

Is UK financial reporting becoming less prudent?

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ABSTRACT

This paper seeks to discover whether as a result of the removal of prudence as a concept within the revised 2010 Conceptual Framework, the accounts of companies in the FTSE100 in the UK have displayed any trends to be more or less conservative/prudent. The research design uses the two most popular measures of accounting conservatism (prudence) used in literature, Market-to-Book ratio and the Basu Asymmetric Timeliness model (Basu 1997) and compares the period prior to the change in the 2010 Conceptual Framework with the same measures post the change. The study finds that using both measures of conservatism, the levels of conservatism have fallen since the removal of prudence from the Conceptual Framework. This paper has implications for the users of financial statements and standard setters as the lower levels of prudence or accounting conservatism are associated with higher levels of risk (litigation) and costs (agency costs) which can affect stock valuations.

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1. INTRODUCTION

The current version of the Conceptual Framework (CF) was issued by the International Accounting Standards Board (IASB) in September 2010 after a lengthy consultation process in which it canvassed input from accounting professionals in practice, industry, government and academia across the world. The purpose of the CF remained unchanged from the previous 'Framework for the Preparation and Presentation of Financial Statements' (the Conceptual Framework) published in 1989. It 'sets out the concepts that underlie the preparation and presentation of financial statements for external users' (IASB 2010, p6). It is designed to provide help for both the Board and practitioners to use, review and develop International Financial Reporting Standards, to 'promote harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements' (IASB 2010, p6).

The IASB considers the scope of the CF is to clarify the objectives of financial reporting, by underpinning the IFRSs with guidance on the 'qualitative characteristics of useful financial information' (IASB 2010, p7) and by defining the various key elements of information in the financial statements. In previous iterations of the CF and indeed throughout the history of accountancy, the concept of prudence was embedded as an important characteristic of financial information (Basu 1997, Maltby 2000). However, during the consultation process leading up to the 2010 revised publication of the CF, the IASB decided to remove references to prudence, feeling that it was inconsistent 'with the desirable quality of neutrality, which encompasses freedom from bias' (International Financial Reporting Standards Foundation 2013). It was felt that accountants could not be expected to be prudent without displaying some downward bias on the figures represented. Whilst it was the subject of some considerable debate at the time of the consultation, the decision was taken to remove prudence in the 2010 version (International Financial Reporting Standards Foundation 2013).

Critics of this move such as Watts (2006) claimed that management would then have the tendency to recognise assets or gains which were of uncertain value or existence or to use partial fair value assessments of asset values. This could then introduce greater subjectivity into the accounting process, such as the relative strengths of parties to negotiate to agree valuations for assets which are not so readily measureable. Wang (2010) suggested that over time, income maximisation tends to emerge as the most consistent outcome in continuing negotiations over asset valuations. This might suggest that in the long run, agreeing asset values may not be manipulated for management gain, but that in the short run, social motivations may well provide outcomes which may not be to the benefit of the shareholders.

Clearly there is some scope for lack of clarity around this issue to ensure that there is no abuse by management in manipulating figures for personal advantage when prudence is removed as a consideration. The trade-off between the need for reliable information and pressures to report good figures could result in assets being inappropriately valued when there is no concept of prudence versus that enhanced test of caution if there were.

2. DEFINITION OF PRUDENCE/ACCOUNTING CONSERVATISM

In accounting literature, the words 'prudence' and 'accounting conservatism' are used interchangeably. Conservatism tends to be used more commonly in US-based accounting

literature, whilst prudence is in more traditional European parlance. Whilst the IASB favours the term 'prudence', given the prevalence of the term 'conservatism' in the literature, the author of this study has tended to use both terms interchangeably throughout the paper.

