TWO CASES IN INDEPENDENT ASSESSMENT OF IMPAIRMENT TESTING ROBUSTNESS

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Abstract

The adoption of IFRS based reporting in Australia for all reporting periods commencing 1 January 2005 onwards resulted in substantial variations to prior accepted reporting practices. One area in which change was particularly profound was in the shift to an impairment testing based regime for goodwill accounting and reporting. The IFRS framework requires substantially greater levels of disclosure about the assumptions brought to bear in sustaining a valuation for goodwill. At face value, this should have resulted in improved transparency and the availability of higher levels of decision useful information. However, a review of disclosures relating to goodwill and its impairment by a sample of large Australian reporting entities in the first year after the transition to IFRS suggests substantial room for improvement. In particular, required disclosures were frequently omitted, or suggested that the technical requirements of the IFRS goodwill impairment testing process had not been complied with. Consequently, it is concluded that at present, it is in exceptional cases rather than a matter of generality that IFRS compliant disclosures sustain improved insights and support better decision making by financial statement users.
1. Introduction

The adoption of IFRS in Australia from the commencement of all reporting periods commencing on or after 1 January 2005 ushered in significant changes to key elements of the nation’s financial reporting framework. The cost of effecting this change was accepted as a price to be paid for the achievement of greater international harmonisation and improved decision usefulness of corporate financial disclosures. One area in which the variation to pre-existing practices consequent upon the adoption of IFRS has been particularly profound is in relation to accounting, reporting and valuation practices for goodwill.

Prior to the adoption of IFRS, reporting conventions in Australia dictated that purchased goodwill be capitalised and subsequently amortised against profit on a straight line basis over a period not exceeding 20 years. The traditional regime also called upon reporting entities to write down goodwill balances where the worth of these balances had fallen below carrying value. In practice, write downs of this nature rarely occurred, and goodwill balances ossified after recognition, save for the very gradual process of amortisation described above.

While this treatment was simple in its practical dimensions, it was not without controversy. Over an extended period, theorists have vigorously debated the nature of goodwill and related valuation and reporting practices. Some authors have been so antagonistic towards the construct that they have claimed that it is a fiction which results from a failure to adequately measure the value of the true assets of the organisation [1].

Others have seen no distinction between goodwill and other fixed assets [2]. Some have even been attracted to the notion that internally generated goodwill, as well as purchased goodwill ought legitimately enjoy a place on a reporting entity’s financial statements [3].

Controversy has also spilled from the theoretical domain into the world of practice. Commentators interested in this dimension have agonised over the impact on acquisition valuations wrought by requirements for persistent post deal amortisation [4] as well as the rather devil may care attitude to compliance with reporting regulations pertaining to goodwill observed in a substantial number of instances [5].

Much of this history was swept aside with the coming of IFRS, when the cost and impairment based regime of the past was replaced with a highly complex system in which the central ethic was a rigorous ongoing examination of fair value. This required an entirely different approach to accounting for goodwill, and resulted in a requirement for radically different disclosures relating to the asset class.

This paper examines the requirements of the IFRS disclosure regime pertaining to goodwill, the extent to which the detail of these provisions has been adhered to by large Australian reporting entities during the initial reporting framework transition phases and the extent to which the new disclosure framework assists report users with decision useful insights into asset and firm value.

In achieving these ends, the remainder of the paper is structured as follows. Section 2 contains an overview of a range of the specific technical disclosure provisions of the Australian IFRS framework touching on goodwill and goodwill impairment testing. Section 3 provides an overview of the data and methods employed for the purposes of this study. Section 4 contains a discussion of the results generated and section 5 contains some conclusions and recommendations for further research agendas.

2. Technical Provisions Pertaining to Goodwill and Impairment

The principal operative Australian accounting standard which bears on disclosures pertaining to goodwill and the process used by reporting entities to test the value of reported goodwill is AASB 136 – Impairment of Assets1. In contrast to the traditional capitalisation and amortisation approach to accounting and reporting for goodwill, this standard requires no annual amortisation charge, but stipulates that goodwill balances be subjected to impairment testing on a cyclic basis.

