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

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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 liabilities decreased comparability. Options to use fair value in other areas (intangible assets, plant and equipment and investment properties) are not generally taken up, either for ongoing 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.

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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 were required to prepare 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, and which represents the greatest ever change in financial reporting.

The study focuses on the consolidated financial statements of listed companies. Widespread adoption of IFRS from 2005 was a significant step towards promoting the use of common standards internationally. Our interest is whether comparability of financial reporting increases in practice, following adoption of common standards. 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). 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 (Ball, 2006; Ernst & Young, 2003, 2005; FitchRatings, 2005). 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.

One of the primary aims of adoption of IFRS is to improve the international comparability of financial reporting. 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, paragraph 39). Therefore, the IASB’s objective is to require like transactions and events to be accounted for and reported in a like way and unlike transactions and events to be accounted for and reported differently, both within an entity over time and among entities. The IASB intends not to permit choices in accounting treatment and has reconsidered, and will continue to reconsider, those transactions and events for which IFRS permit a choice of accounting treatment (Preface to International Financial Reporting Standards, paragraph 13). 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 of financial statements between companies within each country and between companies from the UK and Australia. In other words, we are interested in whether the fair value measurement requirements in IFRS ensure that like assets and liabilities are measured in a like way.

Several prior studies have attempted to assess increases in harmonisation by comparing national accounting standards and practices between companies in the same countries and between companies in different countries. The studies measure differences between national standards of various countries or the practices adopted by companies in different countries in order to assess progress of so-called ‘international harmonisation’ of financial reporting. Prior studies made their comparisons in the context of the transposition of European Union company law directives into national accounting laws and standards and, to a lesser extent, the influence of international and US standards on national standards and practices (Archer, Delvaille, & McLeay, 1995; Emenyonu & Gray, 1992; Herrmann & Thomas, 1995; Parker & Morris, 2001; van der Tas, 1988, 1992). These studies were carried out at a time when national standards varied and when national and international standards and European Union company law directives allowed a significant number of accounting policy choices.

We differ from prior literature because our study’s setting features two countries using the same international standards and there have been significant efforts by the IASB and its predecessor body to remove accounting policy choices since the prior studies. These changes also affect the interpretation of the results. When IFRS require companies to use one measurement policy, any observed lack of comparability also implies a possible lack of compliance with IFRS requirements.

We follow the prior literature by using indices to compare policy choices of different companies over time, and, hence, measure comparability within and between countries. Comparability improves when the indices show that companies’ policy choices for like transactions and events are clustered around like methods. When IFRS require companies to use one measurement policy (e.g. IAS 39 requires the use of fair value measurement for derivative instruments), the indices will show improved comparability when the IFRS requirements replace more flexible national requirements. When IFRS continue to allow choices for like transactions and events (e.g. IAS 39 allows measurement at fair value or amortised cost for some financial assets and liabilities), the indices show greater comparability if more companies make the same choice than was the case under national standards.

In this study we first compare the measurement policies used under national GAAP and IFRS in each country to investigate whether national comparability has increased under IFRS (within country comparability). Second, we are interested in whether the measurement policies used under IFRS in the UK and Australia are more comparable than previously (between country comparability). This would be evidence of IFRS achieving their objective of greater comparability between countries.

We are also interested in the extent of use of fair value measurement in IFRS financial statements. We wish to clarify perceptions about how much fair value measurement occurs in IFRS financial statements to ensure that capital market participants are properly informed about the nature and impact of IFRS. This is important as IFRS are widely used and are being considered for use in more countries and by many more entities. Misconceptions about the extent of fair value measurement in IFRS may mislead users of IFRS financial statements. Such misconceptions may also have standard setting

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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. See discussion of this concept in Gerboth (1973).
3. Material or de jure harmonisation is defined by Tay and Parker (1990) as a movement away from total diversity of practice.
consequences by affecting the level of constituents’ support for individual standards and ultimately the quality of IFRS. Therefore, we consider the extent to which fair value measurement is used when preparers have a choice between fair value measurement and historical cost-based measurement. This evidence is relevant for financial statement preparers, users, standard setters and regulators. It shows preparers’ perceptions about the usefulness of fair value information when IFRS also allow historical cost-based measurement. This provides feedback on what companies do in practice rather than on what people say in lobbying submissions. It also reveals the effects of options in standards on comparability, which is useful for standard setters as they review the impact of IFRS and consider the extent to which they should include options in standards in the future.

The research questions can be summarised 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 IFRS allow companies a choice between fair value measurement and 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).

