Given that compliance with the accounting standards is mandated at law[44], evidence of non compliance coupled with a lack of evidence of obvious enforcement action would represent a basis for substantial concern about the efficacy of the financial regulatory framework operating in Australia, including the role and impact of financial statement audits and by extension throw up the spectre of similar difficulties in other jurisdictions.

Even viewing the problem through this lens the point of enquiry logically returns to questions pertaining to motivation. Holding aside the concerns associated with the character and efficacy of regulatory responses, the question of why systematic non compliance manifests to begin with must be of concern.

Could this be a manifestation of inadequate competence or of stubborn unwillingness to yield to the precepts of the mandated reporting framework – comforted by a sense that meaningful rebuke is unlikely? Could this be a signal that policy makers have promulgated standards so complex, unwieldy and conceptually challenged that any hope of systematic compliance, still less the production of serviceable information via their application is no more than a mirage - a false impossible shore? For researchers at least, these puzzles are ripe with challenges we hope will not go long unanswered.

[44] See sections 295, 295A, 296 and 297 of the *Corporations Act 2001* (Cth).

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APPENDIX A

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
	Banks & Insurance			
ADB	Adelaide Bank Limited	1,673	26,211	34
AMP	AMP Limited	19,855	97,938	731
ANZ	Australia and New Zealand Banking Group Limited	50,596	335,771	2,900
BEN	Bendigo Bank Limited	2,419	15,196	65
CBA	Commonwealth Bank Of Australia	67,333	369,103	7,200
IAG	Insurance Australia Group Limited	10,613	16,972	1,505
MBL	Macquarie Bank Limited	21,750	106,211	83
NAB	National Australia Bank Limited	69,504	484,785	4,434
QBE	QBE Insurance Group Limited	28,092	11,306	1,273
SGB	St George Bank Limited	18,621	107,002	1,187
SUN	Suncorp-Metway Limited	19,543	57,369	1,053
WBC	Westpac Banking Corporation	48,652	299,578	2,403
	Total Banks & Insurance *(n= 12)*	**358,651**	**1,927,443**	**22,868**
	Capital Goods			
ALS	Alesco Corporation Limited	904	622	244
BOL	Boom Logistics Limited	568	432	46
CDD	Cardno Limited	308	137	49
COA	Coates Hire Limited	1,277	1,110	69
CRG	Crane Group Limited	1,017	1,068	172
CSR	CSR Limited	3,216	3,063	15
EHL	Emeco Holdings Ltd	1,092	892	212
HIL	Hills Industries Limited	965	622	105
HST	Hastie Group Limited	394	274	84
LEI	Leighton Holdings Limited	9,994	3,803	55
MAH	Macmahon Holdings Limited	431	487	11
MND	Monadelphous Group Limited	992	217	2
NHR	National Hire Group Limited	192	473	94
NOD	Nomad Building Solutions Limited	233	62	15
RCR	RCR Tomlinson Limited	218	153	8
REH	Reece Australia Limited	2,440	605	3
UGL	United Group Limited	1,967	1,356	458
WTP	Watpac Limited	402	222	3
	Total Capital Goods *(n=18)*	**26,610**	**15,609**	**1,646**
	Commercial Services & Supplies			
CAB	Cabcharge Australia Limited	1,304	229	11
COF	Coffey International Limited	400	173	75
CPB	Campbell Brothers Limited	1,135	461	130

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
CXP	Corporate Express Australia Limited	1,072	468	128
CYG	Coventry Group Limited	177	302	39
DOW	Downer EDI Limited	2,292	2,760	528
FWD	Fleetwood Corporation Limited	449	185	28
IWF	Integrated Group Limited	183	105	24
MIN	Mineral Resources Limited	343	124	10
MMS	McMillan Shakespeare Limited	309	50	33
PBB	Pacifica Group Limited	282	779	20
PMP	PMP Limited	547	786	83
PRG	Programmed Maintenance Services Limited	376	309	9
SAI	SAI Global Limited	541	352	161
SEK	Seek Limited	2,088	102	11
SKE	Skilled Group Limited	567	235	42
SLM	Salmat Limited	472	247	82
SPT	Spotless Group Limited	1,017	1,106	377
TPI	Transpacific Industries	3,022	610	115
TSE	Transfield Services Limited	2,573	1,511	183
	Total Commercial Services & Supplies *(n= 20)*	**19,149**	**10,894**	**2,090**
	Consumer Services			
ABS	ABC Learning Centres Limited	2,985	2,323	314
ALL	Aristocrat Leisure Limited	7,518	878	103
CIL	Centrebet International Limited	231	91	40
FLT	Flight Centre Limited	1,527	1,031	171
IBT	IBT Education Limited	708	229	123
IVC	Invocare Limited	556	310	45
TAH	Tabcorp Holdings Limited	8,919	6,755	3,385
TTS	Tattersalls Limited	6,542	803	44
	Total Consumer Services *(n=8)*	**28,986**	**12,420**	**4,223**
	Diversified Financials			
AEP	Allco Equity Partners Limited.	430	663	115
APD	APN Property Group Limited	440	45	14
ASX	ASX Limited	8,092	813	5
AUB	Austbrokers Holdings Limited	230	195	37
CCP	Credit Corp Group Limited	438	124	2
CGF	Challenger Financial Services Group Limited	2,895	25,895	1,583
CIY	City Pacific Limited	665	1,404	33
CVC	CVC Limited	319	196	8
EBB	Everest Babcock & Brown Limited	813	268	91
ETR	Etrade Australia Limited	415	260	1
FXL	Flexigroup Limited	648	533	50
HFA	HFA Holdings Limited	488	27	2

