

IFRS fair value measurement and accounting policy choice in the United Kingdom and Australia

Abstract

This study investigates the use of fair value measurement by 228 listed companies in the UK and Australia around the time of adoption of IFRS from 1 January 2005. We test whether within and between country comparability in policy choices (as measured by T indices) has changed in relation to (a) mandatory and (b) optional use of fair value measurement. Mandatory requirements related to financial instruments (IAS 39) and share-based payments (IFRS 2) have increased comparability, with a weaker effect for biological assets (IAS 41). In relation to the optional use of fair value, comparability increased in relation to property (IAS 16) because some companies discontinued fair value measurement. Under IAS 39, the fair value option for other financial assets and other financial liabilities decreased comparability. Options to use fair value in other areas (intangible assets and plant and equipment) are not generally taken up, either for on-going measurement or on IFRS adoption (under the 'deemed cost' option). The results suggest a conservative approach and/or lack of incentives to use fair value measurement for most companies. Exceptions include some banks and insurance companies (for other financial assets and liabilities) and companies holding investment properties.

Key words Fair value measurement; accounting policy choice; within country comparability; between country comparability; T index.

1. Introduction

The aim of this study is to investigate the use of fair value measurement and its impact on accounting policy choice and the comparability of financial statements in the United Kingdom (UK) and Australia around the adoption of International Financial Reporting Standards (IFRS) from 1 January 2005. Listed companies in the UK were required to use IFRS in their consolidated financial statements; they also had the option of using IFRS in parent and single company financial statements. In Australia, all reporting entities began preparing consolidated and single company financial statements under Australian equivalents to IFRS (AIFRS). In both countries, the adoption of IFRS was a part of the global trend favouring IFRS over national GAAP, which represents the greatest ever change in financial reporting.

The study focuses on the consolidated financial statements of listed companies. Prior to adoption of IFRS, listed companies in both the UK and Australia presented their consolidated financial statements in accordance with national company law, domestic accounting standards and stock exchange requirements (henceforth, collectively referred to as UK GAAP and Australian GAAP respectively).¹ We select UK and Australian companies for study because both UK GAAP and Australian GAAP permitted a ‘mixed attribute’ measurement model, that is, they permitted the use of several measurement bases. Generally, tangible, intangible and financial assets were measured initially at cost and subsequently at cost-based amounts (depreciated/amortised/written down cost). However, both UK GAAP and Australian GAAP permitted, and occasionally required, subsequent measurement of tangible assets, intangible assets and some financial assets at current values (usually, but not always, fair value). Companies used the permissions to varying degrees.

An investigation of fair value measurement is important because many commentators have suggested that fair value measurement would be more pervasive under IFRS than under national GAAP (Ernst & Young, 2003, 2005; Parker, 2004; FitchRatings, 2005; Ball, 2006). Some suggested that IFRS were a 'fair value based accounting framework with some exceptions for historical cost' (FitchRatings, 2005) and that financial reporting under IFRS largely involved the measurement of assets and liabilities at each balance sheet date at fair value (Ernst & Young, 2005). These commentators also speculated that the IASB would, in the future, extend the use of fair value measurement at each balance sheet date beyond that required by IFRS in 2005.

The primary aim of adoption of IFRS is to improve the international comparability of financial reporting (IASB, 2000). Comparability is one of the four principal characteristics of IFRS financial statements and requires that, among other things, the measurement of the financial effect of like transactions and other events must be carried out in a consistent way for different entities (IASB Framework, para. 39). The matters of interest, therefore, are the extent to which fair value measurement has increased following IFRS adoption and whether fair value measurement has increased the comparability in measurement policies between companies within each country and between companies from the UK and Australia

The study addresses these topics by examining situations where IFRS require or allow the use of fair value measurement. It examines those accounting issues on which IFRS require the use of fair value measurement (derivatives, held-for-trading and available-for-sale financial assets, share-based payment and some biological assets) when UK GAAP and Australian GAAP required or allowed historical cost-based measurement. It also

examines those accounting issues on which IFRS allow a choice of either fair value measurement or historical cost-based measurement (property, plant and equipment, investment property, intangible assets and other financial assets and financial liabilities) when UK GAAP and Australian GAAP allowed a similar choice or required the use of either fair value measurement or historical cost-based measurement. Research questions are as follows: (1) Do mandatory IFRS fair value requirements (a) increase the use of fair value measurement and (b) increase comparability both within and between countries compared to prior national GAAP? (2) When companies have a measurement choice under IFRS (fair value or historical cost-based measurement), (a) does the use of fair value measurement increase and (b) what is the effect of choice on within and between country comparability?

Our sample consists of 228 large listed companies (114 each from the UK and Australia) from 22 industry sectors. The data source is the consolidated financial statements for the first IFRS reporting period (the adoption year) and the last period presented under UK GAAP or Australian GAAP (the transition year).² We find that, as expected, fair value measurement increased in those areas where its use is mandatory, notably derivatives, investments in equity securities, share-based payment and biological assets. The increased use of fair value measurement for derivatives and share-based payment affects many companies, while use of fair values for equity securities affects fewer companies. Fair value measurement for biological assets affects only a small proportion of companies. We find that within and between country comparability increases in relation to the adoption of mandatory fair value measurement in IFRS.

In relation to options to use fair values, we observe very limited use of fair value measurement. For financial assets and financial liabilities that would otherwise be measured at amortised cost, intangible assets and plant and equipment, the fair value option is not generally taken up, either for on-going measurement or on adoption under the IFRS 1 'deemed cost' option. The impact of optional fair value measurement on comparability varies reflecting companies' policy choices. In relation to own-use property, comparability increases as companies abandon fair value measurement under UK GAAP and Australian GAAP. For investment property, comparability declines in the UK as companies make use of the cost model under IFRS that was not available under UK GAAP. For financial assets that would otherwise be measured at amortised cost, comparability declines in both the UK and Australia as companies elect to use fair value under IFRS when such an election was not available under UK GAAP or Australian GAAP.

The study contributes in several ways. First, the primary aim of adoption of IFRS is to improve the international comparability of financial reporting (IASB, 2000). It is useful to investigate the extent to which this has occurred in practice. Second, there have been many sweeping statements about the impact of the IASB's so called 'fair value orientation' and IFRS which require fair value measurement (see Cairns, 2007). We show that while fair value measurement has increased in some areas where it is mandatory, notably derivatives, there are areas of mandated fair value measurement where only a small proportion of companies are affected, such as in relation to biological assets. Third, we show that most companies do not voluntarily adopt fair value measurement. This result suggests that managers support historical cost/modified historical cost as the preferred model for many of the assets reported in the balance sheet. The preference for

historical cost/modified historical cost may be because the benefits of fair value measurement do not exceed its costs for the majority of companies in our sample. Our findings contribute to the debate about the use of fair value measurement. They are relevant to all those concerned with the impact of IFRS adoption in capital markets, including regulators, managers and investors.

2. Background

IFRS require or allow the use of fair values in five sets of circumstances, as follows:

- (1) for the measurement of transactions and other events and, hence, the measurement of the resulting assets, liabilities and equity items on their initial recognition in the financial statements;
- (2) for the allocation of the total amount at which a transaction or other event is measured among its component parts;
- (3) for the measurement of the deemed cost of some assets on the transition to IFRS from other accounting standards;
- (4) in the determination of the recoverable amount of assets when testing those assets for impairment; and
- (5) for the measurement of assets and liabilities at each balance sheet date.

Fair values are used in circumstances 1 and 2 to determine the historical cost of transactions, assets and liabilities. The use of fair values in these circumstances is generally not a change from UK GAAP or Australian GAAP or a policy choice and is, therefore, outside the scope of this study. However, the use of fair values for the measurement of share-based payments is a change from UK GAAP and Australian GAAP and is, therefore, within the scope of this study. Fair values are used in circumstance 3 to

determine the deemed IFRS cost of assets and is a change from UK GAAP and Australian GAAP and a policy choice. It is, therefore, within the scope of this study.

Fair values are used in circumstance 4 as part of the well-established practice of ensuring that the carrying amounts of assets do not exceed the amounts that can be recovered from the use, sale or receipt of those assets. The use of fair values in such circumstances is not a change from UK GAAP or Australian GAAP and is not a policy choice and is, therefore, outside the scope of this study. In circumstance 5, fair values are used for the subsequent measurement of assets and liabilities at each balance sheet date and, therefore, must be updated at each balance sheet date. This use of fair values represents either a policy choice or a change from UK GAAP or Australian GAAP and is, therefore, the primary focus of this study. In particular, we examine those accounting issues on which IFRS require the use of fair value measurement (derivatives, held-for-trading and available-for-sale financial assets and some biological assets) or allow a choice of either fair value measurement or historical cost-based measurement (property, plant and equipment, investment property, intangible assets and other financial assets and financial liabilities).

We now discuss the requirements of IFRS, UK GAAP and Australian GAAP at 2005 (shown in Table 1) for items within the scope of the study and relevant prior research.

[Insert Table 1 about here]

2.1 Tangible assets – property, plant and equipment (other than investment property)

Under UK GAAP, Australian GAAP and IFRS, items of property, plant and equipment are measured at initial recognition at the cost of acquisition or construction. They are

measured subsequently using either a cost model or a revaluation model (based on the use of fair values). Thus discretion to use fair value measurement at each balance sheet date exists under IFRS, UK GAAP and Australian GAAP (Table 1).