What is prudence? Prudence in the context of accounting has been in existence for centuries (Basu 1997, Watts 2003), although its meaning has changed over time. Initially seen as 'a moral virtue conducive to honesty and competence in business' (Maltby 2000), it became more a method of preventing overzealous distribution of funds from businesses by deliberately understating profits and assets, to a more contemporary meaning which tends to operate more in the interests of investors (Maltby 2000). Now it is regarded more as an element of caution to ensure that assets are not overstated and that they are verifiable (EFRAG 2013).

In the absence of a universally agreed definition of conservatism, given the ever-evolving use and understanding of the word, many authors have adopted the Basu definition of conservatism as: 'resulting in earnings reflecting 'bad news' more quickly than 'good news'' and 'accountants' tendency to require a higher degree of verification for recognising good news than bad news in financial statements' (Basu 1997, p4). This clearly represents an evolution in the meaning of the concept from when it was first adopted in accountancy. Others may consider it to mean showing the lowest values for assets and the highest values of liabilities, such as Sterling discusses as part of the stewardship role of accountants (Sterling 1967).

This shift in understanding of the concept is one of the reasons that the IASB and FASB viewed it as conflicting with the need for the financial statements to be unbiased and for the figures to be reliable (International Financial Reporting Standards Foundation 2013), citing the example that investors carry out the evaluations of management performance, and that management need to provide measures, not evaluations (Hines 1991). Both bodies were keen to clarify that a cautious approach is acceptable, whereas deliberate manipulation of figures is not (International Financial Reporting Standards Foundation 2013).

In their recent bulletin, the European Financial Reporting Advisory Group (EFRAG 2013) agrees that there is much debate about the meaning of prudence, taking that stance that it should ensure that 'assets and income are not overstated and that liabilities and expenses are not understated' on the basis of additional verification for gains than for losses, similar to the Basu definition (Basu 1997). However there are criticisms that it can introduce bias and smoothing of results to provide 'cushions' in good years against poor years (EFRAG 2013). The inability

of the users of the financial statements to know exactly what prudence measures have been adopted in the figures they see can be cause for information asymmetry and uncertainty.

With regards to the removal of prudence from the framework, it is clear that there are differing interpretations of the concept which add to the debate. Those who believe it is still incorporated (albeit more implicitly than previously) within the accounting standards themselves (such as inventory valuation being the lower of cost and net realisable value) and therefore do not object to its removal contrast against those who feel it should remain an explicit part of the Conceptual Framework to counter any potential ‘creep’ of poor practice of earlier recognition of gains. Most interpretations appear to agree however, that ideally, prudence should be that important element of ‘caution’ (EFRAG 2013).

2.1 What are advantages and disadvantages of prudence?

Some users of the financial statements are more interested in the potential for downside risk than the opportunity for potential upside (EFRAG 2013). Therefore the early recognition of liabilities or losses appeals to this group of financial statement users, in preference to a lower threshold of recognition for gains or assets. Ahmed and Duellman (2007) cite the reduction of agency costs as a benefit of conservatism. This is echoed by Kwon, who adds that not only do contracting-type agency costs reduce with conservatism, but that the costs of suboptimal management decisions can be better controlled when reporting conservative earnings, rather than neutrally or liberally measured earnings (Kwon 2005).

Watts (2003) argues that accounting conservatism has evolved as part efficient contracting to reduce ‘deadweight losses’ which emanate from agency problems. It acts as a degree of caution where uncertainty exists and acts as a natural foil for the tendency of management to be more overoptimistic, whether that is consciously or subconsciously. By offsetting this management bias, it constrains payments out of the firm to both management and shareholders, hence sharing the value more equitably across all stakeholders and acting as an ‘efficient contracting mechanism’ (Watts 2003).