Our study adds to those which address the impact of IFRS adoption. Studies are beginning to explore capital market effects, such as cost of capital, information asymmetry and effects for analysts of mandatory IFRS in numerous countries (Hail & Leuz, 2007). We focus on a very early step in the financial reporting process, namely the accounting policy choices for the measurement of assets and liabilities being made by companies. Evidence about these policy choices provides a necessary background to understanding capital market effects. Based on the rationale for IFRS adoption, comparability of methods affects the usefulness of accounting information, a primary information attribute being studied when we attempt to measure adoption effects (e.g. Daske, Hail, Leuz, & Verdi, 2008; Horton, Serafeim, & Serafeim, 2008).

The effect of country differences in the application of IFRS has been raised as a possible impediment to successful IFRS adoption (Ball, 2006; Ball, Robin, & Wu, 2003; Hail & Leuz, 2007). Differences in institutional setting (including legal and tax systems, sources of finance and market regulation) may affect the way standards are used in practice. Nobes (2006) suggests that the use of common standards will not necessarily mean the end of international differences in financial reporting. For example, he argues that ‘overt options’ in IFRS may be exercised in a systematically different way in one jurisdiction compared to another. In response to Nobes (2006), we provide evidence about the way some overt options are used in two countries. Our study complements those exploring reasons for, and the impact of, policy choice under IFRS (e.g. Christensen & Nikolaev, 2009; Danbolt & Rees, 2008).

We also add to studies which explore impact of the use of current value measures in accounting (Aboody, Barth, & Kasznik, 1999; Amir, 1993; Barth, 1994; Barth, Beaver, & Landsman, 1996; Barth & Clinch, 1998; Brown, Izan, & Loh, 1992; Easton, Eddey, & Harris, 1993). Fair value measurement is controversial and was strongly debated prior to the financial crisis commencing in 2007 (ICAEW, 2006) and subsequently has been discussed as a possible ‘cause’ of the crisis (Laux & Leuz, 2009). Our contribution is to show the extent to which companies are using fair value measurement under IFRS (considering both mandatory and voluntarily use) in order to improve our understanding of the context within which the fair value measurement debate takes place.

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 (the fair value of consideration give up). The use of fair values in these circumstances is generally not a change from UK GAAP or Australian GAAP nor a policy choice and is, with one exception, outside the scope of this study. The exception is the use of fair values for the measurement of share-based payments; this was a change from national GAAP at the time of the transition to IFRS.

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4 As defined in IFRS 1 First-time adoption of IFRS.
Fair values are used in circumstance 3 to deal, primarily, with the circumstances in which an entity may not have accumulated the necessary information under prior national GAAP to determine IFRS costs (IFRS 1, paragraph BC41). However IFRS 1 does not restrict its use to such circumstances with the result that all entities had a policy choice of using fair values as IFRS deemed cost. Therefore, this use of fair value measurement is within the scope of this study. The circumstances do not arise under, and therefore are not dealt with in, national GAAP.

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. This use of fair values in this circumstance is not a change from national GAAP and is not a policy choice. Therefore, it is 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 national GAAP and is, therefore, the primary focus of this study. 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). We also examine 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).

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

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, both revalued assets do not differ materially from fair value at the balance sheet date.5

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 et al., 1992; Cotter & Zimmer, 1995; Whittred & Chan, 1992). Other motivations are to communicate performance expectations and to avoid takeovers when assets are undervalued (Aboody et al., 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 1983–1995). Barth and Clinch (1998) report that 45% of Australian companies revalued property, plant and equipment in the period 1991–1995. 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.6

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).7 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).8
<table>
<thead>
<tr>
<th>Accounting treatment</th>
<th>IFRS</th>
<th>United Kingdom</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangible assets</strong></td>
<td>IAS 16, IAS 20, IAS 36</td>
<td>FRS 15, SSAP 19</td>
<td>AASB 1010, AASB 1041</td>
</tr>
<tr>
<td>Property, plant and equipment is recognised at cost of acquisition or construction. Revaluation permitted. Investment properties at cost or valuation.</td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretion to use fair value measurement</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Financial assets</strong></td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Discretion to use fair value measurement</td>
<td>Yes, in classification of financial instruments</td>
<td>For financial assets</td>
<td>For financial assets</td>
</tr>
<tr>
<td><strong>Identifiable intangible assets</strong></td>
<td>IAS 38, IAS 36</td>
<td>FRS 2, FRS 10, SSAP 13</td>
<td>AASB 1010</td>
</tr>
<tr>
<td>Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted if active market exists.</td>
<td>Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted if active market exists.</td>
<td>Identifiable intangible assets recognised at cost of acquisition. Revaluation permitted (market or directors' valuation).</td>
<td></td>
</tr>
<tr>
<td>Discretion to use fair value measurement</td>
<td>Fair value measurement limited in practice</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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)\(^9\) 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).\(^{10}\)

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 (Abrahams & Sidhu, 1998; Barth & Clinch, 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).\(^{11}\) 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 allow 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 measurements 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.\(^{12}\) 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

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\(^9\) The Australian accounting standard AASB 1013 paragraph 13.1 defines identifiable intangible assets as “those assets which are capable of being both individually identified and specifically recognised”.