Two methods may be used as a basis for determining a benchmark fair value for reported goodwill balances, and, by virtue of a comparison between estimated fair value and book value, contemplation of whether value

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1 This standard is equivalent to IAS 36 – Impairment of Assets.
impairment has occurred. The first of these is to use a disposal value approach, while the alternative requires estimation of the value in use. The latter represents the more commonly adopted approach in Australia [6].

Estimation of value in use requires the application of a discounted cashflow approach. Specifically, AASB 136 requires that the calculation of the value-in-use of an asset reflect estimates of the future cash flows the entity expects to derive from the asset, and expectations about possible variations in the amount of timing of these future cash flows. The discount rate to apply to these cash flows for their valuation must be a pre-tax rate that reflects the time value of money (represented by the current market risk-free rate of interest) and the risks specific to the asset for which future cash flow estimates have not been adjusted.

For the purposes of this study, a number of factors are significant with respect to the determination of the discount rate under AASB 136. First, the discount rate must incorporate a risk-assessment that is asset-specific - the discount rate should reflect the rate of return that investors would require if they were to choose and invest in the asset that would generate cash flows of amounts, timing and risk profile equivalent to those that the entity expects to derive from the asset.

This rate is to be estimated from the rate implicit in current market transactions for similar assets or from the weighted average cost of capital if a listed entity that has a single asset (or portfolio of assets) similar in terms of service potential and risks to the assets under review. This follows a fundamental principle in corporate finance that states each project undertaken by a firm should be paired with a financial asset of comparable risk - specifically, if the beta of an investment differs from that of the firm, the investment should be discounted at the rate commensurate with its own beta [7].

Second, AASB 136 requires that the discount rate be independent of the entity’s capital structure and the manner in which the entity has funded the asset, justified on the basis that future cash flows expected to arise from an asset are not related to the manner in which the entity financed the purchase of the asset. Third, in cases where an asset-specific rate is not directly available from the market, an entity is required to use a surrogate to estimate the discount rate. In this regard, the entity might take into account its weighted average cost of capital, incremental borrowing rate or other market borrowing rates. These rates, however, must be adjusted to reflect the way the market would assess the specific risks associated with the asset’s estimated cash flows, and exclude risks that are not relevant to the asset’s estimated cash flows or for which the estimated cash flows have been adjusted.

The requirement that asset-specific discount rates be used for the measuring the value-in-use of assets sets forth an expectation that, in the case of tests for goodwill impairment, disparate discount rates will be disclosed where market risks are not consistent across the cash-generating units (CGU) of an entity. If a CGU is the smallest group of assets that includes the asset and generated cash inflows that are largely independent of the cash inflows from other assets or groups of assets, then there must be a reasonable expectation that the market risks (betas) of each CGU will differ, although in some cases this may not be substantial.

The requirement that the discount rate to be used for determining goodwill impairment in a particular CGU be independent of the capital structure of the entity suggests that the weighted average cost of capital for the entity or business unit is not the relevant discount rate and, following from this, any beta used for determining the risk-adjusted discount rate should be an all-equity unlevered (asset) beta.

While an asset-specific discount rate may be derived from the weighted average cost of capital of an entity, AASB 136 implies that weighted average cost of capital in itself cannot be used for determining the value-in-use of goodwill in a CGU because it is composite of the particular funding structure for the firm or asset in question. In the case of the beta that is applicable to a specific CGU, the beta of the entity itself will incorporate

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2 AASB 136, Paragraph 30.
3 AASB 136, Paragraph 55.
4 AASB 136, Paragraph 56.
5 AASB 136, Paragraph 19.
6 AASB 136, Paragraph 18.
7 Each unit or group of units to which goodwill is allocated represents the lowest level within the entity at which goodwill is monitored for internal management purposes.
8 There is an argument, however, that suggests in a perfect-market setting, the risk that is specific in an asset will reflect in a constant weighted average cost of capital regardless of the particular funding structure used to
the greater variance in returns to equity holders arising from debt that may be held on the balance sheet, and as such, should be adjusted to ensure the resulting risk measure is asset-specific.\textsuperscript{9}