The information asymmetry which exists between managers and the outside world can result in managers diverting funds away from value-creating activities into their own remuneration, hence reducing the availability of resources for positive NPV projects (Watts, Zimmerman

1986). The counter to this is that by demanding greater verification standards in the recognition of gains (to which managerial remuneration or bonuses may be attached), then management's ability to overstate earnings or gains or hide losses is reduced (Watts 2003). However, if there is a high level of management ownership within the company, then the information asymmetry and agency distance is lower and the company is likely to demonstrate lower conservatism (Lafond, Roychowdhury 2008). This element of insider-ownership to reduce information asymmetry is important, as several studies (LaFond, Watts 2008, Beatty, Weber et al. 2008, Khan, Watts 2009) find that firms with higher asymmetry or lower institutional shareholdings are more likely to be conservative. Information asymmetry can also affect bid prices made by uninformed investors for the company's shares as the tendency in situations of high asymmetry is for investors to reduce their bid prices hence reducing firm values (LaFond, Watts 2008, Iatridis 2011).

Lafond and Watts (LaFond, Watts 2008) confirmed this positive linkage between accounting conservatism and information asymmetry, but found also that information asymmetry was the driver, not conservatism. Chi and Wang took this further by suggesting that conservatism is positively related to information asymmetry and that 'information asymmetry in the current period will further drive an increase of conservatism in the next period.' (Chi, Wang 2010). They have a concern that without conservatism encouraged by the standard setting bodies such as IASB and FASB, investors will need to be more aware of the issue of information asymmetry and its effect on company financial statements. Their concern is that facing a situation of uncertainty, companies will counter difficulties in accounts preparation and that the benefits of conservatism to creditors and shareholders will be lost, even though stakeholders appear to value conservatism (Chi, Wang 2010).

UK firms have typically a higher level of institutional ownership than US firms, which results in more demands for greater access to the firm by its institutional shareholders than by individual non-employee owners (Ahmed, Duellman 2007). Where there is a large separation between ownership and control, the demand for conservatism grows (Lafond, Roychowdhury 2008). Ramalingegowda and Yu found that where institutions are actively monitoring firms, especially in firms with more growth options, then institutions will demand more conservatism to manage uncertainty and information asymmetry (Ramalingegowda, Yu 2012). This is important in share valuations, as institutional shareholders have more impact in price setting and have a better appreciation of the benefits of corporate governance than non-institutional

shareholders. As conservatism is a key tool of corporate governance, then this is important for firms, investors and standard setters (Ramalingegowda, Yu 2012).

Hui et al (Hui, Matsunaga et al. 2009) consider conservatism as a mechanism to reduce information asymmetry and potential litigation by reporting bad news on a timelier basis in substitution for voluntary managerial forecasts issued to the market. This is also perceived as a method of improving the reliability of reported earnings (LaFond, Watts 2008) since management is less likely to manipulate and overstate earnings.

A more recent paper from Hui et al (Hui, Klasa et al. 2012) studies the effects of suppliers and customers on a firm's accounting conservatism and find that the more powerful the supplier and customer base is, the quicker the firm recognises losses. This stakeholder base uses the accounting data of the firm to assess its performance and whether to do business with it. It has a preference for early recognition of losses (conservatism) rather than of gains as it does not profit from overstatement, but faces risk of default with losses, so early recognition is a way to manage the risk in a timelier manner. Powerful suppliers and customers value conservatism and reward it with ongoing commercial relationships.

Whilst not strictly speaking conservatism in the conventional accounting sense, Iatridis examines whether voluntary disclosure of sensitive accounting information hinders profitability (Iatridis 2008). These disclosures can be viewed as a conservative approach to financial accounting and with information disclosure to wider stakeholders. Iatridis found that by adopting international financial reporting standards and making voluntary disclosures about accounting practices that firms have higher profitability, suggesting enhanced quality and reliability of financial information, and reduced uncertainty and information asymmetry for stakeholders which can allow firms to raise capital more easily (Iatridis 2008).