Under the cost model, items are measured at cost less accumulated depreciation and any accumulated impairment losses. Under the revaluation model, items are measured at fair value less any subsequent accumulated depreciation and accumulated impairment losses after the date of the revaluation. An entity may use the revaluation model provided that it applies the model to all the items in the same class of property, plant and equipment, the revaluations are made to fair value and revaluations are carried out with sufficient regularity that the carrying amounts of the revalued assets do not differ materially from fair value at the balance sheet date.³

In the past, many UK and Australian companies used the revaluation model. Their practice has been explained in terms of contracting theory and political costs (Brown, Izan & Loh, 1992; Whittred & Chan, 1992; Cotter & Zimmer, 1995). Other motivations are to communicate performance expectations and to avoid takeovers when assets are undervalued (Aboody, Barth & Kasznik, 1999). Lin and Peasnell (2000a, 2000b) find that specific national factors, in this case equity depletion resulting primarily from the writing off of goodwill against equity on acquisition, influence revaluation decisions. Aboody et al. (1999) show that in the UK 43% of companies recorded an asset revaluation reserve (based on company-years 1983 to 1995). Barth and Clinch (1998) report that 45% of Australian companies revalued property, plant and equipment in the period 1991 to 1995. However, the use of the revaluation model declined substantially in the UK and Australia

from the early 1990s as economies experienced lower inflation and accounting standards introduced stricter revaluation requirements.⁴

2.2 Tangible assets – investment property

Under UK GAAP, Australian GAAP and IFRS, investment property is measured at initial recognition at the cost of acquisition or construction (Table 1). Under UK GAAP, investment property is measured at subsequent balance sheet dates at open market value and no depreciation is charged. The use of the cost model is prohibited (SSAP 19).⁵ Australian GAAP did not include a separate standard for investment property and thus AASB 1010 applied which allowed the use of a cost model or a revaluation model, both with depreciation. Many Australian companies with investment properties used the revaluation model.

IAS 40 Investment Property reflects a compromise between the two approaches. It requires that investment property is measured at subsequent balance sheet dates using either a fair model (without depreciation) or the cost model (with depreciation). While IAS 40 expresses a clear preference for the fair value model, companies have discretion about using fair value measurement (Table 1).⁶

2.3 Identifiable intangible assets

Under UK GAAP, Australian GAAP and IFRS, acquired and internally generated intangible assets that qualify for recognition on the balance sheet as assets (that is, intangible assets other than goodwill)⁷ are measured at initial recognition at the cost of acquisition or production. They are measured at subsequent balance sheet dates using either a cost model or (in very restricted circumstances) a revaluation model (Table 1).

Under the cost model, items are measured at cost less any accumulated amortisation and impairment losses. Under the revaluation model, items are measured at fair value less any amortisation and impairment losses after the date of the revaluation. Under both UK GAAP and IFRS, the revaluation model may be used only if the fair value is determined from an active market for the asset, which has the effect of prohibiting the use of revaluation in virtually all cases. Under Australian GAAP, fair value was based on either a directors' valuation or a market valuation (Table 1).⁸

Aboody et al. (1999) reported very little revaluation of intangible assets in the UK. Prior to 1999, a few companies revalued intangibles to overcome equity depletion resulting from goodwill written off directly to equity under the then current accounting standard. Changes in standards removed this incentive and very few revaluations were observed subsequently (Lin & Peasnell, 2000a). Barth and Clinch (1998) show that 21% of Australian companies reported revalued intangible assets (based on company-years in the period 1991 - 1995). Studies suggest that revaluation of intangible assets provides useful information (Barth & Clinch, 1998; Abrahams & Sidhu, 1998; Godfrey & Koh, 2001).

2.4 Financial assets and liabilities

Prior to 2005, UK accounting standards did not deal with the measurement of financial assets or liabilities (other than a company's own debt, which was required to be measured at amortised cost under FRS 4).⁹ Companies (other than banks and insurance companies) measured non-current financial assets at either cost or revalued amount and current financial assets at the lower of cost (or amortised cost) and net realisable value (Table 1). In practice, derivatives were treated as either non-current financial assets and measured at the lower of cost (usually zero) and net realisable value or as contracts, in which case a

provision was recognised to the extent that they were onerous. Derivatives that were held for hedging purposes were accounted for in the same way, except that the hedging relationship resulted in the deferral of gains or losses on the derivatives. By virtue of the EC Bank Accounts Directive, UK banks were allowed to measure some financial assets, including investments in debt and equity securities and derivatives, at either the lower of cost (or amortised cost) and net realisable value or at revalued amount. In practice, several banks chose to use revalued amounts for trading securities and derivatives which were held for trading.

In Australia prior to 2005, financial assets were not a separately identified category. Financial assets within the investment category could be measured at cost or revalued under Australian GAAP (Table 1). Short-term investments (for example, available-for-sale securities) were usually shown at the lower of cost and net realisable value. Non-current financial assets could be measured at market value under non-current asset revaluation standards. Available-for-sale securities were usually measured at the lower of cost and net realisable value, with unrealised gains excluded from income.

Under IFRS, the measurement of financial assets and financial liabilities is determined by IAS 39. Measurement of financial assets follows from managers' specifications of their intentions in relation to those assets. There are two measurement categories that require measurement at fair value: at fair value through profit and loss (including all held-for-trading items and all derivatives); and available-for-sale financial assets (Table 1). There are two measurement categories that allow measurement at amortised cost: held to maturity investments; and loans and receivables (Table 1). The measurement of financial liabilities also follows from managers' specifications of their intentions in relation to

those liabilities. There is one measurement category that requires measurement at fair value: at fair value through profit and loss (including all held-for-trading items and all derivatives). There is one measurement category that allows measurement at amortised cost: other financial liabilities.

IAS 39 has two major differences from pre-2005 UK GAAP and Australian GAAP.¹⁰ First, IAS 39 requires the recognition of all derivatives on the balance sheet and measurement of the resulting assets or liabilities at each balance sheet date at fair value. Second, IAS 39 requires that all other held-for-trading financial assets and liabilities and available-for-sale financial assets are measured at each balance sheet date at fair value. In both situations, the IAS 39 treatment was not required or, in many cases permitted, under pre-2005 UK GAAP and Australian GAAP.

IAS 39 also allows an entity to designate on initial recognition virtually any financial assets or financial liabilities that would otherwise be measured at amortised cost as at fair value through profit or loss and, therefore, measure them at fair value at each balance sheet date (the so-called 'fair value option'). In practice, few entities use this fair value option and those that use it do so for only selected items, for example, loans that contain embedded derivatives and for other items for which it would simplify hedge accounting or eliminate a mismatch between the measurement of related financial assets and financial liabilities.

Landsman (2007) reviews studies suggesting that fair values of financial instruments (notably banks' investment securities) are relevant to investors, providing a rationale for the choice of fair value measurement by some companies prior to 2005. Fair value

measurement of financial assets has been strongly opposed by some financial statement preparers, who claim that such measurements are unreliable and introduce excessive volatility (Beresford, 1998; Penman, 2007). However, opposition could also arise because financial instrument standards may restrict companies' flexibility in managing their financial portfolios (Johnson & Swieringa, 1996; Chalmers & Godfrey, 2000).

2.5 Share-based payment

Prior to the adoption of *IFRS 2 Share-based Payment*, UK and Australian accounting standards did not deal comprehensively with share-based payment, in particular all share-based payments to employees, including the granting of share options. Under pre-2005 UK GAAP, some share-based payments to employees were measured at their intrinsic value at grant date in accordance with UITF Abstract 17 but others were exempt from this requirement and were recognised only when the shares were issued. As a result, many equity settled share-based payments were frequently omitted from financial statements until employees were required to make payments or companies were required to issue shares. Furthermore, the amounts recorded were usually limited to the amounts, if any, paid by the employees to the companies. Similarly, in Australia an expense was recognised on issue of shares rather than granting of options (Brown & Yew, 2002). From 2005, IFRS 2 requires companies to recognise an expense in relation to employee compensation involving shares or shares options and to measure this expense at the fair value of the shares or options at grant date.

2.6 Biological assets and harvested agricultural produce

Prior to 2005, UK GAAP did not deal comprehensively with the measurement of biological assets (living plants and animals) and harvested agricultural produce. Under

pre-2005 UK GAAP, biological assets were usually measured using a cost model (at cost or cost less accumulated depreciation and any impairment losses). Harvested agricultural produce was accounted for in the same way as inventories and measured at the lower of cost and net realisable value.

IAS 41 *Agriculture* requires that biological assets are measured on acquisition and at subsequent balance sheet dates at fair value less costs to sell, unless the entity determines on initial recognition that fair value cannot be determined reliably. Harvested agricultural produce is always measured at fair value less costs to sell. These requirements differed substantially from UK GAAP but are largely consistent with prior Australian GAAP. AASB 1037 (which required market value measurement for biological assets and produce, with changes in value taken to the income statement) was issued in 1998.

3. Hypotheses

We examine the use of fair value measurement in the following three scenarios:

- (A) for the measurement of share-based payments in accordance with IFRS 2 (for which there were no equivalent pre-2005 UK GAAP or Australian GAAP);
- (B) for the measurement of the deemed cost of property, plant and equipment, investment property and intangible assets in accordance with IFRS 1 on the transition to IFRS from UK GAAP and Australian GAAP (a use which is unique to IFRS and which created an opportunity to incorporate one-off revaluations to fair value or carry over old revaluations into their IFRS financial statements); and
- (C) for the subsequent measurement of property, plant and equipment (IAS 16), investment property (IAS 40), intangible assets (IAS 38), biological assets (IAS 41),

harvested agricultural produce (IAS 41), and financial assets and financial liabilities (IAS 39) at each balance sheet date.

We expect companies to use fair value measurement when required to do so by accounting standards. That is, we expect companies to comply with the mandatory fair value measurement requirements in IAS 39, IAS 41 and IFRS 2. Large companies (as included in this study) have both the available resources and necessary incentives to comply with accounting standards. They have reputations to protect, meaning they will seek to comply with laws and accounting standards to receive unqualified audit reports and avoid negative publicity or the attention of the regulatory body (the FRRP in the UK or ASIC in Australia).¹¹ Thus we expect companies to comply with standards that mandate the use of fair value measurement. As the requirement to use fair value measurement removes policy choices that may have existed under UK GAAP and Australian GAAP, we expect an increase in national comparability, within country comparability and between country comparability. The hypothesis can be formally stated as:

H1: Mandatory IFRS requirements for fair value measurement increase (a) national, (b) within country and (c) between country comparability for companies from the UK and Australia.