To allow determination of the extent to which disclosures applying to goodwill impairment permit a reasonable assessment of the sensitivity of the value-in-use of goodwill to key management assumptions it is necessary to have access to data capturing the number of annual periods for which management cash flow forecasts have been applied, growth rates that may have been used for these periods, and long-term growth rate assumptions used for calculation of terminal values.\textsuperscript{10}

AASB 136 requires that the measurement of value-in-use be based on cash flow projections that represent management’s best estimate of the range of economic conditions that will exist over the remaining useful life of the asset\textsuperscript{11}. In estimating these cash flows, projections should cover a maximum period of five years, unless a longer period can be justified\textsuperscript{12}. With respect to growth rates, projections should be based on forecasts or budgets using a steady or declining growth rate for later years, unless an increasing growth rate can be justified\textsuperscript{13}. This growth rate should not exceed the long-term average growth rate for the products, industries or countries in which the entity operates unless a higher rate can be justified.

3. Data and Methodology

In theory, the combination of specific technical requirements and disclosure rules pertaining to goodwill and the factors taken account of for the purpose of testing for its impairment ought to facilitate improved transparency in relation to what has traditionally been a an at best translucent construct. In particular, the requirement that firms adopting a value in use approach to the testing for goodwill impairment disclose matters as specific as forecast growth rates, discount rates and growth forecast horizons, ought theoretically allow financial statement users to independently turn their mind to the validity of values ascribed to goodwill, via sensitivity modelling exercises. However, theory does not always meet practice. Consequently, the testing regime employed for the purposes of this paper is designed to reveal the extent to which the disclosures called for by relevant sections of AASB 136 such as those digested and analysed in section 2 of this paper have been translated into practice and sustain independent critical evaluation of values ascribed to goodwill by financial statement users.

In pursuing this objective and bearing in mind the exploratory ethic of the research agenda, disclosures on goodwill impairment during 2006 for the top 20 companies by market capitalisation\textsuperscript{14} on the Australian Stock Exchange were examined. The 20 organisations which comprised the research sample were categorised according to the nature of the information potentially useful for independent modelling and analysis of goodwill valuation provided by each.

Table 1 provides an assessment of the quality of disclosures on discount rates and other management assumptions that would be incorporated into the determining the value-in-use of goodwill. In the case of discount rates, consideration is given to asset-specific risk – specifically, do discount rates vary where the market risk in CGUs would be expected to not be consistent? With respect to disclosures on growth rates and

\[ \beta_L = \beta_U \left[ 1 + \frac{D}{E} (1 - t) \right] \]

\( \beta_L \) is the levered beta, \( \beta_U \) is the unlevered (asset) beta, \( D/E \) is the ratio of debt to equity in the firm and \( t \) is the corporate tax rate.

\textsuperscript{9} Such adjustment is normally undertaken using the Hamada equation for the leverage-adjusted beta, viz: \( \beta_L = \beta_U \left[ 1 + \frac{D}{E} (1 - t) \right] \).

\textsuperscript{10} This is in addition to data on pre-tax discount rates used for determining the value-in-use of goodwill that applies to CGUs.

\textsuperscript{11} AASB 136, Paragraph 33a.

\textsuperscript{12} AASB 136, Paragraph 33b.

\textsuperscript{13} AASB 136, Paragraph 33c.

\textsuperscript{14} As at June 2006.
cash forecast periods, it is determined if the data is adequate to allow a simple sensitivity test on key management assumptions.

### Table 1 Quality of Disclosures on Goodwill Impairment

<table>
<thead>
<tr>
<th>Table 1 Quality of Disclosures on Goodwill Impairment</th>
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<tbody>
<tr>
<td>Number of companies in sample</td>
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<tr>
<td>Number of companies for which discount rates disclosed</td>
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<tr>
<td>Number of companies that disclose different discount rates across CGUs where risk would appear to be non-constant</td>
</tr>
<tr>
<td>Number of companies that disclose range over which discount rates vary by CGU</td>
</tr>
<tr>
<td>Number of companies that provide data sufficient to allow simple sensitivity test on key management assumptions(^\text{15})</td>
</tr>
</tbody>
</table>

The data in Table 1 indicate that 12 of the top 20 companies disclose discount rates used in goodwill impairment testing, and of these 12 companies, only one discloses discount rates that vary directly by CGU. Two other companies provide a range over which discount rates vary, but do not disclose discount rates specific to each of their CGUs. These figures suggest that of those companies that do disclose discount rates, only three companies incorporate a risk-assessment into their discount rates that is asset-specific.