Conservatism also has impacts on debt contracting (Watts 2003); Beatty et al found that firms with more conservatism incorporated income escalators in debt financing (Beatty, Weber et al. 2008). Firms prepare more conservative financial reports in response to lenders' demands for conservatism. Ahmed et al and Zhang (Ahmed, Duellman 2007, Zhang 2008) then find that when firms exhibit more conservatism, they reduce the cost of debt by securing lower interest rates from lenders. This increased verification of gains and losses therefore reduces information uncertainty which can then filter through to a lower cost of capital (García Lara, García Osma

et al. 2011). Zhang also found that lenders benefit from conservatism through more timely indications of default risk in a company, but that such conservative companies are more likely to breach a debt covenant after a negative price shock (Zhang 2008). This is because they are more likely to recognise bad news on a timelier basis than good news, which can then result in a breached debt covenant.

Zhang also expresses concern in the apparent move of bodies such as the Financial Accounting Standards Board (FASB) away from reliability/conservatism to more 'relevant' accounting standards, which tends to be reflected by fair value in the accounts and which is inherently less conservative (Zhang 2008). Whilst fair value recognises unrealised gains and losses earlier, which can be said to improve the transparency of information in the accounts, it is inherently the opposite of conditional conservatism, which requires additional verifiability before gain recognition (Kim, Pevzner 2010).

From the shareholders' standpoint, empirical evidence suggests that conservative firms are less likely to deliver bad news to the market, by not missing analyst forecasts, presenting weaker earnings or dividends (Kim, Pevzner 2010). Kim and Pevzner also suggest that by increasing the amount of information to the market, conservative firms reduce information asymmetry which then affects the market's reaction to news emanating from such firms, impacting share prices, as the market has a tendency to react stronger to good news (given the higher level of verifiability to this news by conservative firms) and weaker to bad news (Kim, Pevzner 2010). By improving the reliability of future cash flow forecasting, conservative firms are rewarded by higher valuation multiples (Kim, Pevzner 2010). In addition, D'Augusta et al found that for conservative companies, the higher quality information they provide results in a reduction in investor disagreement around earnings announcement dates, and consider this when valuing companies (D'Augusta, C., Bar-Yosef, F., Prencipe, A 2013).

Alam and Petrushka (2012) highlight the importance of monitoring conservatism from a fraud detection standpoint, finding that ex-post firms committing fraud demonstrate considerably lower levels of accounting conservatism for at least 3 years prior to the initial fraud occurring. They indicate that if companies suddenly appear to change their accounting practices, it could be a marker of potential fraud.

National and legal frameworks can have an impact on conservatism as can the institutional, regulatory, tax-policies and economic framework of a given country (Watts 2003, Bushman, Piotroski 2006). Those countries with high state involvement recognised good news faster than bad, whilst those with high quality judicial systems reported bad news in earnings faster than good (Bushman, Piotroski 2006). Whilst this study concentrates exclusively on the UK FTSE100 firms, other authors (Ball, Kothari et al. 2000) have concluded that common law systems such as the US and UK, as opposed to code law systems are instrumental in recognising economic losses quicker, but that information asymmetry in code-law countries finds a more timely resolution by having closer ties with major stakeholders. Lobo and Zhou found that the introduction of the Sarbanes-Oxley Act in the US caused a significant increase in the level of conservatism in the accounts, both in terms of lower discretionary accruals but also in the quicker recognition of losses than gains (Lobo, Zhou 2006). Other regimes have taken a different approach to conservatism; Chinese authorities have viewed conservatism as a capitalist method to actively manipulate figures and exploit the workforce, although this is changing (Lin, Tian 2012).

Ahmed and Duellman (2007) also point out some of the differences of US and UK GAAP, in that UK GAAP tends to be more lenient in approach, by allowing capitalisation of development costs as intangible assets and allowing upward revaluations of assets, which are both prevented under US GAAP. This more permissive culture is also presented against the acknowledgement that US firms have higher risks of litigation than their UK counterparts, and is therefore more likely to be conservative in their accounting approaches (Ahmed, Duellman 2007). This additional conservatism is likely to reduce ex-post litigation costs, both in terms of being sued in the first place but also the increased chance of the case being dismissed entirely (Ruch, Taylor 2011).