\(^{10}\) A directors’ valuation was a means of estimating fair value.

\(^{11}\) The measurement of these financial assets was determined by company law which derived from the EC Company Law Directives, in particular EC Fourth Directive.

\(^{12}\) 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.
recognition many 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’).\textsuperscript{13}

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 (Chalmers & Godfrey, 2000; Johnson & Swieringa, 1996).

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. Fair value less costs to sell at the point of harvest is cost at that date for the purposes of measuring subsequent inventories. 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

\textsuperscript{13} 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.
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 comparability within the UK and within Australia for seven and five accounting policies respectively. However, there was complete comparability between UK and Australian companies for only three policies (inventory valuation, finance leases and interest on construction). 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 (Field, Lys, & Vincent, 2001). Based on arguments posited in the prior literature that options in standards reduce comparability 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, 2000a, 2000b). Further, past practice under national GAAP has been shown to influence policy choice under IFRS (Christensen & Nikolaev, 2009; Tarca, 2005). 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 (Ball, Kothari, & Robin, 2000; Basu, 1997) 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 (Brown & Tarca, 2007; Nobes, 1983), 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; 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).

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

15 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.
The largest companies by market capitalisation in each of 22 industry sectors (based on GICS classification) were selected. The UK companies range in size from GBP million 100.39 to 106,631.00 (median 2750.42) 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 period (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

As outlined above, many prior studies have used indices to compare accounting policy choices by companies and, hence, measure comparability between and within countries (Archer et al., 1995; Emenyonu & Gray, 1992; Herrmann & Thomas, 1995; Parker & Morris, 2001; van der Tas, 1988, 1992). We employ T indices developed by Taplin (2004), which extend the H, C and I indices developed by van der Tas (1988) to a flexible framework containing many specific indices. This flexibility enables different indices to be used for different policy choices or to examine sensitivity of conclusions to the choice of index and provides a simple way of describing which particular index is computed in a particular situation.
The $T$ index has the simple interpretation as the probability that two randomly selected companies have financial statements that are comparable.\footnote{The $T$ index selects the two companies with replacement. The difference in index values arising from whether companies are selected with or without replacement is typically small except in very small samples. The reasons for the $T$ index selecting companies with replacement are expounded in Taplin (2004). The standard errors in Taplin (2004) show the difference between selecting companies with or without replacement is negligible compared to the accuracy with which index values are estimated.} It takes values from 0 (when all companies have financial statements non-comparable to each other) to 1 (when all companies have financial statements that are comparable with each other). Table 2 provides hypothetical data and resulting $T$ indices for two possible policy choices (A and B) in two countries (1 and 2) for two years to illustrate how indices quantify comparability. For example, in this data 60 companies use accounting method A and 40 use accounting method B in country 1 during year 1. The corresponding $T$ index value of $T = 0.6^2 + 0.4^2 = 0.52$ indicates that if two companies were randomly selected from country 1 there is a 52% chance their accounts will use the same method in year 1. In year 2 all companies in country 1 use method A so the comparability increases to 100%.

The international index for year 1 ($T = 0.6 \times 0.3 + 0.4 \times 0.7 = 0.46$) compares companies in different countries by forcing the two randomly selected companies to be from different countries. Although this summary of international comparability increases to 0.60 in year 2, this occurs with a decrease in comparability within country 2 even though companies from both countries are more likely to use method A in year 2 compared to year 1. Thus different indices add insights into concepts of comparability from different perspectives.

The general formula for $T$ is given by (see Taplin, 2004 for further details)

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

(1)

where

$\alpha_{kl}$ is the coefficient of comparability between accounting methods $k$ and $l$,

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

$p_{ik}$ 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 $M$). 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).

In this study we compute four sets of indices. The first two measure the national level of comparability for each country separately, by using only data for the UK and for Australia respectively (national comparability). The last two measure the level of comparability using data from both countries and taking a within country international focus (option 2b) and a between country focus (option 2c). For these latter two indices each country is assigned equal weight (option 1b).

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 (2010) 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 comparability 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.

\footnote{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.}
Table 2
Hypothetical data illustrating simple national and international T indices.

<table>
<thead>
<tr>
<th>Country 1</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Method A</td>
<td>Method B</td>
</tr>
<tr>
<td>Country 1</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Country 2</td>
<td>30</td>
<td>70</td>
</tr>
</tbody>
</table>

International index = 0.46

This table provides the number of companies (out of 100) using accounting method A and B in two countries over two years. National indices are provided for each country in each year together with international indices summarising comparability between the two countries for both years.