When companies are permitted to choose a fair value or historical cost based-model, we expect variation in policy choice both within and between countries. Policy choice has been examined in many studies and UK company choices have been observed from the early studies such as van der Tas (1988, 1992) and Emenyonu and Gray (1992). Parker and Morris (2001) report variation in policy choice among eighty UK and Australia

companies in 1993. They find considerable national harmony within the UK and within Australia for seven and five accounting policies respectively. However, there was complete harmony between UK and Australian companies for only three policies (inventory valuation, finance leases and interest on construction).¹² Tarca (2005) compares UK and Australian companies in 1999-2000 and reports that Australian companies were more likely to revalue property plant and equipment (84% of Australian companies held some revalued property compared to 40% of UK companies) and to record intangible assets at valuation (17% of Australian companies held some revalued/internally generated intangible assets compared to 4% of UK companies).

As outlined above, companies have measurement choices under IAS 16, IAS 38, IAS 39 and IAS 40. In addition, they can elect to use a fair value measurement as deemed cost of tangible and intangible assets on first time adoption of IFRS. Companies select accounting policies in response to a range of managerial, company and country-level incentives, reflecting their circumstances and preferences (Fields, Lys & Vincent, 2001). Based on arguments posited in the prior literature that options in standards reduce harmony in policy choice, we expect to observe within country and between country variability in policy choice. The second hypothesis is thus:

H2: Options in IFRS allowing fair value measurement reduce (a) national, (b) within country and (c) between country comparability for companies from the UK and Australia.

Whether options in IFRS permitting the use of fair value measurement have resulted in more fair value measurement under IFRS in the adoption year compared with under UK

GAAP and Australian GAAP in the transition year is a key question addressed in this study. Incentives to use a current value measurement model have decreased since the relatively high inflation period of the 1980s and other country specific incentives to revalue assets such as the direct write-off of goodwill to equity have disappeared (Lin & Peasnell, 2001a, 2001b). Further, past practice under national GAAP has been shown to influence policy choice under IFRS (Tarca, 2005; Christensen & Nikolaev, 2008). We may observe 'stickiness' in terms of policy choice, that is, companies continue with the same policy under IFRS as they used under UK GAAP or Australian GAAP despite the availability of the same or new choices under IFRS. In addition, companies may be influenced by general conservatism in accounting. A preference for early recognition of losses but later recognition of gains (Basu, 1997; Ball, Kothari & Robin, 2000; Watts, 2003a, 2003b) may result in preference for historical cost-based measurement which incorporates unrealised losses through impairment write downs but ignores unrealised gains.

Companies may not favour the fair value model because of its impact on their financial statements (such as volatility in the income statement; less reliability in measurement where assets are not traded in active markets) and the cost of preparing and maintaining fair value information (for example, the requirement of IAS 16 that the fair value of property be current at balance date). Christensen and Nikolaev (2009) argue that historical cost is a more effective mechanism for reducing agency costs and that the few companies which use fair value appear to derive contracting benefits from this choice. Finally, we recognise that while there are many similarities between the national accounting frameworks in the UK and Australia (Nobes, 1983; Brown & Tarca, 2007), specific country differences may lead to within and between country differences.

4. Data and Method

4.1 Sample selection

A sample of 228 listed companies (114 from each country) was selected based on company size and industry because these attributes have been observed to influence policy choice and disclosure (Meek, Roberts & Gray, 1995, 2005; Parker & Morris, 2001; Tarca, 2005). Our focus is on larger companies because of their importance in capital markets. In addition, large companies' financial statements are more likely to be affected by differences between IFRS and prior national GAAP (Goodwin & Ahmed, 2006; Stenka, Ormrod & Chan, 2008).

The largest companies by market capitalisation in each of 22 industry sectors (based on GICS classification) were selected.¹³ The UK companies range in size from GBP million 100.39 to 106,631 (median 2,750.42) and are larger than the Australian companies, which range in size from GBP million 48.49 to 44,125.75 (median 939.26). For each country, the sample includes 13 companies from Materials; nine each from Consumer Services & Supplies and Energy; eight each from Banks, Capital Goods and Health Care Equipment & Services; six each from Diversified Financials, Food, Beverage & Tobacco, Media and Real Estate; and five or fewer companies from the other sectors.

Annual reports were collected directly from company websites for two years, being the first IFRS reporting period¹⁴ (the adoption year) and the latest period presented under UK GAAP or Australian GAAP (the transition year). Year-end dates varied, with the most common date for the adoption year being 31 December 2005 in the UK (66 companies, 57% of sample) and 30 June 2006 in Australia (49 companies, 61% of sample).

4.2 Data collection

A checklist was developed by the researchers to collect data about policy choice in relation to the measurement of the selected items under IFRS in the adoption year and under UK GAAP and Australian GAAP in the transition year (see Appendix 1). It contains 20 items relating to the following IFRS and their equivalents under UK GAAP and Australian GAAP: *IAS 16 Property Plant and Equipment* (four items), *IAS 40 Investment Property* (two items), *IAS 38 Intangible Assets* (two items), *IAS 41 Agriculture* (three items), *IAS 39 Recognition and Measurement of Financial Instruments* (five items), *IFRS 2 Share-based Payment* (two items) and *IFRS 1 First Time Adoption of IFRS* (four items).

Each company's annual report was read and its policy choices under IFRS (adoption year) and UK GAAP or Australian GAAP (transition year) were scored 1 or 0 to record the policies used in each year. For example, in relation to property, plant and equipment, the coders recorded the measurement method used (cost, deemed cost or revaluation) for property and for plant and equipment under IFRS (adoption year) and UK GAAP or Australian GAAP (transition year). (Information in relation to *IFRS 1 First Time Adoption of IFRS* was collected as at the transition date only, e.g. the deemed cost information for property, plant and equipment.)

If a company's accounting policy for a particular item was not stated and could not be determined from other note disclosures, the company was shown as 'not applicable' in relation to that item. Since companies provide detailed note disclosures to comply with IFRS, we were able to ascertain that the policy was not applicable rather than simply not

disclosed. Thus, we believe the not applicable category captures companies which do not hold that class of asset, rather than companies which do not disclose their policy choice. In addition, we checked that the statements in the accounting policy note were correct by checking the income statement/balance sheet notes. If 'boilerplate' policy notes were used, we made a correct classification by referring to the financial statement notes. For example, some companies gave policy notes for all four classes of financial instruments. We recorded policy choices for only those financial instruments actually held by the company, as determined from the balance sheet notes.

In relation to prior national GAAPs, additional data collection was required to capture companies' policies. For financial instruments, prior national GAAP did not use the categories required by IAS 39. Therefore we classified financial instruments as disclosed under national GAAP to the IAS 39 categories to allow comparison between the transition and adoption years. Similarly, the financial statements under national GAAP did not provide disclosures about share-based payments which were directly comparable to IFRS accounts. Therefore, we reconstructed the GAAP information from that provided in various places in the financial statements and annual reports.

In general, consistency and accuracy of coding was promoted in several ways. In each country, the coder was trained by the chief researcher and all coding was completed by one coder to promote consistency. It was then reviewed by one of the chief researchers to ensure accuracy. Finally, the two chief researchers compared coding of UK and Australian data to ensure comparability.

4.3 Data analysis

Comparability of policy choice is commonly measured using indices (van der Tas, 1988, 1992; Emenyonu & Gray, 1992; Herrmann & Thomas, 1995; Emenyonu & Adhikari, 1998; Parker & Morris, 2001; Archer, Delvaile & McLeay, 1995). We employ T indices developed by Taplin (2004), which extend the H, C and I indices used previously. The T index is a flexible framework containing countless indices in a unified framework and is used in this paper for two reasons. First, its flexibility enables different indices to be used for different policy choices or to examine sensitivity of conclusions to the choice of index. Second, it provides a simple way of describing which particular index is computed in a particular situation.

The general formula for T is given by

$$T = \sum_{i=1}^N \sum_{j=1}^N \sum_{k=1}^M \sum_{l=1}^M \alpha_{kl} \beta_{ij} p_{ki} p_{lj} \quad [1]$$

where

α_{kl} is the coefficient of comparability between accounting methods k and l ,

β_{ij} is the weighting for the comparison between companies in countries i and j ,

p_{ki} is the proportion of companies in country i that use accounting method k ,

p_{lj} is the proportion of companies in country j that use accounting method l ,

and there are N countries (labelled 1 to N) and M accounting methods (labelled 1 to M).

The T index has the simple interpretation as the probability that two randomly selected companies have accounts that are comparable. It takes values from 0 (when all companies have accounts non-comparable to each other) to 1 (when all companies have accounts that are comparable with each other). Since the T index contains countless individual indices,

we use the options included in Taplin (2004) to describe which of the indices within the T framework we employ (see Appendix 2 for a list of these options).

We compute four sets of indices. The first two measure the national level of harmony for each country separately, within the UK and within Australia (national comparability). The last two measure the level of harmony for the combined countries using a within country international focus (option 2b) and using a between country focus (option 2c). For these latter two indices each country is assigned equal weight (option 1b).¹⁵

In the primary analysis, companies for which a standard was not applicable were removed (option 4a). For policy choices other than not applicable, we assume that companies using the same policy choice are completely comparable with each other and that companies using different policy choices are completely non-comparable with each other (option 3a). In sensitivity tests, we calculate indices with 'not applicable' companies included, thus treating the financial statements of these companies comparable to all other companies (option 4b).

In addition, as a robustness test we analyse policy choices in relation to (a) property and (b) plant and equipment in three ways. First, we assume cost, deemed cost and revaluation are completely non-comparable with each other (and completely comparable with themselves). Second, we assume deemed cost is completely comparable with cost (and completely non-comparable with revaluation). This is justified under the assumption that these companies are expected to use cost over time and the revaluation was a once-only occurrence allowed under IFRS. Third, we assume deemed cost is completely comparable with revaluation (and completely non-comparable to cost). This is justified under the assumption that these

companies effectively revalued the asset during that year. These last two approaches use option 3b of the T index. Similarly, we analyse policy choices for derivatives in two ways. First, the 18 companies which measure held-for-trading derivatives at fair value and hedging derivatives at the lower of cost and net realisable value under national GAAP are treated as fully comparable with companies using fair value for derivatives. Second, these 18 companies are treated as fully comparable with companies using cost.

For each of the indices described above we calculate the T index for both the transition year (under UK GAAP and Australian GAAP) and the adoption year (under IFRS). We compute standard errors using the formula in Taplin (2009) to provide an assessment of how accurately these indices have been estimated. We also compute p-values to summarise the evidence of a change in harmony from transition year to adoption year for each index. These p-values are estimated from 10,000 bootstrap samples because in some cases small sample sizes suggest sampling distributions of T indices may not be normal.