The role of conservatism in corporate governance is a recurring theme in the literature (Watts 2003, Ahmed, Duellman 2007). By acting as that perceived 'degree of caution' (International Financial Reporting Standards Foundation 2013), firms practicing accounting conservatism are more likely to recognise economic losses earlier, which can highlight potentially loss-making projects earlier and avoid those which may deliver a negative NPV. A further example of this is for firms who face high litigation risk to recognise losses more quickly to avoid potential litigation costs (Watts 2003). Watts also highlights the benefit of more timely loss recognition compared with gains for its effect of lowering tax charges.

Asgari and Behpour (2014) consider that high-governance firms are more likely to produce accounting statements with high quality earnings information, rather than weaker ones where the imperative to show unverifiable results may be stronger. They also assert that conservatism is thus a long-standing method of solving agency issues. Ettredge et al also see improved corporate governance in periods following corrections of overstated earnings as key in increased conservatism (Ettredge, Huang et al. 2012). Indeed, in a recent study by Francis et al found that during the financial crisis of 2007-9 better managed companies demonstrating conservative accounting had higher performing shares than those who were less conservative (Francis, Hasan et al. 2013).

Chi and Wang (2010) argue that conservatism is necessary in an uncertain business world by maintaining the asymmetric timeliness in recognising gains as opposed to losses and by setting the threshold of verification for the recognition of assets higher than that of liabilities. This asymmetric recognition of losses is also believed to focus not only analysts' but also management's attention on underlying causes of poor performance and on the need to manage debt covenants effectively, which can reduce information asymmetry and improve decision-making (Iatridis 2011). As such it takes account of the fact that the legal and business environment in which accountants operate is not always clear-cut but that managers still have an all-important stewardship role which is to balance often quite conflicting social relations of capital to allow an 'equal return on capital' (Maltby 2000).

Conservatism is not without its critics: the 'degree of caution' may also undermine the benefits of conservatism if not balanced (Ahmed, Duellman 2007, Beaver, Ryan 2000), as it may lead to early termination of projects which whilst giving an overall positive NPV incur substantial cash flows at the start or a total rejection of projects with only small positive NPVs.

Other criticisms of accounting conservatism include the fact that it may result in bias and noise in the accounts which may generate 'soft' accounting numbers, increase information asymmetry and affect valuations (Givoly, Hayn 2002, LaFond, Watts 2008). Givoly and Hayn's 2002 study highlighted that there has been a growing conservatism in accounts over the last decades, which users of the financial statements should be aware of in ascertaining the worth of the firm, as it has led to persistent declines in reporting profitability, increased losses and increased dispersion of earnings. (Givoly, Hayn 2002). This is a finding echoed by Chen et al

(Chen, Folsom et al. 2013) who found that conditional conservatism causes a reduction in earnings persistence and results in lower earnings multiples. This could be a real disadvantage for investors who may not realise the full worth of their holdings if the information asymmetry from good news means that uninformed investors sell out too soon (Kim, Pevzner 2010). However, Kim et al were not convinced by this argument, stating that earnings persistence provides lower uncertainty and more predictability in projecting future performance which can be factored into earnings multiples and forecasts (Kim, Pevzner 2010).

Despite the current removal of prudence or accounting conservatism from the Conceptual Framework, Watts (2006) is of the belief that it will prevail in practice. Whilst some managers will use its removal to commit fraud, Watts believes that this will have far-reaching consequences for standards and standard-setting bodies, unless standards are constructed in such a way as to remove areas of potential misinterpretation, but which will necessarily re-introduce some element of bias into the financial statements (Watts 2006).

3. RATIONALE AND METHODOLOGY

This study examines whether companies preparing their financial statements under IFRS have reacted in any way to the removal of conservatism or prudence from the Conceptual Framework issued in 2010.