5. Results

Table 3 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.

Table 4 presents T indices and standard errors under GAAP and IFRS (T GAAP and T IFRS) for Australia and for the UK separately for the sub-sample of companies excluding ‘not applicable’ companies. p-Values indicate significant differences pre- and post-IFRS. Table 5 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 4 and 5 also include p-values for sensitivity tests which relate to the T indices for the full sample (T indices not tabulated in Tables 4 and 5). All p-values are summarised in Table 6, which will be discussed following our main analysis below. We discuss our results in the order of the asset categories listed in Table 3, commenting first on use of fair value and secondly on changes in comparability.

5.1. Property, plant and equipment – Table 3 Panel A

Table 3 (items 1–2) shows that few companies use the revaluation model in IAS 16, UK GAAP or 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 and fewer companies (three UK, eight Australian) used the revaluation model under IFRS. On transition to IFRS, three UK and four Australian companies ceased using the revaluation model.20 No company uses the revaluation model for plant and equipment. The results are consistent with that reported by Christensen and Nikolaev (2009). Compared to prior studies, fewer companies are using fair value measurement (Parker & Morris, 2001; Tarca, 2005).

In addition, there was little use of the deemed cost provisions in IFRS 1. Twelve UK companies (16%) and 13 Australian companies (18%) used prior period revaluations under national GAAP as deemed costs for property rather than use transition date fair values or restate the carrying amounts to an IFRS historical cost-based amount. Six UK companies and eight Australian companies used one-off revaluations to fair value at transition date as IFRS deemed costs for property (Table 3, item 1b). A similar situation is observed for plant and equipment (Table 3, items 3–4). One UK company and four Australian companies used fair value at transition date as IFRS deemed costs; one UK company and nine Australian companies used prior period revaluations under national GAAP as IFRS deemed costs.

With fewer companies using the revaluation model for property, comparability has increased both within and between countries.21 T indices (national comparability) increase in Australia and in the UK (0.804–0.864, p = 0.015; 0.899–0.948, p = 0.051, Table 4). Considering within and between country T indices, Table 5 shows significant increases for property (2) (0.852–0.906, p = 0.001; 0.849–0.904, p = 0.001).22 If deemed cost is assumed to be the same as cost (as in plant and equipment (2) in Tables 4 and 5) 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. Investment property – Table 3 Panel B

Among companies which hold investment property, most use fair value. In Australia 17 companies used fair value and only one used cost under both national GAAP and IFRS. In the UK 15 companies had investment property under UK GAAP and all used fair value; none used cost as it was not permitted under UK GAAP. Under IFRS, 23 companies had investment property

20 In the UK (three companies HSBC, P Z Cussons and Royal Bank of Scotland) treated the UK GAAP revalued amounts at transition date as deemed costs for IFRS purposes. In Australia 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.
21 Deemed cost is assumed to be the same as cost (as in property (2) in Tables 4 and 5).
22 If the deemed cost choice is assumed to be the same as fair value (as in property (3) in Tables 4 and 5) then T indices decrease significantly in Australia and the UK (0.804–0.609, p < 0.001; 0.899–0.697, p < 0.001). Considering within and between country T indices, Table 5 shows significant declines in T indices for property (3) (0.852–0.653, p < 0.001; 0.849–0.647, p < 0.001).
Table 3

<table>
<thead>
<tr>
<th>Panel A IAS 16 Property plant and equipment</th>
<th>UK GAAP Transition year</th>
<th>UK GAAP Adoption year</th>
<th>AUST GAAP Transition year</th>
<th>AUST GAAP Adoption year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a Property – cost</td>
<td>107</td>
<td>94</td>
<td>92</td>
<td>81</td>
</tr>
<tr>
<td>1b Property – deemed cost</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>2 Property – revaluation</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Panel B IAS 40 Investment property</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a Investment property – cost</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>5b Investment property – deemed cost</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6 Investment property – fair value</td>
<td>15</td>
<td>13</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>99</td>
<td>87</td>
<td>91</td>
<td>80</td>
</tr>
<tr>
<td>Panel C IAS 38 Intangible assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7a Intangible asset – cost</td>
<td>54</td>
<td>47</td>
<td>93</td>
<td>82</td>
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<td>7b Intangible asset – deemed cost</td>
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<td>0</td>
</tr>
<tr>
<td>8 Intangible asset – revaluation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>60</td>
<td>53</td>
<td>21</td>
<td>18</td>
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<tr>
<td>Panel D IAS 41 Agriculture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Biological assets – fair value</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>10 Biological assets – cost</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>112</td>
<td>98</td>
<td>112</td>
<td>98</td>
</tr>
<tr>
<td>Panel E IAS 39 Financial instruments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Held-for-trading – fair value</td>
<td>12</td>
<td>10</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>14 Cost</td>
<td>9</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>93</td>
<td>82</td>
<td>91</td>
<td>80</td>
</tr>
<tr>
<td>Panel F IFRS 2 Share-based payments</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>24 Equity settled – fair value</td>
<td>4</td>
<td>3</td>
<td>112</td>
<td>98</td>
</tr>
<tr>
<td>25 Equity settled – intrinsic value or issue price</td>
<td>107</td>
<td>94</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not applicable/none held</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>26 Cash settled – fair value</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>27 Cash settled – intrinsic value</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>28 Cash settled – not specified</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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).
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 4 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 each other; Property (2) and Plant and equipment (2) assume that deemed cost is completely comparable to cost; 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 but not fair value. Cash settled SBP (share-based payment) (1) assumes that not specified is comparable and cash settled SBP (2) assumes that not specified is comparable.