Further, only five of the companies in the sample provide sufficient information in their disclosures to permit a basic analysis of the sensitivity of the value-in-use of goodwill to key management assumptions, notwithstanding that only one company in this group provides discount rates that are CGU-specific.

Of these five companies, two are examined in more detail using a case study approach, focusing on the quality of their disclosures for goodwill impairment under AASB136. These companies are Telstra Ltd (TLS) and Wesfarmers Ltd (WES). The disclosures apply to the financial reports for the year 2005/06. The analysis centres on two questions:

1. Does the disclosed data, which embodies the assumptions of management regarding the value-in-use of the goodwill in question, fit reasonably well within parameters established by market benchmarks and contemporary corporate finance theory and practice?

2. Does the disclosed data permit a reasonable assessment of the sensitivity of the value-in-use of goodwill to key management assumptions?

The companies have been selected without prejudice, and as indicated above, form a small subset of listed companies where sufficient data is provided in their financial reports to allow more than a cursory examination of the quality of the disclosures. The results of each case analysis are reported in section 4, below.

### 4. Results and Discussion

The first firm examined using the detailed case approach was Telstra (TLS). Disclosures relating to goodwill impairment in TLS are robust and in accordance with the requirements under AASB 136. TLS identifies ten CGUs across eight business segments. It reports different discount rates for each CGU, which it claims represent market-determined rates adjusted for specific risks relating to the CGU and the countries in which they operate. TLS also discloses the growth rates that apply to each CGU for the purposes of determining terminal values, where these growth rates are based on management expectations of the long-term performance of each CGY in its respective market. Details are provided in Table 2.

### Table 2 TLS: Disclosures Related to Impairment Testing on Goodwill

<table>
<thead>
<tr>
<th>Cash-Generating Unit</th>
<th>Discount rate</th>
<th>Terminal value</th>
</tr>
</thead>
</table>

\(^{15}\) Assumes discount rates provided, although discount rates may be constant across CGUs.
<table>
<thead>
<tr>
<th>Telstra CSL Group</th>
<th>11.1%</th>
<th>2.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>New World Mobility Group</td>
<td>12.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Kaz Group</td>
<td>16.6%</td>
<td>3.0%</td>
</tr>
<tr>
<td>TelstraClear Group</td>
<td>18.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>United Kingdom Group</td>
<td>14.9%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Sensis Group</td>
<td>13.7%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Trading Post Group</td>
<td>15.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Universal Publishers</td>
<td>14.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Adstream Group</td>
<td>18.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Telstra Business Systems</td>
<td>15.0%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

The pre-tax discount rates applied by Telstra to its CGUs range from 11.1% to 18.6%. Using the capital asset pricing model (CAPM), we estimate the required rate of return on equity for the Telstra Group to be 8.2% on an after-tax basis and 11.8% on a pre-tax basis\(^\text{16}\), using the following assumptions:

- Risk-free rate [Australian ten year bond] \(5.70\%\)
- Market risk premium \(6.00\%\)
- Beta [20/1/07] \(0.518\)
- Debt/equity \(3.16\%\)
- Unlevered beta \(0.424\)

The unlevered beta is used to determine the required return on equity in accordance with the requirement in AASB 136 that the discount rate be asset specific with respect to risk and independent of financing considerations. The estimated before-tax required return of 11.8% for the Telstra Group fits well with the range of discount rates disclosed by the company for its CGUs, and suggests that TLS has not been conservative in its estimates of risk for the purposes of calculating goodwill impairment.\(^\text{19}\)

With respect to the sensitivity of the value-in-risk of goodwill to key management assumptions, we perform a simple test by which the discount rates for each CGU are increased by 100 basis points and the long-term growth estimates used for terminal value calculations are reduced by 100 basis points. While elementary, we feel such a test should be easily undertaken by a stakeholder in the company interested in the extent to which goodwill could be written down should management assumptions prove to result in favourable estimates of the value-in-use of goodwill.