The timing of any change will always be difficult to assess accurately, as whilst statement of financial position (SOF) items such as provisions could potentially have an effect from December 2010, other elements of conservatism through the statement of comprehensive income (SOI) such as the potential understatement of income or overstatement of costs, may take longer to materialise. The other issue with timing is that the time elapsed since September 2010 is still relatively short; those companies with a December 31st year end have only issued accounts to December 31 2013 (at time of writing) so any changes in behaviour may be difficult to perceive.

The sample chosen for this study centred on the FTSE 100 companies in the UK, as they are most likely to have been adopting IFRS for several years, been audited as complying with IFRS and also subject to the removal of prudence from the Conceptual Framework in 2010. In order to make a reasonable comparison, it is necessary to have an equal number of observations prior

and post the CF change. This meant that given the change occurred effective in 2010, and for the sake of equality of potential impact only those firms with a December 31 year end were chosen, only four year ends have occurred since the change up to time of writing (2010, 2011, 2012 and 2013), and therefore only three ends prior should be chosen (2006, 2007, 2008 and 2009). By eliminating firms without a December 31 year end, this will affect the choice of firms and industries in the sample; e.g. there are no retail organisations in the sample as they tend to publish their accounts on a March year end basis, after seasonal Christmas sales. This is not expected to have a significant impact on the results.

By eliminating those firms not having a December 31 year end, or not having sufficient data available (for example not having been in the FTSE for the requisite number of years), the sample was reduced to 45 firms, giving a total of 360 firm years across the eight year period under study. Accounting data was sourced from the FAME database, year-end stock prices from the London Stock Exchange and number of shares from company annual reports.

The two most popular measures of conservatism were calculated (Wang 2009), firm Market to Book (MTB) values (Beaver, Ryan 2000, Givoly, Hayn 2002, Roychowdhury, Watts 2007, Feltham, Ohlson 1995) and Basu's 2007 measure of asymmetric timeliness in earnings (AT). These were chosen not only for their wide acceptance in literature, but also as indicators of the two different forms of conservatism – conditional and unconditional.

Conditional conservatism is concerned with the asymmetric timeliness of recognising gains compared with losses, and with requiring a greater degree of verification for good news reporting rather than bad (Basu 1997). Unconditional conservatism is the systematic understatement of net assets (Roychowdhury, Watts 2007) or the early recognition of losses irrespective of whether news is good or bad. Conditional conservatism is referred to as ex-post or dependent on news, in that management write down assets by impairing them in times of bad news or uncertainty, but do not to revalue them upwards at a later date when conditions are favourable again. Conditional conservatism has been growing in the US for the last 3 decades (Watts 2003, Ball, Kothari et al. 2000), and is viewed as a method likely to increase contracting efficiency, through its earlier recognition of losses.

Iatridis (2011) found that companies displaying more conditional conservatism but less unconditional conservatism tend to report higher quality accounting disclosures, which is linked

to higher profitability and liquidity. The reason for the inverse relation between conditional and unconditional forms is that conditional conservatism has the benefit of improving contracting efficiency whereas unconditional conservatism can allow managers to manipulate figures for their own benefit or tax and litigation reasons (Iatridis 2011). By selecting certain accounting policies to benefit managerial interests by anticipating future bad news (Beaver, Ryan 2005), managers may create 'noise' and bias in the accounts, which whilst it may achieve a management target, help to obtain good finance terms or possibly reduce agency costs or risks of litigation (Iatridis 2011), it may actually undermine the quality of the reporting and lead to poor economic decision-making (Ball, Shivakumar 2006). Beaver and Ryan also assert that unconditional conservatism can build up 'accounting slack' or 'unrecorded goodwill' such that it can cover the use of conditional conservatism in bad news times, until such a point that this slack is used up when the news is particularly bad (Beaver, Ryan 2005). In such an eventuality, this can cause large amounts of information asymmetry and can undermine the reliability of the financial statements.