5. Results

Table 2 shows the number and percentage of companies using each policy required or permitted under the set of standards selected for study. Policy choices are usually cost or fair value. In addition, we consider the use of ‘deemed cost’ as permitted under IFRS 1. As explained above, companies were categorised as ‘not applicable/none held’ if they did not hold (did not show in the financial statements) assets or liabilities of the type under consideration.

[Insert Table 2 about here]

Table 3 presents T Indices and standard errors under GAAP and IFRS (T GAAP and T IFRS) for Australia and the UK for the sub-sample of companies excluding ‘not

applicable' companies. P-values indicate significant differences pre- and post-IFRS. Table 4 presents (a) within country comparability based on policy choices made by a combined Australia/UK sample and (b) between country comparability based on a comparison of policies of companies from the UK and Australia. Tables 3 and 4 also include p-values for sensitivity tests which relate to the T indices for the full sample (T indices not tabulated in Tables 3 and 4). All p-values are summarised in Table 5, which will be discussed following our main analysis below.

5.1 Fair value measurement under national GAAP and IFRS – mandatory standards

We first examine the mandatory use of fair value measurement in response to IAS 39, IAS 41 and IFRS 2 (Hypothesis 1).

5.1.1 IAS 39 Financial Instruments – Table 2 Panel E

Held-for-trading

Under UK GAAP, 21 (18%) UK companies had held-for-trading securities (Table 2, items 13-14) of which 12 companies (predominantly financial institutions) measured them at fair value and nine used the cost model.¹⁶ Under IFRS, 23 (20%) UK companies had held-for-trading securities, all of which were measured at fair value. Under Australian GAAP, 20 (18%) Australian companies reported held-for-trading securities measured at fair value. Under IFRS, 23 (20%) Australian companies reported held-for-trading securities measured at fair value. Companies using fair value measurement under Australian GAAP were in the banking and insurance sectors.

Table 3 shows the T indices for held-for-trading securities for Australia are 1.000 for both Australian GAAP and IFRS (thus no change). There is no significant difference in

comparability pre- and post-IFRS in Australia because Australian GAAP allowed and IFRS requires the use of fair value measurement. In the UK T indices increase significantly ($p < 0.001$) from 0.510 under UK GAAP to 1.000 under IFRS. We find a significant increase in comparability pre- and post-IFRS in the UK because only banks and insurance companies were permitted to use fair value measurement under UK GAAP whereas all companies are required to use fair value measurement under IFRS. Table 4 shows T indices improve significantly (0.755 to 1.000 for within country and 0.571 to 1.000 for between country, both $p < 0.001$).

[Insert Table 3 about here]

[Insert Table 4 about here]

Available-for-sale

Both UK and Australian companies show an increase in the use of fair value measurement for available-for-sale financial assets (Table 2, items 15-16). Cost was the dominant measurement method under national GAAP (52% of UK companies and 39% of Australian companies compared with 3% of UK companies and 7% of Australian companies using fair value). Fair value is the main measurement method under IFRS (51% of UK companies and 46% of Australian companies compared with 4% of UK companies and no Australian companies using cost). These changes represent a significant increase in comparability (0.740 to 1.000, $p < 0.001$) for Australia and a non-significant decrease in harmony (0.908 to 0.854, $p = 0.271$) for the UK (Table 3). Both within country and between country comparability increase significantly (0.824 to 0.927, $p = 0.026$; 0.813 to 0.921, $p = 0.039$) (Table 4).

Derivatives

In relation to derivatives, 92% of UK companies and 89% of Australian companies measured derivatives at fair value under IFRS. This compares with no UK company and three Australian companies measuring all derivatives at fair value under prior national GAAP (Table 2, items 17-19). A few companies (six UK and 19 Australian) measured held-for-trading derivatives at fair value at each balance sheet date under national GAAP but used the lower of cost and net realisable value approach for hedging derivatives. In calculating T indices we classified this second group as equivalent to fair value (Derivatives (1) in Tables 3 and 4). We find that the T indices increase significantly in Australia and the UK (0.639 to 1.000, $p < 0.001$; 0.891 to 1.000, $p = 0.002$).¹⁷ Similar results are observed for the within and between country T indices reported in Table 4; both show a significant increase in comparability (0.765 to 1.000, $p < 0.001$; 0.733 to 1.000, $p < 0.001$).

5.1.2 IAS 41 Agriculture – Table 2 Panel D

Only two UK companies had biological assets and both used fair value measurement under IFRS but historical cost-based measurement under UK GAAP. Only one UK company had harvested agricultural produce and it used fair value measurement under IFRS and cost under UK GAAP (Table 2, items 9-12). In Australia, only eight companies had biological assets. Six companies used the fair value model under both IFRS and under Australian GAAP; two used the cost model under Australian GAAP and one use cost under IFRS.¹⁸ One Australian company, Wesfarmers, included biological assets (plantations) in property plant and equipment, which were measured at cost. Five Australian companies measured harvested agricultural produce at fair value under both IFRS and Australian GAAP, while two measured harvested agricultural produce at cost under both IFRS and Australian GAAP (Table 2, items 9-12).¹⁹

For biological assets, T indices increased in Australia but not significantly (0.625 to 0.755, $p = 0.385$). T indices did not change for harvested agricultural produce (0.592 under both AGAAP and IFRS, Table 3). Company policy choices changed in the UK in a uniform manner from cost to fair value measurement in response to the adoption of IFRS. Therefore, comparability within the UK remained constant for both biological assets and harvested agricultural produce but it was based on a different measurement method. Within country comparability improves for biological assets (0.813 to 0.878, $p = 0.385$) and is the same for harvested agricultural produce (0.796 and 0.796). Between country comparability improves for biological assets (0.250 to 0.857, $p = 0.034$) and for harvested agricultural produce (0.286 to 0.714, $p = 0.167$) reflecting the use of the same standard in Australia and the UK.

5.1.3 IFRS 2 Share-based Payment – Table 2 Panel F

Companies reported far more equity settled plans than cash settled plans, so we focus our analysis on the former. Table 2 (items 24-25) shows that 112 (98%) UK companies and 102 (89%) Australian companies reported equity settled share-based payments in their first IFRS financial statements and measured the resulting expense at fair value at grant date. Under UK GAAP, four companies (3%) used fair value and 107 (94%) used intrinsic value or issue price to measure share-based payment. Similarly, under AGAAP, seven companies (6%) used fair value and 97 (85%) used intrinsic value or issue price to measure share-based payment.

For equity settled plans, T indices increase significantly in Australia and the UK (0.874 to 1.000, $p = 0.001$; 0.931 to 1.000, $p = 0.016$). Similar results are observed for within and

between country T indices reported in Table 4; both show a significant increase in comparability (0.902 to 1.000, $p < 0.001$; 0.902 to 1.000, $p < 0.001$).²⁰

5.2 Fair value measurement under national GAAP and IFRS – choice in standards

As explained in Section 2, several IFRS allow a choice of measurement method. We examined policy choices under IAS 16, IAS 38, IAS 39 and IAS 40. We also consider the choice to make a one-off revaluation to fair value at transition date or carry forward prior national GAAP revaluations as ‘deemed cost’ on adoption of IFRS.

5.2.1 Property, plant and equipment – Table 2 Panel A

Table 2 (items 1-2) shows that few companies use the revaluation model available in IAS 16, UK GAAP and Australian GAAP for property. Only six (5%) UK companies and 12 (11%) Australian companies used the revaluation model for own use property under UK/Australian GAAP. Fewer companies (three UK, eight Australian) used the revaluation model under IFRS. In the UK three companies (HSBC, P Z Cussons and Royal Bank of Scotland) ceased using the revaluation model on the transition from UK GAAP to IFRS and treated the UK GAAP revalued amounts at transition date as deemed costs for IFRS purposes. The low proportion of companies using fair value and the switch away from fair value is consistent with trends reported by Christensen and Nikolaev (2009). In Australia four companies ceased using the revaluation model on the transition to IFRS. The Insurance Australia Group used fair value at transition date as deemed cost for IFRS and West Australian Newspapers, Boral and CSL used previous revalued amounts as deemed costs for IFRS.

Under UK GAAP, 107 (94%) UK companies measured property using the cost model. Under IFRS, 110 (97%) UK companies used cost (92 companies) or deemed cost (18 companies). Thirteen companies had revalued property prior to the adoption of FRS 15 and elected to use these earlier revaluations in the UK GAAP 'cost' carrying amounts in accordance with the transitional provisions in FRS 15. Twelve of the 13 companies used the pre-FRS 15 revaluations as deemed costs for the purposes of IFRS. The thirteenth company (Marks and Spencer), plus five other companies, made one-off revaluations to fair value at the transition date to IFRS and used these amounts as IFRS deemed costs (Table 2, item 1b).

Australian companies also show a preference for the cost model, although not as strongly as UK companies. Under Australian GAAP, 97 (85%) companies used cost. Under IFRS, 101 (88%) companies used cost (80 companies) or deemed cost (21 companies). Thirteen companies used earlier Australian GAAP revaluations as deemed cost. Eight companies made one-off revaluations to fair value at the transition date to IFRS and used these amounts as deemed costs under IFRS (Table 2, item 1b).

If deemed cost is assumed to be the same as cost (as in Property (2) in Tables 3 and 4), the T indices increase in Australia and the UK (0.804 to 0.864, $p = 0.015$; 0.899 to 0.948, $p = 0.051$). Considering within and between country T indices, Table 4 shows significant increases for property (2) (0.852 to 0.906, $p = 0.001$; 0.849 to 0.904, $p = 0.001$). Overall, the use of revaluation for property has declined from earlier periods (Morris & Parker, 2001; Tarca, 2005) and the level of comparability has increased.²¹

Revaluation of plant and equipment is non-existent under IFRS in both countries (Table 2, items 3-4). One UK company used fair value at transition date as IFRS deemed cost and one UK company used a previous UK GAAP revaluation as IFRS deemed cost. In Australia, four companies used fair value at transition date as IFRS deemed cost and nine companies used a previous GAAP revaluation as IFRS deemed cost. If deemed cost is assumed to be the same as cost (as in plant and equipment (2) in Tables 3 and 4) then T indices equal 1 for both countries at both times. All companies are comparable with all other companies because no company used revaluation.