In the case of TLS, management estimate cash flows for each CGU over a five year period and apply a terminal value assumption from year five. Using this information we find that a 100 basis point across-the-board increase in the discount rates reported for each CGU results in a total reduction in the value-in-use of goodwill of 8.5%.\(^\text{20}\) We estimate that a 100 basis point reduction in growth rate estimates would approximately result in a 4.6% reduction in the value-in-use of goodwill. Finally, a combination of lower growth estimates and higher discount rates, across-the-board, results in a 13.1% reduction in the value-in-use of goodwill.

\(^\text{16}\) We gross up the after-tax discount rate by dividing this figure by one minus the marginal corporate tax rate. While this is standard practice, Lonergan (2006) notes that this approach is an oversimplification and will only lead to consistency on a before and after-tax basis when cash flows are in perpetuity and there is no growth in these cash flows.

\(^\text{17}\) This figure is consistent with the findings of Frino et al (2007) and Officer (1989). The data in the former study covers 1980-2004 and the data for the later study applies to 1882-1987.

\(^\text{18}\) Based on annual report figures for 30 June 2006, with TLS market capitalisation used for equity.

\(^\text{19}\) A more detailed analysis would attempt to extract representative equity betas for each CGU, and compare discount rates for each CGU against those reported by the entity.

\(^\text{20}\) Calculations assume the value-in-use of goodwill matches its carrying value and assume constant annual cash flow forecasts to the terminal value calculation.
By way of contrast, Wesfarmers (WES) identifies four CGUs across six business segments. Discount rates are based on a risk-free rate, for which it uses a ten-year swap rate, plus risk weightings for various risks including technical, industry, country, political, currency, supplier and social risk. This description suggests that the risk estimate is asset specific, and as such, a different discount rate would be expected for each CGU. This would particularly be the case in WES, where its three main segments are in non-related sectors: home improvement, industrial and safety equipment and insurance.

WES, however, discloses the same discount rate for each CGU for the purposes of determining the value-in-use of goodwill.\(^{21}\) Given it is highly improbable that each segment would have identical risks, the use of a single discount rate appears to run counter to the requirement of AASB 136 regarding the use of asset-specific risk estimates to determine discount rates for the purposes of valuing goodwill. WES also discloses the growth rates that apply to each CGU for the purposes of determining terminal values. These growth rates are also identical across each segment. Details are provided in Table 3.

**Table 3** WES: Disclosures Related to Impairment Testing on Goodwill

<table>
<thead>
<tr>
<th>Cash-Generating Unit</th>
<th>Discount rate</th>
<th>Terminal value growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Improvement</td>
<td>8.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Industrial and Safety Segment</td>
<td>8.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Insurance</td>
<td>8.8%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

The pre-tax discount rate applied by WES to its CGUs is 8.8%. Using the capital asset pricing model (CAPM), we estimate the required rate of return on equity for WES to be 11.8% on an after-tax basis and 16.9% on a pre-tax basis, using the following assumptions:

- Risk-free rate: 5.70% [Australian ten year bond]
- Market risk premium: 6.00%
- Beta [20/1/07]: 1.10 [Datastream Advance]
- Debt/equity: 10.3%
- Unlevered beta: 1.02

The estimated before-tax required return of 16.9% for WES does not align well with the 8.8% discount rate disclosed by the company for calculating the value-in-risk of goodwill in its CGUs, and indicates that WES may be underestimating its before-tax discount rate for the purposes of calculating goodwill impairment.\(^{23}\)