reflecting the broader definition of investment property in IAS 40 for which 17 companies used fair value and six used cost. No UK or Australian company used fair value at transition date or any earlier date as IFRS deemed cost (Table 3, item 5b).

Thus, there was no change in national comparability in Australia. However, both within and between country comparability showed a significant decline (0.948–0.755, \( p = 0.003 \); 0.944–0.713, \( p = 0.003 \), Table 5). The adoption of the cost model by six UK companies under IFRS led to a reduction in national comparability. T indices show a significant decline (1.000–0.614, \( p = 0.003 \), Table 4.) The reduction in the UK reflects, partly, the use of the cost model by companies affected by the broader definition of investment property in IFRS as well as 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 of options will reduce comparability if there are company incentives to make use of the new option.

### 5.3. Intangible assets – Table 3 Panel C

No companies measured intangible assets at fair value under national GAAP and IFRS (Table 3, items 7–8) and none used fair value at transition date or any earlier date as IFRS deemed cost (Table 3, item 7b). Companies in both countries were constrained by the IAS 38 and IFRS 1 requirement that fair value must be determined from an active market. Some Australian companies had revalued identifiable intangible assets in prior periods under national GAAP. However, all of these companies had changed their policies prior to the end of the transition year so that the national GAAP policy at transition date was ‘cost’ in all cases. There is no significant change in the national comparability T indices in Australia or in the UK (Table 4) or in the T indices measuring within and between country comparability (Table 5).

### 5.4. Agriculture – Table 3 Panel D

IAS 41 applies to few companies in our sample. Only two UK companies had biological assets and both used fair value measurement under IFRS, a change from cost under UK GAAP (Table 3, items 9–12). In Australia, six companies used the fair value measurement under IFRS.
5.5. Financial instruments – Table 3 Panel E

5.5.1. Held-for-trading

In Australia, 23 companies (20%) reported held-for-trading securities under IFRS, an increase of three companies from the prior year. Under both national GAAP and IFRS all companies used fair value. Similarly, in the UK 23, companies reported held-for-

---

Table 5

<table>
<thead>
<tr>
<th></th>
<th>(a) Within country index</th>
<th>Sensitivity</th>
<th>(b) Between country index</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T GAAP</td>
<td>SE</td>
<td>T IFRS</td>
<td>SE</td>
</tr>
<tr>
<td>Property (1)</td>
<td>0.852</td>
<td>0.030</td>
<td>0.635</td>
<td>0.034</td>
</tr>
<tr>
<td>Property (2)</td>
<td>0.852</td>
<td>0.030</td>
<td>0.906</td>
<td>0.025</td>
</tr>
<tr>
<td>Property (3)</td>
<td>0.852</td>
<td>0.030</td>
<td>0.653</td>
<td>0.030</td>
</tr>
<tr>
<td>Plant and equipment (1)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.890</td>
<td>0.026</td>
</tr>
<tr>
<td>Plant and equipment (2)</td>
<td>1.000</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Plant and equipment (3)</td>
<td>1.000</td>
<td>0.000</td>
<td>0.880</td>
<td>0.026</td>
</tr>
<tr>
<td>Investment property</td>
<td>0.948</td>
<td>0.047</td>
<td>0.755</td>
<td>0.064</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>1.000</td>
<td>0.000</td>
<td>1.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Biological assets</td>
<td>0.813</td>
<td>0.079</td>
<td>0.878</td>
<td>0.087</td>
</tr>
<tr>
<td>Harvested agricultural produce</td>
<td>0.796</td>
<td>0.079</td>
<td>0.796</td>
<td>0.079</td>
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<tr>
<td>Held-for-trading securities</td>
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<td>0.023</td>
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</tr>
<tr>
<td>Available-for-sale securities</td>
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<td>0.042</td>
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<tr>
<td>Derivatives (1)</td>
<td>0.765</td>
<td>0.030</td>
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<tr>
<td>Derivatives (2)</td>
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<td>0.017</td>
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<tr>
<td>Other financial assets</td>
<td>0.991</td>
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</tr>
<tr>
<td>Other financial liabilities</td>
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<td>0.000</td>
<td>0.966</td>
<td>0.016</td>
</tr>
<tr>
<td>Equity settled SBP</td>
<td>0.902</td>
<td>0.027</td>
<td>1.000</td>
<td>0.000</td>
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<tr>
<td>Cash settled SBP (1)</td>
<td>0.476</td>
<td>0.121</td>
<td>1.000</td>
<td>0.000</td>
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<tr>
<td>Cash settled SBP (2)</td>
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<td>0.087</td>
<td>1.000</td>
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</tbody>
</table>