5.2.2 Intangible Assets – Table 2 Panel C

All intangible assets recognised on company balance sheets are measured using the cost model in both countries under national GAAP and IFRS (Table 2, items 7-8). While some companies in both countries may favour revaluing intangible assets, they are probably precluded from doing so by the requirement that the assets should be revalued to fair value and fair value must be determined from an active market for the asset. As the companies used the cost model under both national GAAP and IFRS, there is no significant change in the T indices in Australia or in the UK (Table 3) or in the T indices measuring within and between country comparability (Table 4).

No UK or Australian company used fair value at transition date or any earlier date as IFRS deemed cost (Table 2, item 7b). Again companies in both countries were constrained by the requirement that fair value must be determined from an active market for the asset. Some Australian companies had revalued identifiable intangible assets under AGAAP. However, all of these companies had changed their policies prior to the end of the transition year so that the AGAAP policy at transition was ‘cost’ in all cases.

5.2.3 IAS 39 fair value option – Table 2 Panel E

Table 2 shows that there is little use of voluntary fair value measurement for other financial assets and liabilities, that is, those financial assets and financial liabilities that would otherwise not qualify for the fair value through profit and loss category (Table 2, items 20-21 and 22-23).

No UK company and only one Australian company used fair value measurement for other financial assets under national GAAP. Eight (7%) UK companies and ten (9%) Australian companies elected to use fair value measurement for other financial assets under IFRS. The eight UK companies include only banks and insurance companies. All used the option selectively for only some financial assets (mainly those associated with insurance liabilities or structured loans that include embedded derivatives). Therefore, for each of these eight companies, the substantial majority of other financial assets (mainly loans and receivables) were measured at amortised cost. The ten Australian companies include five insurance companies, two material sector and one consumer services, one commercial services and one food and staples retail company. Again, the fair value option was used selectively for only some financial assets with the result that the substantial majority of the other financial assets (mainly loans and receivables) of these ten companies were measured at amortised cost.

No UK or Australian companies used fair value measurement for other financial liabilities under national GAAP. Four UK companies, but no Australian company, elected to use fair value measurement for other financial liabilities. The four UK companies included three banks and one other company. All used the fair value option selectively for only

some financial assets (mainly those associated with insurance activities or debt that included embedded derivatives). For each of the companies, the substantial majority of other financial liabilities (mainly own debt, customer deposits of banks and payables) was measured at amortised cost.

The use of the fair value option for other financial assets means that the T indices decline significantly in Australia and the UK (0.982 to 0.833, $p < 0.001$; 1.000 to 0.869, $p < 0.001$, Table 3). Within and between country indices also decline significantly (0.991 to 0.851, $p < 0.001$; 0.991 to 0.851, $p < 0.001$, Table 4).

The use of the fair value option for other financial liabilities by UK companies leads to a significant decline in the T index in the UK (1.000 to 0.932, $p = 0.018$). The T indices do not change in Australia because no company uses the fair value option. Within country and between country T indices reveal a significant decline (1.000 to 0.966, $p = 0.018$; 1.000 to 0.965, $p = 0.018$) (Table 4).

5.2.4 IAS 40 Investment Property – Table 2 Panel B

In their UK GAAP balance sheets, 15 UK companies recognised investment property and measured that property at fair value (open market value) in accordance with SSAP 19.²² The broader definition of investment property in IAS 40 means that 23 companies included investment property on their IFRS balance sheets. Under IFRS, 17 companies use the fair value model and six use the cost model (Table 2, items 5-6). Two companies, (Cobham and Marks & Spencer) had used the SSAP 19 fair value model in order to give a true and fair view under UK GAAP but elected to use the cost model under IFRS. Four of the eight companies which reclassified own use property to investment property used the

fair value model for that property under IFRS. The four others used the cost model and, as a result, accounted for that property in the same way as they had accounted for it under UK GAAP.

In Australia, 17 companies included investment property in their Australian GAAP and IFRS balance sheets. They measured that property at fair value under both Australian GAAP²³ and IFRS. The companies include six property, real estate and infrastructure companies/trusts, four insurance companies, one bank, one diversified financial services company, two companies in the retail sector and three other companies (from food, beverage and tobacco; health care; and transport).

The adoption of the cost model by six UK companies under IFRS led to a reduction in comparability. T indices show a significant decline (1.000 to 0.614, $p = 0.003$, Table 3.) The reduction in the UK reflects, partly, the consequences of the broader definition of investment property in IFRS and partly the decision by two companies to switch from the SSAP 19 fair value model to the IAS 40 cost model. It illustrates the point that the introduction options reduce comparability if there are company incentives to make use of the option. There was no change in comparability in Australia. Both within and between country comparability showed a significant decline (0.948 to 0.755, $p = 0.003$; 0.944 to 0.713, $p = 0.003$, Table 4). No UK or Australian company used fair value at transition date or any earlier date, as IFRS deemed cost (Table 2, item 5b).

5.3 Summary and sensitivity analysis

Table 5 provides a summary of our results described above for within and between country comparability and also for sensitivity tests.²⁴ In relation to H1 (Table 5, Panel A),

which proposed that within and between country comparability would increase in relation to mandatory requirements for fair value measurement, the strongest results are for IAS 39 and IFRS 2. Both within and between country comparability increase significantly for held-for-trading, available-for-sale and derivative securities as well as for share-based payment. H1 is only partially supported for IAS 41 (reflecting the sample number of companies with biological assets). Within country comparability has not increased significantly but between country comparability (for biological assets) has improved. Taken together, these results suggest that mandatory fair value measurement improves comparability within and between the UK and Australia for financial instruments and share-based payment.

[Insert Table 5 about here]

In relation to standards which permit choice of fair value measurement, a range of outcomes is observed (Table 5, Panel B). The prediction of H2 (a within and between country decline in comparability) is supported in relation to IAS 39 Other financial assets and Other financial liabilities. The fair value option gave companies a choice of using fair value measurement. It was taken by some companies in each country for other financial assets and by some companies in the UK for other financial liabilities, resulting in a significant decline in comparability both within and between the countries. Similarly, for IAS 40 within and between country comparability for investment properties declined significantly as some UK companies exercised the choice available in this standard.

In relation to IAS 16 comparability increases rather than declines as companies made more comparable choices and generally avoided the use of fair value measurement for property (Table 5, Property 2). For plant and equipment, cost was preferred over fair

value under both GAAP and IFRS so no change in comparability is observed (Table 5, Plant and Equipment 2). We explored the use of the ‘deemed cost’ option for both property and plant and equipment. If we treat ‘deemed cost’ as a one-off fair value measurement, we find comparability for property and for plant and equipment declines significantly, thus supporting H2 (Table 5, Property 3 and Plant and Equipment 3). This is the only area where use of the ‘deemed cost’ option affects our results as overall the option was not widely used. The results suggest that even the relatively cheap option of a one-off revaluation on adoption of IFRS (that is, an opportunity to introduce fair value measurement without committing to yearly revaluations) was not attractive to many companies. In relation to intangible assets, all companies use cost. Fair value measurement does not occur and there are no changes in comparability around IFRS adoption either within or between the countries.²⁵

In relation to our sensitivity tests (p-values but not T indices or standard errors are shown in Tables 3 and 4), we find extensive support for our main results. Recall that in the main analysis we exclude companies shown as ‘not applicable’. In the sensitivity tests we include these companies and treat them as having comparable choices to all other companies. Therefore the sensitivity tests reflect a less stringent measure of comparability. Comparing the main analysis and sensitivity tests, we reach the same conclusions regarding the significance of changes in the T indices for all policy choices except two. The first is available-for-sale securities: a non-significant increase in within country comparability is observed. The second is biological assets: a non-significant increase in between country comparability is observed.

6. Conclusions

This study investigates the use of fair value measurement by 228 listed companies in the UK and Australia around the adoption of IFRS from 1 January 2005. We consider the extent to which fair value measurement has increased in relation to both mandatory and voluntary requirements in IFRS. We also measure whether national, within and between country comparability has changed as a result of (a) mandatory and (b) optional use of fair value measurement.

An IASB objective is to produce high quality standards and assist companies to provide information which is both relevant and comparable (IASB Framework, 1989). We provide evidence about the comparability of reporting following IFRS and also about the prevalence of fair value reporting and thus add to studies about the impact of adoption of IFRS. In relation to mandatory requirements, we observe the expected increase in use of fair value measurement for financial instruments and share-based payment, leading to increases in within and between country comparability. Based on prior value relevance studies (Easton, Edey & Harris, 1993; Barth & Clinch, 1998; Aboody et al., 1999; Horton, 2007; Landsman, 2007) greater use of fair value measurement should be beneficial to investors. However that is an empirical issue not addressed in our paper, and which is suitable for future research.

We find little use of fair value measurement in areas where it is optional, other than for investment property. In spite of prior practices in both countries, few companies revalue other property under IFRS or use fair value at transition date as the 'deemed cost' on transition to IFRS. No company measures intangible assets or plant and equipment at fair

value at each balance sheet date. There is limited and selective use of the fair value option to measure at fair value other financial assets and liabilities that would otherwise be measured at amortised cost. The results suggest that, given a choice, the majority of managers consider historical cost-based measurement a satisfactory measurement model for all non-financial assets except investment property. There is limited support for fair value measurement of some financial assets and a few financial liabilities. We do not propose that managers consider that fair value measurements are irrelevant to users. However, in terms of measurement in statutory financial statements, preparers overwhelmingly take a traditional historical cost-based position when given discretion in policy choice. For most companies, the incentives for the voluntary use of fair value identified in prior studies do not appear to be in place around the time of adoption of IFRS.

The changes from UK GAAP/Australian GAAP to IFRS also lead to changes in within and between country comparability, when comparability is defined as entities' measuring the financial effect of like transactions and other events in a consistent way. However, questions about comparability cannot be separated from issues about the relevance of particular measurement attributes. Within and between country comparability for derivatives and share-based payments has increased as a result of the mandatory use of fair value measurement, arguably improving both comparability and relevance, consistent with the IASB's objectives.