Therefore for this study, it was deemed important to evaluate any impacts of the Conceptual Framework change on both a measure of conditional and unconditional conservatism. The MTB is regarded as a measure of unconditional conservatism, whereas Basu's AT is deemed a more appropriate measure of conditional conservatism (Chi, Wang 2010).

3.1 Market-to-book ratio

The MTB ratio is regarded as having a positive relation with conservatism (Feltham, Ohlson 1995, Givoly, Hayn 2000, Khan, Watts 2009), as high MTB is synonymous with higher firm growth options compared with book assets. Furthermore, the higher demands for gain verification versus loss verification results in net assets being cumulatively understated compared with market values (Khan, Watts 2009), which is continuous in conservative companies since they select the most prudent write-downs of expenses and also tend to reduce their agency costs (Watts 2003, Roychowdhury, Watts 2007). Beaver and Ryan (2000) adapted the basic MTB measure, which encompasses the relative understatement of book net assets to their market value, to take account of the bias and lag components, as the two sources of variation in the ratio. Whilst they determine the importance of bias, rather than lag, on the future book returns, and this adapted methodology has been subsequently adopted by others such as Ahmed and Duellman (2007). As this study was to determine any more general change in conservatism, this adaptation was not adopted here, using instead the raw MTB ratio. A MTB

ratio greater than 1 is deemed to indicate conservatism, and an increasing score suggests increased conservatism (Feltham, Ohlson 1995, Givoly, Hayn 2000).

3.2 Basu's 2007 measure of asymmetric timeliness in earnings (AT)

Basu's equation is given in (1) below:

$$\frac{EPS_{it}}{P_{it}} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} DR_{it} + \varepsilon_{it} \quad (1)$$

where:

EPS_{it} : Earnings per share for firm i year t

P_{it}: Opening stock market price for firm i year t

R_{it}: Stock markets return for firm i year t

DR_{it}: Dummy variable that is equal to 1 if the stock market return for firm i in year t is negative, and equal to 0 if the stock market return for firm i in year t is non- negative.

Despite being the most-used measure of conservatism, there are nonetheless criticisms with the Basu AT measure; for example that there are large variations in measurement between large and small companies (Givoly, Hayn 2000), it is not easy to calculate firm specific AT over a short time frame (Ahmed, Duellman 2007) and also that it does not measure conservatism prior to the period under study unless taken cumulatively over several periods (Roychowdhury, Watts 2007). However, given the nature of this study, using predominantly large firms, to determine if there have been any short run changes (due to the fact that there were only 4 years of available data post the CF change), these model weaknesses were not deemed significant in this study.

Roychowdhury and Watts found that there is a negative correlation between the Basu measure and end of period MTB in short run situations (one to two years) (Roychowdhury, Watts 2007) but that when taken over a longer period, the association becomes more positive. This is because of the influence of the starting MTB and cumulative net asset conservatism which has occurred prior to the measurement period (Beaver, Ryan 2005). Their argument centres around the issue that high MTB (more conservative) firms, which have high 'rents' (or growth options) or unverifiable increases in asset values, are less impacted by bad news (i.e. low earnings

timeliness) than low MTB firms. This is because the majority of the decrease in value from the bad news occurs from a decline in value of those growth options or unverifiable asset values, and therefore this is unlikely to be a large asset write-down, since these values were unrecorded in the books originally (since they were only perceived by the market, not by the accountants preparing the accounts) (Roychowdhury, Watts 2007). The converse is true for low MTB (less conservative) firms, as any changes (from positive or negative news) are more likely to result in the already recorded asset values. Therefore the relationship between the MTB at the beginning of any study and asymmetric timeliness is likely to be negative. However, this effect reduces over extended periods of time so that the relationship is likely to be more positive (or certainly less negative), the longer the time frame under study (Roychowdhury, Watts 2007).