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 4) 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 4 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 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.

value model under both IFRS and under Australian GAAP; two used the cost model under Australian GAAP and one use cost under IFRS (Table 3, items 9–12).\(^{23}\)

Only one UK company had harvested agricultural produce and it used fair value measurement under IFRS and cost under UK GAAP (Table 3, items 9–12). 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 3, items 9–12).\(^{24,25}\)

National comparability was little changed in Australia. For biological assets, T indices increased in Australia but not significantly (0.625–755, \(p = 0.385\)). T indices did not change for harvested agricultural produce (0.592 under both AGAAP and IFRS, Table 4). In the UK policy choices changed in a uniform manner (from cost to fair value) therefore comparability remained constant for both biological assets and harvested agricultural produce. Within country comparability improves for biological assets (0.813–0.878, \(p = 0.385\)) and is the same for harvested agricultural produce (0.796 and 0.796). Between country comparability improves for biological assets (0.250–0.857, \(p = 0.034\)) and for harvested agricultural produce (0.286–0.714, \(p = 0.167\)) reflecting the use of the same standard in Australia and the UK.

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\(^{23}\) SymBio Health used cost under AGAAP but no longer held biological assets at the end of the IFRS adoption year. One Australian company, Wesfarmers, included biological assets (plantations) in property plant and equipment, which were measured at cost.

\(^{24}\) 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. IAS 41 does not permit an exemption from fair value measurement, arguing that the fair value of agricultural produce at the point of harvest can always be measured reliably. Therefore the measurement of harvested agricultural produce at cost by two Australian companies may be partly explained by the application of materiality or by non-compliance with IFRS requirements.

\(^{25}\) As discussed previously, fair value less costs to sell at the point of harvest is cost for purposes of measurement of subsequent inventories. Given the small number of companies with harvested agricultural produce we have not explored the consequences of this requirement for the measurement of inventories.
Fair value measurement | Main analysis | Sensitivity
---|---|---
| National GAAP vs IFRS | With-in country | Between country | With-in country | Between country |

**Panel A H1 Mandatory requirements**

<table>
<thead>
<tr>
<th>IAS 39</th>
<th>Held-for-trading securities</th>
<th>Increase</th>
<th>Significant</th>
<th>Increase</th>
<th>Significant</th>
<th>Increase</th>
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</thead>
<tbody>
<tr>
<td>Available-for-sale securities</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td></td>
</tr>
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<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>Derivatives (2)</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
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<tr>
<td>IAS 41 Biological assets</td>
<td>Increase</td>
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<td>Significant</td>
<td>Increase</td>
<td>Not Significant</td>
<td>Increase</td>
<td>Not Significant</td>
<td></td>
</tr>
<tr>
<td>IAS 41 Harvested agricultural produce</td>
<td>No change</td>
<td>Not Significant</td>
<td>Increase</td>
<td>Not Significant</td>
<td>Increase</td>
<td>Not Significant</td>
<td>Increase</td>
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<td></td>
</tr>
<tr>
<td>IFRS 2 Equity settled SBP</td>
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<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
<td>Increase</td>
<td>Significant</td>
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</tbody>
</table>

**Panel B H2 Options in standards**

<table>
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<tr>
<th>IAS 16</th>
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<th>Increase</th>
<th>Significant</th>
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</thead>
<tbody>
<tr>
<td>Property (3)</td>
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<td>Significant</td>
<td>Decline</td>
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<td>Decline</td>
<td>Significant</td>
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<tr>
<td>Plant and equipment (2)</td>
<td>No change</td>
<td>Not Significant</td>
<td>No change</td>
<td>Not Significant</td>
<td>No change</td>
<td>Not Significant</td>
<td>No change</td>
<td>Not Significant</td>
<td></td>
</tr>
<tr>
<td>Plant and equipment (3)</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>IAS 38 Intangible assets</td>
<td>No change</td>
<td>Not Significant</td>
<td>No change</td>
<td>Not Significant</td>
<td>No change</td>
<td>Not Significant</td>
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<td>Not Significant</td>
<td></td>
</tr>
<tr>
<td>IAS 40 Investment property</td>
<td>Decline</td>
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<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>IAS 39 Other financial assets</td>
<td>Decline</td>
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<td>Decline</td>
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<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>IAS 39 Other financial liabilities</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td>Decline</td>
<td>Significant</td>
<td></td>
</tr>
</tbody>
</table>

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 4. 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 4 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 3 (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.