With respect to the sensitivity of the value-in-risk of goodwill to key management assumptions, we again increase the discount rate that WES applies to goodwill in each CGU by 100 basis points and reduce the long-term growth estimates used for terminal value calculations by 100 basis points. In the case of WES, management estimate cash flows for each CGU over a five year period and apply a terminal value assumption from year five, using a cash flow multiple of five for the calculation of the terminal value.\(^{24}\)

Using this information we find that a 100 basis point across-the-board increase in the discount rates reported for each CGU results in a total reduction in the value-in-use of goodwill of 14.5%.\(^{25}\) We estimate that a 100 basis point reduction in growth rate estimates would approximately result in an 11.6% reduction in the value-in-use of goodwill. Finally, a combination of lower growth estimates and higher discount rates, across-the-board, results in a 22.8% reduction in the value-in-use of goodwill.

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\(^{21}\) As noted above, this is not unique to WES. Refer Table 1 in this paper.

\(^{22}\) Based on annual report figures for 30 June 2006, with WES market capitalisation used for equity.

\(^{23}\) If book values are used to determine the unlevered beta for WES, the before-tax equity hurdle rate drops to 15.14%. This is still significantly above the 8.8% discount rate used by WES.

\(^{24}\) It is uncertain how the use of a cash flow multiple of 5 aligns with growth rates that would appear to be used for terminal value calculations.

\(^{25}\) Calculations assume the value-in-use of goodwill matches its carrying value and assume constant annual cash flow forecasts to the terminal value calculation. These calculations are rough estimates only given the difficulty in extracting specific data from the disclosures.
5. Conclusion

Compared against the precepts of the disclosure framework which it superseded, Australia’s IFRS compliant regime for goodwill accounting and reporting requires the dissemination of a substantially more detailed level of potentially value relevant information. Holding aside the collateral benefit of harmonisation, one impact of the adoption of what amounts to an extended disclosure framework should theoretically be an improved capacity on the part of financial statement users, to understand and evaluate financial statement data by gaining greater insights into the key assumptions used in the process of their generation.

However, the results of this study suggest that this degree of insight is not typically being supported by the nature and quality of disclosures pertaining to the key dimensions of goodwill value impairment testing. This may perhaps be attributed to the fact that the data examined for the purposes of this study refers to what might be deemed a transitional period.

The entities whose reports were examined for the purposes of this study all reported under IFRS for the first time during 2006. On the other hand, the enterprises examined were all very substantial organisations of the type likely to have had access to the highest level of resources to devote to the task of effectively and accurately implementing IFRS. In any event, future evaluative research in this area will not suffer from this potentially confounding factor, since a transition risk argument must lose credibility after the first few periods of IFRS reporting.

Surprisingly few entities in the sample studied (only 25%) provided disclosures which contained sufficient detail to sustain meaningful independent scrutiny and modelling (e.g. sensitivity testing) of the valuations ascribed to goodwill by financial statement preparers. This is a key finding of the study, and suggests the presence of a regulatory enforcement gap. The significance of this gap is underlined by the results of the case study analysis performed in section 4 of the paper, in which degradation of discount rate and growth rate assumptions used by one of the entities under review of just 1% in each case gave rise to an estimated 22.8% decline in the value of goodwill.

Unfortunately, despite the requirements of AASB 136, it is simply impossible to replicate such a sensitivity analysis for most reporting entities, meaning that financial statement users are cast more into the role of passive information recipients than in the role of empowered critical analysts of management assertions as to position and performance.

The results of the two case studies performed for the purposes of this paper suggested a far greater degree of aggression in the assumptions brought to bear by Wesfarmers in its goodwill impairment testing process than by Telstra – and a commensurately higher vulnerability (in the case of the former) to asset valuation shocks brought on by relatively moderate degradations in credit, economic and trading conditions.

More importantly however, in only a minority of cases was it possible to engage in sufficiently detailed analysis of goodwill disclosures to be in a position to form the types of assessment discussed in section 4 of the relative merits of the goodwill impairment testing and valuation process applied by a particular organisation. In the early post implementation period then, the new IFRS goodwill reporting and accounting framework in Australia may represent an excellent example of much ado about nothing. It is to be hoped that this changes favourably in future reporting cycles.
REFERENCES