In contrast, within and between country comparability for property, plant and equipment has increased as a result of companies electing to use historical cost-based measurement and abandon prior policies of revaluation. In this case, comparability may have increased

at the expense of relevance. We observe that the use of the fair value option for financial assets or financial liabilities that would otherwise be measured at amortised cost reduces within and between country comparability because some companies use fair value measurement for items that are measured at amortised cost by the majority of companies. We assume that in this instance the IASB would argue that the increase in the relevance of financial information arising from the use of the fair value option outweighs the disadvantage arising from a decrease in comparability. This issue presents an opportunity for future research.

The generalisability of our findings is limited by the small size of the sample and the focus on only large companies in two countries. Future research may address the questions we raise more broadly, by considering more companies and other countries. Nevertheless, the UK and Australia were the obvious countries in which to conduct our study, given their history of asset revaluation, a practice not as prevalent in other countries. It is also appropriate to study large companies because of their economic importance and key role in capital markets.

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Table 1 Requirements of IFRS, UK GAAP and Australian GAAP at 31 December 2004

Accounting treatment	IFRS	UNITED KINGDOM	AUSTRALIA
<i>Tangible assets</i>	IAS 16, IAS 20, IAS 36 Property, plant and equipment is recognised at cost of acquisition or construction. Revaluation permitted. Investment properties at cost or valuation.	FRS 15, SSAP 19 Property, plant and equipment is recognised at cost of acquisition or construction. Revaluation permitted (current cost, market value or general indexation). Investment properties must be recorded at market value.	AASB 1010, AASB 1041 Property, plant and equipment is recognised at cost of acquisition or construction. Revaluation permitted.
Discretion to use fair value measurement	Yes	Yes	Yes
<i>Financial assets</i>	IAS 39 Classify items as (a) at fair value through profit and loss (b) held to maturity (recognise at amortised cost) (c) loans and receivables (d) available-for-sale (at fair value with remeasurements shown in equity until realised. On sale, items removed from equity, recorded in income statement then returned to equity).	Current assets recognised at the lower of cost and net realisable value. Current and non-current financial assets may be revalued, with gains taken to equity. Insurance companies recommended to use market value for insurance related assets.	Current assets recognised at the lower of cost and net realisable value. Non-current financial assets may be revalued, with gains taken to equity. Insurance companies required to use market value for insurance related assets.
Discretion to use fair value measurement	Yes, in classification of financial instruments	For financial assets	For financial assets
<i>Identifiable intangible assets</i>	IAS 38, IAS 36 Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted if active market exists.	FRS 2, FRS 10, SSAP 13 Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted if active market exists.	AASB 1010 Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted (market or directors' valuation).
Discretion to use fair value measurement	Fair value measurement limited in practice	Yes	Yes

Source: KPMG (2000); Nobes (2000, 2001) Alfredson et al. (2005), Deloitte (2007).

Table 2 Measurement policy choice under national GAAP and IFRS 2004-2006

	UK GAAP		UK IFRS		AUST GAAP		AUST IFRS	
	Transition year		Adoption year		Transition year		Adoption year	
	N = 114	%	N = 114	%	N = 114	%	N = 114	%
Panel A IAS 16 Property Plant and Equipment								
1a Property – Cost	107	94%	92	81%	97	85%	80	70%
1b Property – Deemed Cost	0	0%	18	16%	0	0%	21	18%
2 Property – Revaluation	6	5%	3	2%	12	11%	8	7%
Not Applicable/None Held	1	1%	1	1%	5	4%	5	5%
3a P & E – Cost	113	99%	111	97%	109	96%	99	87%
3b P & E – Deemed Cost	0	0%	2	2%	0	0%	13	11%
4 P & E – Revaluation	0	0%	0	0%	0	0%	0	0%
Not Applicable/None Held	1	1%	1	1%	5	4%	2	20%
Panel B IAS 40 Investment Property								
5a Investment Property – Cost	0	0%	6	5%	1	1%	1	1%
5b Investment Property – Deemed Cost	0	0%	0	0%	0	0%	0	0%
6 Investment Property – Fair Value	15	13%	17	15%	17	15%	17	15%
Not Applicable/None Held	99	87%	91	80%	96	84%	96	84%
Panel C IAS 38 Intangible Assets								
7a Intangible Asset – Cost	54	47%	93	82%	102	89%	102	89%
7b Intangible Asset – Deemed Cost	0	0%	0	0%	0	0%	0	0%
8 Intangible Asset – Revaluation	0	0%	0	0%	0	0%	0	0%
Not Applicable/None Held	60	53%	21	18%	12	11%	12	11%
Panel D IAS 41 Agriculture								
9 Biological Assets – Fair Value	0	0%	2	2%	6	5%	6	5%
10 Biological Assets – Cost	2	2%	0	0%	2	2%	1	1%
Not Applicable/None Held	112	98%	112	98%	106	93%	107	94%
11 Harvested Agricultural Produce – Cost	1	1%	0	0%	2	2%	2	2%
12 Harvested Agricultural Produce – Fair Value	0	0%	1	1%	5	4%	5	4%
Not Applicable/None Held	113	99%	113	99%	107	94%	107	94%

Table 2 (Continued) Measurement policy choice under national GAAP and IFRS 2004-2006

	UK GAAP		UK IFRS		AUST GAAP		AUST IFRS	
	Transition year		Adoption year		Transition year		Adoption year	
	N = 114	%	N = 114	%	N = 114	%	N = 114	%
Panel E IAS 39 Financial Instruments								
13 Held-for-Trading – Fair Value	12	10%	23	20%	20	18%	23	20%
14 Cost	9	8%	0	0%	0	0%	0	0%
Not Applicable/None Held	93	82%	91	80%	94	82%	91	80%
15 Available-for-Sale – Fair Value	3	3%	58	51%	8	7%	53	46%
16 Cost	59	52%	5	4%	44	39%	0	0%
Not Applicable/None Held	52	45%	51	45%	62	54%	61	54%
17 Derivatives – Fair Value	0	0%	105	92%	3	3%	101	89%
18 Trading – Fair Value; Hedging – Cost	6	5%	0	0%	19	17%	0	0%
19 Cost	98	86%	0	0%	71	62%	0	0%
Not Applicable/None Held	10	9%	9	8%	21	18%	13	11%
20 Other Fin. Asset – Fair Value	0	0%	8	7%	1	1%	10	9%
21 Other Fin. Asset – Cost	114	100%	106	93%	109	96%	99	87%
Not Applicable/None Held	0	0%	0	0%	4	4%	5	4%
22 Other Fin. Liability – Fair Value	0	0%	4	4%	0	0%	0	0%
23 Other Fin. Liability – Cost	114	100%	110	96%	114	100%	113	99%
Not Applicable/None Held	0	0%	0	0%	0	0%	1	1%
Panel F IFRS 2 Share-based Payments								
24 Equity Settled – Fair Value	4	3%	112	98%	7	6%	102	89%
25 Equity Settled – Intrinsic Value or Issue Price	107	94%	0	0%	97	85%	0	0%
Not Applicable/None Held	3	3%	2	2%	10	9%	12	11%
26 Cash Settled – Fair Value	0	0%	11	10%	1	1%	8	7%
27 Cash settled – Intrinsic Value	4	4%	0	0%	6	5%	0	0%
28 Cash settled – Not specified	5	4%	0	0%	0	0%	0	0%
Not Applicable/None Held	105	92%	103	90%	107	94%	106	93%

This table presents data about policy choice by companies from the UK and Australia under national GAAP in transition year and under IFRS in adoption year. The order of the table follows the data collection checklist (Appendix 1).

Table 3 Measures of comparability of policy choice under national GAAP and IFRS: National comparability for the UK and Australia

	UK						AUSTRALIA					
	T GAAP	SE	T IFRS	SE	P-value	Sensitivity P-value	T GAAP	SE	T IFRS	SE	P-value	Sensitivity P-value
Property (1)	0.899	0.037	0.689	0.049	0.000	0.000	0.804	0.047	0.581	0.049	0.000	0.000
Property (2)	0.899	0.037	0.948	0.028	0.051	0.051	0.804	0.047	0.864	0.042	0.015	0.015
Property (3)	0.899	0.037	0.697	0.046	0.000	0.000	0.804	0.047	0.609	0.040	0.000	0.000
Plant and Equipment (1)	1.000	0.000	0.965	0.024	0.136	0.136	1.000	0.000	0.795	0.046	0.000	0.000
Plant and Equipment (2)	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000
Plant and Equipment (3)	1.000	0.000	0.965	0.024	0.131	0.131	1.000	0.000	0.795	0.046	0.000	0.000
Investment Property	1.000	0.000	0.614	0.089	0.003	0.003	0.895	0.093	0.895	0.093	1.000	1.000
Intangible Assets	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000
Biological Assets	1.000	0.000	1.000	0.000	1.000	1.000	0.625	0.158	0.755	0.174	0.385	0.362
Harvested Agricultural Produce	1.000	0.000	1.000	0.000	1.000	1.000	0.592	0.159	0.592	0.159	1.000	1.000
Held-for-trading Securities	0.510	0.045	1.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	1.000
Available-for-sale Securities	0.908	0.048	0.854	0.056	0.271	0.240	0.740	0.068	1.000	0.000	0.000	0.000
Derivatives (1)	0.891	0.040	1.000	0.000	0.002	0.002	0.639	0.046	1.000	0.000	0.000	0.000
Derivatives (2)	1.000	0.000	1.000	0.000	1.000	1.000	0.938	0.034	1.000	0.000	0.048	0.048
Other Financial Assets	1.000	0.000	0.869	0.041	0.000	0.000	0.982	0.018	0.833	0.045	0.000	0.000
Other Financial Liabilities	1.000	0.000	0.932	0.032	0.018	0.018	1.000	0.000	1.000	0.000	1.000	1.000
Equity Settled SBP	0.931	0.033	1.000	0.000	0.016	0.016	0.874	0.042	1.000	0.000	0.001	0.001
Cash Settled SBP (1)	0.198	0.167	1.000	0.000	0.005	0.005	0.755	0.174	1.000	0.000	0.368	0.368
Cash Settled SBP (2)	1.000	0.000	1.000	0.000	1.000	1.000	0.755	0.174	1.000	0.000	0.365	0.366

This table shows the T indices (and standard errors) measuring national comparability for each country, based on national GAAP and IFRS accounting policy choices, for a sample where all companies showing 'not applicable' for the policy are removed. P-values show whether the T indices are significantly different under GAAP and IFRS. Sensitivity p-values (which relate to T indices and standard errors not shown in the table) are based on a sample where all companies showing 'not applicable' for the policy are assumed to be comparable to other companies using any other policy choice. Policy choices for each item are cost or fair value, as shown in Table 3 except as follows: Property (1) and Plant and Equipment (1) assume cost, deemed cost and fair value (revaluation model) are completely non-comparable to each other; Property (2) and Plant and Equipment (2) assume that deemed cost is completely comparable to cost; Property (3) and Plant and equipment (3) assume that deemed cost is completely comparable to fair value. Derivatives (1) considers companies using Item 18 of Table 2 (which measure held-for-trading derivatives at fair value and hedging derivatives at the lower of cost and net realisable value under national GAAP) to be comparable with companies using fair value for derivatives but not comparable with companies using cost. Derivatives (2) considers companies using Item 18 to be comparable to cost but not fair value. Cash settled SBP (share based payment) (1) assumes that not specified is not comparable. Cash settled SBP (2) assumes that not specified is comparable.