Trading securities under IFRS, an increase of two companies (Table 3, items 13–14). Under UK GAAP, 12 companies (predominantly financial institutions) measured them at fair value and nine used the cost model while under IFRS all used fair value.26 National comparability does not change in Australia (Table 4 shows the T indices for held-for-trading securities for Australia are 1.000 for both AGAAP and IFRS). 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 national 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. Both within and between country comparability improves significantly (0.755–1.000 for within country and 0.571–1.000 for between country, both p < 0.001, Table 5).

### 5.5.2. 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 3, items 15–16). Fair value was rarely used under national GAAP (UK companies 3% and Australian 7%). Under IFRS 51% of UK companies and 46% of Australian use fair value. These changes represent a significant increase in national comparability (0.740–1.000, p < 0.001) for Australia and a non-significant decrease (0.908–0.854, p = 0.271) for the UK (Table 4).27 Both within country and between country comparability increase significantly (0.824–0.927, p = 0.026; 0.813–0.921, p = 0.039) (Table 5).

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26 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. In Australia all companies were from the banking and insurance sectors.

27 Table 3 (item 16) shows that five UK companies (4%) use cost for available-for-sale (AFS) financial assets either because they cannot reliably measure them at fair value (consistent with IAS 39), the amounts were immaterial or there is non-compliance with IFRS requirements. Thus the non-significant decrease in comparability on adoption of IFRS may be partly explained these firms’ inability to measure available-for-sale financial assets at fair value, the application of materiality or non-compliance with IFRS requirements.
5.5.3. Derivatives

Both UK and Australian companies show an increase in the use of fair value measurement for derivatives. Under IFRS 92% of UK companies and 89% of Australian use fair value compared to no UK and three Australian companies under prior national GAAP (Table 3, 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 4 and 5). National comparability increases under IFRS. T indices increase significantly in Australia and the UK (0.639–1.000, p < 0.001; 0.891–1.000, p = 0.002).28 Similar results are observed for the within and between country T indices reported in Table 5; both show a significant increase in comparability (0.765–1.000, p < 0.001; 0.733–1.000, p < 0.001).

5.5.4. Other financial assets and liabilities

Table 3 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 3, items 20–21 and 22–23). Eight (7%) UK companies (banks and insurance) and ten (9%) Australian companies elected to use fair value measurement for other financial assets under IFRS (compared to no UK and one Australian company under national GAAP). The UK 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, the substantial majority of their other financial assets (mainly loans and receivables) were measured at amortised cost. The ten Australian companies include five insurance companies, two Materials 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) were measured at amortised cost.

Four UK companies, but no Australian company, elected to use fair value measurement for other financial liabilities under IFRS, compared to no companies under national GAAP. The four UK companies (three banks and one other company) used the fair value option selectively for only some financial assets (mainly those associated with insurance activities or debt that included embedded derivatives). The substantial majority of other financial liabilities (mainly own debt, customer deposits of banks and payables) was measured at amortised cost. National comparability declines, reflecting use of the fair value option for other financial assets. T indices decline significantly in Australia and the UK (0.982–0.833, p < 0.001; 1.000–0.869, p < 0.001, Table 4). Within and between country indices also decline significantly (0.991–0.851, p < 0.001; 0.991–0.851, p < 0.001, Table 5).

For financial liabilities, comparability declines in the UK. Use of the fair value option leads to a significant decline in the national T index (1.000–0.932, 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 (1.000–0.966, p = 0.018; 1.000–0.965, p = 0.018) (Table 5) because the pattern of use of the option differs in the two countries.

5.6. Share-based payment – Table 3 Panel F

Table 3 (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.29 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. Thus comparability has increased in the UK and Australia for equity settled plans. National T indices increase significantly (0.874–1.000, p = 0.001; 0.931–1.000, p = 0.016, Table 4). Similarly, within and between country T indices show a significant increase in comparability (0.902–1.000, p < 0.001; 0.902–1.000, p < 0.001, Table 5).30

5.7. Summary and sensitivity analysis

Table 6 provides a summary of our results described above for within and between country comparability and also for sensitivity tests.31 In relation to H1 (Table 6, 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 small number of companies with biological assets). Within country comparability has not increased significantly but between country comparability (for

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28 If companies in group 18 of Panel E Table 3 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 4 derivatives (2)). Both the within and between country T indices reported in Table 5 show a significant increase in comparability (0.969–1.000, p = 0.048; 0.969–1.000, p = 0.048) providing support for the conclusion of increased comparability for measurement of derivatives under IFRS.