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
HHL	Hunter Hall International Limited	319	39	0
IFL	IOOF Holdings Limited	634	1,585	71
IWL	IWL Limited	264	270	65
PPT	Perpetual Limited	3,344	1,278	55
SOL	Washington H Soul Pattinson & Company Limited	2,281	2,424	126
TRG	Treasury Group Limited	325	59	2
TRU	Trust Company Limited	372	148	39
WHG	WHK Group Limited	514	243	132
	Total Diversified Financials *(n=20)*	**23,926**	**36,468**	**2,431**
	Energy			
CTX	Caltex Australia Limited	6,666	4,417	39
ORG	Origin Energy Limited	7,925	8,665	1,207
SRL	Straits Resources Limited	735	1,064	1
WOR	Worleyparsons Limited	6,093	1,162	377
	Total Energy *(n=4)*	**21,419**	**15,308**	**1,624**
	Food, Beverage & Staples			
ABB	ABB Grain Limited	1,179	1,540	346
CCL	Coca-Cola Amatil Limited	7,067	5,397	375
CGJ	Coles Group Limited	20,778	9,135	865
FCL	Futuris Corporation Limited	1,787	3,361	198
FGL	Foster's Group Limited	13,106	10,439	2,105
GFF	Goodman Fielder Limited	3,273	3,080	1,503
GNC	Graincorp Limited	605	968	11
LNN	Lion Nathan Limited	4,936	2,590	120
MGW	McGuigan Simeon Wines Limited	345	607	48
MTS	Metcash Limited	3,926	3,104	867
RIC	Ridley Corporation Limited	333	777	62
SHV	Select Harvests Limited	460	152	26
TGR	Tassal Group Limited	335	150	15
WES	Wesfarmers Limited	15,049	7,515	1,470
WOW	Woolworths Limited	34,049	13,346	2,971
	Total Food, Beverage & Staples *(n=15)*	**107,228**	**62,163**	**10,983**
	Health Care			
ANN	Ansell Limited	1,666	1,308	185
API	Australian Pharmaceutical Industries Limited	561	869	89
COH	Cochlear Limited	3,426	546	185
CSL	CSL Limited	15,783	4,186	74
HSP	Healthscope Limited	1,324	1,548	649
IBA	IBA Health Limited	469	168	53
IPN	Independent Practitioner Network Limited	245	60	32

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
MYP	Mayne Pharma Limited	2,614	2,008	885
PRY	Primary Health Care Limited	1,509	544	327
RHC	Ramsay Health Care Limited	2,002	2,191	538
SHL	Sonic Healthcare Limited	4,608	2,345	1,504
SIP	Sigma Pharmaceuticals Ltd	2,373	1,961	880
SYB	Symbion Health Limited	2,504	2,164	707
VGH	Vision Group Holdings Limited	179	219	184
	Total Health Care *(n=14)*	**39,263**	**20,119**	**6,291**
	Materials			
ABC	Adelaide Brighton Limited	1,925	1,175	164
AMC	Amcor Limited	6,603	10,156	1,744
ANE	Auspine Limited	195	601	3
BKW	Brickworks Limited	1,984	1,648	242
BLD	Boral Limited	5,094	5,587	321
BSL	Bluescope Steel Limited	8,425	7,261	112
CBH	CBH Resources Limited	415	131	5
GTP	Great Southern Limited	630	1,608	61
IPL	Incitec Pivot Limited	2,446	1,303	184
NUF	Nufarm Limited	2,283	1,927	100
ORI	Orica Limited	8,394	5,709	1,005
OST	Onesteel Limited	3,234	3,139	193
PPX	Paperlinx Limited	1,805	4,390	345
SGM	Sims Group Limited	3,070	1,938	579
SSX	Smorgon Steel Group Limited	1,956	2,568	816
TIM	Timbercorp Limited	640	1,312	1
WYL	Wattyl Limited	293	285	1
	Total Materials *(n=17)*	**49,392**	**50,738**	**5,874**
	Media			
AHD	Amalgamated Holdings Limited	954	804	11
APN	APN News & Media Limited	2,836	2,495	213
FXJ	Fairfax Media Limited	5,164	4,087	654
PBL	Publishing & Broadcasting Limited	13,471	8,351	414
PGA	Photon Group Limited	434	250	167
REA	Realestate.com.au Limited	732	94	54
RUP	Rural Press Limited	1,639	707	2
SBC	Southern Cross Broadcasting (Australia) Limited	1,232	1,051	78
SEV	Seven Network Limited	2,550	1,831	13
SGN	STW Communications Group Limited	679	405	129
TEN	Ten Network Holdings Limited	1,265	1,619	71
VRL	Village Roadshow Limited	513	2,236	47
WAN	West Australian Newspapers Holdings Limited	3,294	636	2