Table 4 Measures of within and between country comparability of policy choice under national GAAP and IFRS: the UK and Australia

	(a) Within country index						(b) Between country index					
	T GAAP	SE	T IFRS	SE	P-value	Sensitivity P-value	T GAAP	SE	T IFRS	SE	P-value	Sensitivity P-value
Property (1)	0.852	0.030	0.635	0.034	0.000	0.000	0.849	0.032	0.630	0.036	0.000	0.000
Property (2)	0.852	0.030	0.906	0.025	0.001	0.001	0.849	0.032	0.904	0.027	0.001	0.001
Property (3)	0.852	0.030	0.653	0.030	0.000	0.000	0.849	0.032	0.647	0.032	0.000	0.000
Plant and Equipment (1)	1.000	0.000	0.880	0.026	0.000	0.000	1.000	0.000	0.870	0.030	0.000	0.000
Plant and Equipment (2)	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000
Plant and Equipment (3)	1.000	0.000	0.880	0.026	0.000	0.000	1.000	0.000	0.870	0.031	0.000	0.000
Investment Property	0.948	0.047	0.755	0.064	0.003	0.002	0.944	0.056	0.713	0.088	0.003	0.001
Intangible Assets	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000
Biological Assets	0.813	0.079	0.878	0.087	0.385	0.362	0.250	0.167	0.857	0.145	0.034	0.163
Harvested Agricultural Produce	0.796	0.079	0.796	0.079	1.000	1.000	0.286	0.183	0.714	0.183	0.167	0.468
Held-for-trading Securities	0.755	0.023	1.000	0.000	0.000	0.000	0.571	0.109	1.000	0.000	0.000	0.000
Available-for-sale Securities	0.824	0.042	0.927	0.028	0.026	0.112	0.813	0.049	0.921	0.034	0.039	0.046
Derivatives (1)	0.765	0.030	1.000	0.000	0.000	0.000	0.733	0.041	1.000	0.000	0.000	0.000
Derivatives (2)	0.969	0.017	1.000	0.000	0.048	0.037	0.968	0.018	1.000	0.000	0.048	0.036
Other Financial Assets	0.991	0.009	0.851	0.030	0.000	0.000	0.991	0.009	0.851	0.031	0.000	0.000
Other Financial Liabilities	1.000	0.000	0.966	0.016	0.018	0.014	1.000	0.000	0.965	0.017	0.018	0.018
Equity Settled SBP	0.902	0.027	1.000	0.000	0.000	0.000	0.902	0.027	1.000	0.000	0.000	0.000
Cash Settled SBP (1)	0.476	0.121	1.000	0.000	0.002	0.002	0.381	0.166	1.000	0.000	0.002	0.002
Cash Settled SBP (2)	0.878	0.087	1.000	0.000	0.365	0.290	0.937	0.074	1.000	0.000	0.375	0.269

This table shows the T indices (and standard errors) for each country, based on national GAAP and IFRS accounting policy choices, for a sample where all companies showing 'not applicable' for the policy are removed. Within country comparability is the equivalent of the average of national comparability (Table 3) and between country comparability is a comparison of level of comparability of companies in each country. P-values show whether the T indices are significantly different under GAAP and IFRS. Sensitivity p-values (which relate to T indices and standard errors not shown in the table) are based on a sample where all companies showing 'not applicable' for the policy are assumed to be comparable to other companies using any other policy choice. Policy choices for each item are cost or fair value, as shown in Table 3 except as follows: Property (1) and Plant and Equipment (1) assume cost, deemed cost and fair value (revaluation model) are completely non-comparable to each other; Property (2) and Plant and Equipment (2) assume that deemed cost is completely comparable to cost; Property (3) and Plant and equipment (3) assume that deemed cost is completely comparable to fair value. Derivatives (1) considers companies using Item 18 of Table 2 (which measure held-for-trading derivatives at fair value and hedging derivatives at the lower of cost and net realisable value under national GAAP) to be comparable with companies using fair value for derivatives but not comparable with companies using cost. Derivatives (2) considers companies using Item 18 to be comparable to cost but not fair value. Cash settled SBP (share based payment) (1) assumes that not specified is not comparable. Cash settled SBP (2) assumes that not specified is comparable.

Table 5 Summary of results of hypothesis testing

H1: Mandatory IFRS requirements for fair value measurement increase (a) national, (b) within country and (c) between country comparability for companies from the UK and Australia.

H2: Options in IFRS allowing fair value measurement reduce (a) national, (b) within country and (c) between country comparability for companies from the UK and Australia.

FAIR VALUE MEASUREMENT	MAIN ANALYSIS				SENSITIVITY			
	Within country		Between country		Within country		Between country	
	T indices	P-value	T indices	P-value	T indices	P-value	T indices	P-value
Panel A H1 Mandatory requirements								
IAS 39								
Held-for-trading securities	Increase	Significant	Increase	Significant	Increase	Significant	Increase	Significant
Available-for-sale securities	Increase	Significant	Increase	Significant	Increase	Not Signif.	Increase	Significant
Derivatives (1)	Increase	Significant	Increase	Significant	Increase	Significant	Increase	Significant
Derivatives (2)	Increase	Significant	Increase	Significant	Increase	Significant	Increase	Significant
IAS 41 Biological assets	Increase	Not Signif.	Increase	Significant	Increase	Not Signif.	Increase	Not Signif.
IAS 41 Harvested agricultural produce	No change	Not Signif.	Increase	Not Signif.	Increase	Not Signif.	Increase	Not Signif.
IFRS 2 Equity settled SBP	Increase	Significant	Increase	Significant	Increase	Significant	Increase	Significant
Panel B H2 Options in standards								
IAS 16								
Property (2)	Increase	Significant	Increase	Significant	Increase	Significant	Increase	Significant
Property (3)	Decline	Significant	Decline	Significant	Decline	Significant	Decline	Significant
Plant and Equipment (2)	No change	Not Signif.	No change	Not Signif.	No change	Not Signif.	No change	Not Signif.
Plant and Equipment (3)	Decline	Significant	Decline	Significant	Decline	Significant	Decline	Significant
IAS 38 Intangible assets	No change	Not Signif.	No change	Not Signif.	No change	Not Signif.	No change	Not Signif.
IAS 40 Investment property	Decline	Significant	Decline	Significant	Decline	Significant	Decline	Significant
IAS 39 Other financial assets	Decline	Significant	Decline	Significant	Decline	Significant	Decline	Significant
IAS 39 Other financial liabilities	Decline	Significant	Decline	Significant	Decline	Significant	Decline	Significant

This table summarised the results of hypothesis testing. We compare within country and between country comparability using T indices based on national GAAP and IFRS accounting policy choices in the UK and Australia. T indices measure comparability and p-values show whether T indices are significantly different under GAAP and IFRS. Main analysis excludes companies shown as 'not applicable' in Table 3. Sensitivity includes all 228 companies in the sample. Policy choices for each item in Column 1 are cost or fair value, as shown in Table 3 except as follows: Property (2) and Plant and Equipment (2) assume that deemed cost is completely comparable to cost; Property (3) and Plant and equipment (3) assume that deemed cost is completely comparable to fair value. Derivatives (1) considers companies using Item 18 of Table 2 (they measure held-for-trading derivatives at fair value and hedging derivatives at the lower of cost and net realisable value under national GAAP) to be comparable with companies using fair value for derivatives but not comparable with companies using cost. Derivatives (2) considers companies using Item 18 to be comparable to cost but not fair value.

Appendix 1 Checklist for data collection

IAS 16 *Property Plant & Equipment*

1a	Are all classes of property (own use real estate) measured at each balance sheet date using the cost model (cost less depreciation and any impairment losses)?
2	Are any classes of property measured at each balance sheet date using the revaluation model (current fair value less any subsequent depreciation and impairment losses with changes in fair value usually included in equity)? If so, specify details
3a	Are all classes of plant and equipment measured at each balance sheet date using the cost model (cost less depreciation and any impairment losses)?
4	Are any classes of plant and equipment measured at each balance sheet date using the revaluation model (current fair value less any subsequent depreciation and impairment losses with changes in fair value usually included in equity)? If so, specify details

IAS 40 *Investment Property*

5a	Is investment property measured at each balance sheet date using the cost model (cost less depreciation and any impairment losses)?
6	Is investment property measured at each balance sheet date using the fair value model (current fair value with changes in fair value included in profit or loss)? If so, specify details

IAS 38 *Intangible Assets*

7a	Are all classes of intangible assets measured at each balance sheet date using the cost model (cost less depreciation and any impairment losses)?
8	Are any intangible assets measured at each balance sheet date using the revaluation model (current fair value less any subsequent depreciation and impairment losses with changes in fair value usually included in equity)? If so, specify details

IAS 41 *Agriculture*

9	Are biological assets measured at fair value less estimated point-of-sale costs with changes in fair value included in profit or loss?
10	Are biological assets measured at cost less depreciation and any impairment losses? If so, specify details.
11/12	Is harvested agricultural produce measured at fair value less point of sale costs with changes in fair value included in profit or loss? If not, specify details.