29 Companies reported far more equity settled plans than cash settled plans, so we focus our analysis on the former.

30 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 4 and 5).

31 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.
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.

For standards which permit choice of fair value measurement, a range of outcomes is observed (Table 6, 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 6, 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 6, 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 6, 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 inexpensive 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.

Sensitivity tests (p-values but not T indices or standard errors are shown in Tables 4 and 5) provide 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. The extent of use of fair value measurement is important as it is one of the most controversial aspects of IFRS and does not have unequivocal support. The extent of within and between country comparability is of interest because of the potential for greater comparability to contribute to higher quality financial information and thus benefits from the adoption of IFRS.

Whether the benefits of IFRS are being realised is currently under investigation and our study contributes to this area of literature. 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. Greater use of fair value measurement should be useful to investors (Aboody et al., 1999; Barth & Clinch, 1998; Easton et al., 1993; Horton, 2007; Landsman, 2007) so our evidence may provide explanations for improvements in the information environment observed post-IFRS in the UK and Australia (Cotter, Tarca & Wee, in press; Horton et al., 2008). Our study thus complements those addressing IFRS impact and provides useful feedback for standard setters, regulators and other parties evaluating IFRS.

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.

Our results are informative about preparers’ choices under IFRS and thus are relevant to informing capital market participants about the way IFRS are being used. We show a very conservative approach to the optional use of fair value measurement, implying the likelihood of less intentional or unintentional measurement error in financial statements, which may reassure some investors and analysts. On the other hand, greater use of cost measures means that less current information is provided, which may not be consistent with the preferences of some standard setters and needs of some users of financial reports for more relevant information. The changes from UK GAAP/Australian GAAP to IFRS also lead to changes in within and between country comparability. We add to prior studies using indices in the national GAAP setting. Ours is the first

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32 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) and Cheung, Evans, and Wright (2008).
study to measure comparability under IFRS. In addition, we report on the significance of changes using Taplin’s (2010) T indices on an original data set, which extends how the indices have been used previously.

The IASB identifies comparability as an important qualitative aspect of financial information, thus the extent to which it has increased under IFRS is a measure of benefits of IFRS. 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 have 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 have increased as a result of companies electing to use historical cost-based measurement and abandoning 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 have elected to use fair value which may be more relevant notwithstanding the loss of comparability.

Few studies have so far evaluated the use of IFRS options in the post 2005 setting, so our evidence provides insights for users of financial statements and also regulators as they consider the extent to which standards should permit options. We observe very little use of remeasurement on first-time adoption (the ‘deemed cost’ option), which reflects the likelihood that prior national GAAP historical cost-based amounts were the same as IFRS historical cost-based amounts. The option was used by the minority of companies for which national GAAP carrying amounts included prior period revaluations, so avoiding the need to determine IFRS historical cost-based amounts. The option was also used by a very small number of companies as an opportunity created by IFRS 1 for one-off valuations (which were not permitted by prior national GAAP and are not permitted by IFRS). The fact that the substantial majority of companies did not use the option in this way suggests a lack of economic incentives to bring current values into the accounts, but also gives assurance that the option was not used opportunistically by most companies (Ball, 2006).

Nobes (2006) suggests that IFRS options may allow between countries differences to continue. Our results show companies in two countries with many commonalities in their institutional frameworks continue to use options in similar ways (e.g. the IAS 16 revaluation option; the IAS 39 fair value option). Future studies could compare the use of options in countries with more dissimilar institutional frameworks.

We find that some changes in comparability reflect specific country influences such as the requirements of prior standards (e.g. investment property in the UK). We also observe industry effects in relation to use of measurement options (e.g. IAS 39 fair value option used by banks and insurance companies), which is consistent with the benefits of fair value varying with the nature of firm assets and operations. Our results confirm that, as proposed by ICAEW (2006), standard setters should consider applicability of measurement methods to particular industries.

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.

Acknowledgment

The authors thank Frances Gunnell for research assistance.

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
Appendix 2. Options for T indices (from Taplin, 2004)

1. 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).

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

3. 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, $\alpha_{kl}$ takes a value on the continuum from 0 (completely incomparable) to 1 (completely comparable).

4. 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 $s$, $\alpha_{ks} = \alpha_{ms} = \alpha_{SM} = s$ for all $k$ and $l$.

References


Ernst & Young (May 2005). How fair is fair value? IFRS stakeholder series.