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
	Total Media *(n=13)*	**34,763**	**24,566**	**1,855**
	Real Estate			
BEC	Becton Property Group	592	510	7
LLC	Lend Lease Corporation Limited	8,363	8,155	769
MGQ	Macquarie Goodman Group	11,977	6,753	704
MGR	Mirvac Group	5,532	6,055	169
MPY	MFS Living and Leisure Group	187	373	116
MXG	Multiplex Group	3,835	7,524	323
OAK	Oaks Hotels & Resorts Limited	288	75	1
SDG	Sunland Group Limited	1,035	784	4
SGP	Stockland	11,877	9,599	246
SRV	Servcorp Limited	417	156	15
TCQ	Trinity Consolidated Group	496	235	55
	Total Real Estate *(n=11)*	**44,599**	**40,219**	**2,409**
	Retailing			
APE	AP Eagers Limited	303	533	26
ARP	ARB Corporation Limited	295	90	7
BBG	Billabong International Limited	3,476	1,258	92
CPR	Clive Peeters Limited	425	159	19
DJS	David Jones Limited	2,062	1,136	10
FAN	Fantastic Holdings Limited	436	75	3
FUN	Funtastic Limited	283	264	95
GUD	GUD Holdings Limited	503	274	25
HVN	Harvey Norman Holdings Limited	5,282	3,030	11
HWI	Housewares International Limited	353	289	33
JBH	JB Hi-Fi Limited	849	327	20
JST	Just Group Limited	964	253	75
MCP	McPherson's Limited	199	317	139
NCK	Nick Scali Limited	186	24	2
PBG	Pacific Brands Limited	1,602	2,108	874
RCL	Repco Corporation Limited	335	565	114
SFH	Specialty Fashion Group Limited	375	166	8
SUL	Super Cheap Auto Group Limited	474	270	52
	Total Retailing *(n=18)*	**18,402**	**11,138**	**1,607**
	Software & Services			
BVA	Bravura Solutions Limited	344	64	8
CPU	Computershare Limited	6,291	2,167	1,490
DWS	DWS Advanced Business Solutions Limited	272	34	8
HPX	HPAL Limited	265	86	30
IFM	Infomedia Limited	227	58	9

ASX Code	Company Name	Market Capitalisation ($ million)	Total Assets ($ million)	Total Goodwill ($ million)
MLB	Melbourne IT Limited	273	152	64
MYO	MYOB Limited	476	359	173
OKN	Oakton Limited	368	46	19
RDF	Redflex Holdings Limited	277	113	1
SMX	SMS Management & Technology Limited	297	64	14
TNE	Technology One Limited	317	54	9
TWO	Talent2 International Limited	293	87	24
UXC	UXC Limited	331	236	107
	Total Software & Services *(n=13)*	**10,031**	**3,519**	**1,957**
	Technology & Telecommunication			
CDA	Codan Limited	203	105	21
CDR	Commander Communications Limited	471	746	233
PWT	Powertel Limited	316	239	32
REF	Reverse Corp Limited	462	13	2
SLX	Silex Systems Limited	1,440	29	8
SOT	SP Telemedia Limited	417	543	87
TLS	Telstra Corporation Limited	48,971	36,175	2,073
VEA	Veda Advantage Limited	803	425	310
	Total Technology & Telecommunication *(n=8)*	**53,083**	**38,276**	**2,767**
	Utilities & Transportation			
AAN	Alinta Limited	7,416	11,001	1,697
APA	APA Group	1,817	2,061	1
KSC	K & S Corporation Limited	256	217	7
MAP	Macquarie Airports	6,668	16,927	1,123
QAN	Qantas Airways Limited	10,679	19,183	112
REX	Regional Express Holdings Limited	231	100	1
SPN	SP Ausnet	2,846	6,947	607
TOL	Toll Holdings Limited	13,870	14,670	5,659
VBA	Virgin Blue Holdings Limited	2,859	1,916	44
	Total Utilities & Transportation *(n=9)*	**46,642**	**73,022**	**9,250**
	GRAND TOTAL *(n=200)*	**882,144**[45]	**2,341,892**	**77,874**

[45] Market capitalisation as at 31 December 2006 quoted from Aspect Financial. The total market capitalisation of the ASX at December 2006 was approximately $1.390 trillion; hence this sample of 200 firms (valued at $882.1 billion) represents 63.5% of the total market value of the bourse.