IAS 39 *Financial Instruments: Recognition and Measurement*

13/14	Are investments in equity or debt securities classified as held for trading measured at fair value at each balance sheet date with changes in fair value included in profit or loss? If not, specify details.
15/16	Are investments in equity or debt securities classified as available for sale measured at fair value at each balance sheet date with changes in fair value usually included in equity? If not, specify details
17/18/19	Are derivatives measured at fair value at each balance sheet date with changes in fair value included in profit or loss (subject to cash flow hedge accounting)? If not, specify details.
20/21	Are any other financial assets classified as at fair value through profit or loss and measured at fair value at each balance sheet date with changes in fair value included in profit or loss (fair value option)? If so, specify details.
22/23	Are any other financial liabilities classified as at fair value through profit or loss and measured at fair value at each balance sheet date with changes in fair value included in profit or loss (fair value option)? If so, specify details.

IFRS 2 *Share-based Payments*

24/25	Are equity settled share-based payments measured by reference to the fair value of the equity instrument granted? If not, specify details.
26/27	Are cash settled share-based payments measured at the fair value of the liability? If not, specify details.

IFRS 1 *First Time Adoption of IFRS*

1b	<p>Did the entity determine the deemed IFRS cost of any items of own use property at the transition date to IFRS using:</p> <ul style="list-style-type: none"> • fair value at transition date; • previous GAAP revaluations to fair value; • previous GAAP cost adjusted to reflect changes in a general price index; or
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	<ul style="list-style-type: none"> • previous GAAP cost adjusted to reflect changes in a specific price index? <p>If so, specify details.</p>
3b	<p>Did the entity determine the deemed IFRS cost of any items of plant and equipment at the transition date to IFRS using: s</p> <ul style="list-style-type: none"> • fair value at transition date; • previous GAAP revaluations to fair value; • previous GAAP cost adjusted to reflect changes in a general price index; or • previous GAAP cost adjusted to reflect changes in a specific price index? <p>If so, specify details.</p>
5b	<p>Did the entity determine the deemed IFRS cost of any investment property accounted for using the cost model at the transition date to IFRS using:</p> <ul style="list-style-type: none"> • fair value at transition date; • previous GAAP revaluations to fair value; • previous GAAP cost adjusted to reflect changes in a general price index; or • previous GAAP cost adjusted to reflect changes in a specific price index? <p>If so, specify details.</p>
7b	<p>Did the entity determine the deemed IFRS cost of any intangible assets at the transition date to IFRS using:</p> <ul style="list-style-type: none"> • fair value at transition date; • previous GAAP revaluations to fair value; • previous GAAP cost adjusted to reflect changes in a general price index; or • previous GAAP cost adjusted to reflect changes in a specific price index? <p>If so, specify details.</p>

Appendix 2 Options for T Indices (from Taplin 2004)

Company/country weightings.

- (1a) companies are weighted equally, $b_i = n_i / n$, where n_i is the number of companies from country i in the sample and n is the total number of companies in the sample, so b_i is the proportion of companies in the sample from country i . This means a country receives weight proportional to the number of companies sampled from that country,
- (1b) countries are weighted equally, $b_i = 1 / N$, where N is the number of countries,
- (1c) countries are weighted according to the total population number of companies in each country, $b_i = u_i / \sum_{i=1}^N u_i$ where u_i is the total number of companies in country i (for example, the total number of companies listed on the stock exchange rather than the number of companies in the sample).

International focus.

- (2a) overall, $\beta_{ij} = b_i b_j$,
- (2b) within country, $\beta_{ij} = \frac{b_i b_j}{\sum_{i=1}^N b_i^2}$ if $i = j$ and $\beta_{ij} = 0$ if $i \neq j$,
- (2c) between country, $\beta_{ij} = 0$ if $i = j$ and $\beta_{ij} = \frac{b_i b_j}{\sum_{i=1}^N \sum_{j \neq i} b_i b_j}$ if $i \neq j$.

Multiple accounting policies.

- (3a) multiple accounting policies are not allowed, $\alpha_{kl} = 0$ if $k \neq l$,
- (3b) multiple accounting policies are allowed if completely comparable, $\alpha_{kl} = 1$ when methods k and l are completely comparable and $\alpha_{kl} = 0$ when they are completely incomparable,
- (3c) multiple accounting policies are allowable with fractional comparability, α_{kl} takes a value on the continuum from 0 (completely incomparable) to 1 (completely comparable).

Non-disclosure.

- (4a) not applicable, companies who do not disclose a method are removed from the sample,

- (4b) comparable to everything, $\alpha_{kM} = \alpha_{Ml} = \alpha_{MM} = 1$ for all accounting methods k and l ,
- (4c) comparable to nothing, $\alpha_{kM} = \alpha_{Ml} = \alpha_{MM} = 0$ for all accounting methods k and l ,
- (4d) comparable to the standard (or default) method s , $\alpha_{ks} = \alpha_{kM}$, $\alpha_{sl} = \alpha_{Ml}$ for all k and l .

Notes

¹ In the case of the UK, company law has been heavily influenced by the accounting requirements in the European Union's company law directives.

² As defined in IFRS 1 *First-time Adoption of IFRS*

³ This restriction was added in the 1993 version of IAS 16 and, as a consequence in, the UK's FRS 15 and Australia's AASB 1010.

⁴ Companies were permitted to retain FRS 15 and AASB 1010 revaluations as 'deemed cost' under standards revised in the 1990s.

⁵ The requirement to use market value stems from the opposition of UK property investment companies to the depreciation of investment property and their belief that depreciation could not be segregated from other changes in value. The property companies persuaded the then Accounting Standards Committee that the use of cost less depreciation for investment property would not result in a true and fair view (Rutherford, 2007). However, as the EC Fourth Directive (and, hence, UK company law) requires the depreciation, UK companies must use the true and fair override in company law when applying SSAP 19 in order to overcome the conflict with the law.

⁶ The IFRS approach to investment property is one example where the UK persuaded the former IASC to follow its lead even though other countries (including Australia) did not share the UK's objection to the depreciation of investment property. However, the IAS 40 fair value model differs from the SSAP 19 model. Under the IAS 40 fair value model, changes in fair value are included in profit and loss whereas SSAP 19 includes them in equity. The definition of investment property in IAS 40 is, in some respects, broader than the definition in SSAP 19.

⁷ The Australian accounting standard AASB 1013 para. 13.1 defines identifiable intangible assets as “those assets which are capable of being both individually identified and specifically recognised”.

⁸ A directors’ valuation was a means of estimating fair value.

⁹ The measurement of these financial assets was determined by company law which derived from the EC Company Law Directives, in particular EC Fourth Directive.

¹⁰ At the same time as the transition to IFRS, the UK adopted national standards that complied fully with IAS 39. Australia did not maintain a separate set of national standards; AGAAP became AIFRS.

¹¹ The Financial Reporting Review Panel; the Australian Securities and Investment Commission.

¹² The influence of US GAAP was proposed as one factor explaining the poor degree of UK/Australia international harmony as Australian companies appeared to follow US GAAP to a greater extent than UK companies.

¹³ Automobiles and Components, Banks, Capital Goods, Commercial Services & Supplies, Consumer Durables & Apparel, Consumer Services, Diversified Financials, Energy, Food & Staples Retailing, Food, Beverage & Tobacco, Health Care Equipment & Services, Insurance, Materials, Media, Pharmaceuticals, Biotechnology & Life Sciences, Real Estate, Retailing, Software & Services, Technology, Hardware & Equipment, Telecommunications Services, Transportation and Utilities.

¹⁴ As defined in IFRS 1 *First-time Adoption of IFRS*.

¹⁵ Although sample sizes were originally equal for the two countries, this is typically not the case after removing companies which do not hold the asset.

¹⁶ The 12 companies using fair value included 11 financial institutions which are permitted by company law to use fair value for such assets. The other company, Marks & Spencer, used the ‘true and fair override’ in order to overcome the conflict with company law.

¹⁷ If companies in group 18 of Panel E Table 2 are considered comparable to companies using cost but not to those using fair value, results are similar for Australia (significant increase in T index) but not for the UK (no change in the T index) (Table 3 Derivatives (2)). Both the within and between country T indices reported in Table 4 show a significant increase in comparability (0.969 to 1.000, $p = 0.048$; 0.968 to 1.000, $p = 0.048$) providing support for the conclusion of increased comparability for measurement of derivatives under IFRS.

¹⁸ Symbion Health used cost under AGAAP but no longer held biological assets at the end of the IFRS adoption year.

¹⁹ CSR did not measure harvested agricultural produce at fair value; rather it was classified as inventory and measured at lower of cost and net realisable value.

²⁰ The same effect (i.e. a significant increase in comparability) is observed for cash settled plans (assuming the ‘not specified’ companies are not comparable, as per Cash Settled SBP (1), Tables 3 and 4).

²¹ If the deemed cost choice is assumed to be the same as fair value (as in Property (3) in Tables 3 and 4) then T indices decrease significantly in Australia and the UK (0.804 to 0.609, $p < 0.001$; 0.899 to 0.697, $p < 0.001$). Considering within and between country T indices, Table 4 shows significant declines in T indices for Property (3) (0.852 to 0.653, $p < 0.001$; 0.849 to 0.647, $p < 0.001$).

²² All these companies disclosed that compliance with SSAP 19 was necessary to give a true and fair view.

²³ Australian GAAP did not include an investment property standard but revaluation was permitted under general property revaluation rules.

²⁴ We have not provided a summary in relation to national comparability because the two country average of national comparability is captured in the within country measures.

²⁵ This finding is based on the policy choices as presented in transition and adoption year annual reports. Further analysis of earlier AGAAP policies shows that 31 companies were forced to change their policy in relation to identifiable intangible assets under IFRS, which they did prior to the end of the transition year. For further discussion, see Chalmers, Clinch and Godfrey (2008); Cheung, Evans and Wright (2008).