4. RESULTS

4.1 Market to book ratio

The market to book (MTB) ratio is the second most popular proxy for accounting conservatism (Wang 2009). The ratios were calculated from the numbers of shares outstanding in the individual company reports and from year end share prices from the London Stock Exchange. These were then averaged across the four years prior to the change in the Conceptual Framework (2006-2009 inclusive) and for the four years post the change (2010-2013 inclusive). This was then scatter plotted in figure 1 to determine whether MTB ratios had changed over that period. The slope coefficient of the line of

best fit was 0.661, suggesting that MTBs have fallen since the change occurred, inferring less conservatism post-CF change.

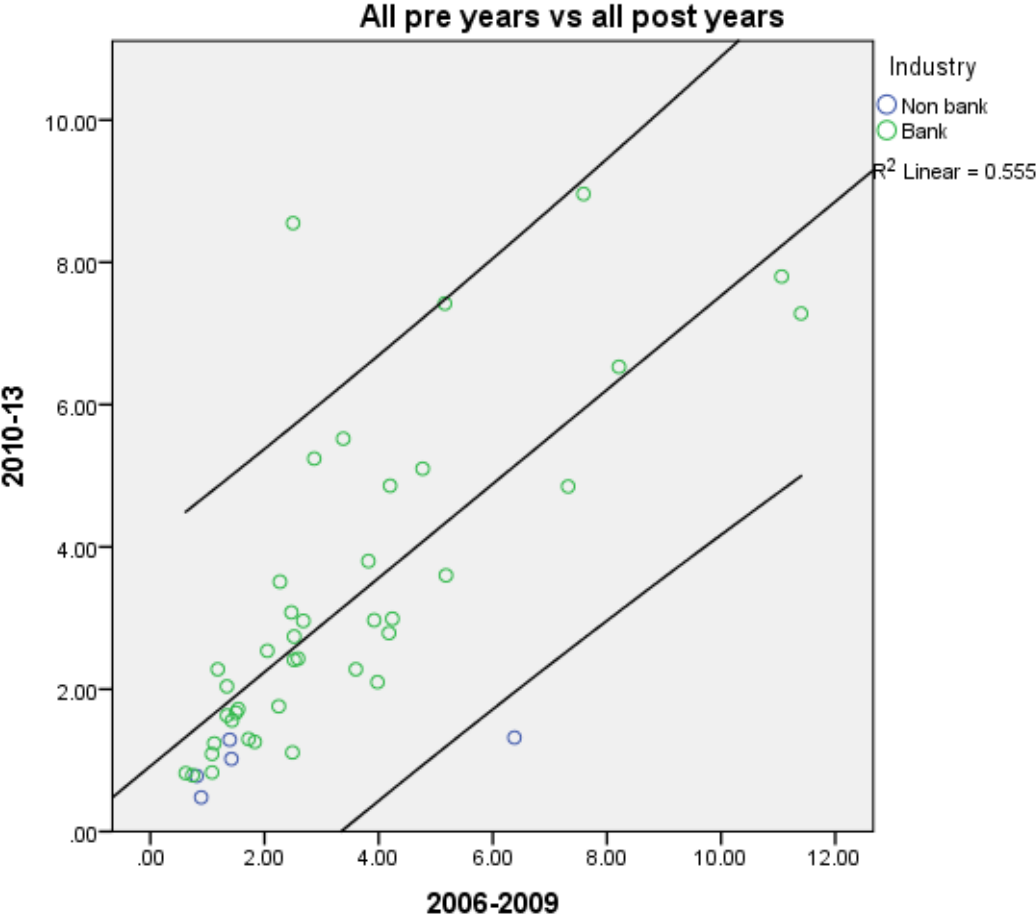


Figure 1: Scatter plot of average MTB ratios for four years prior to CF change against four years post the CF change.

In order to test further this result, other factors were considered. During the four years prior to the CF change, most major economies experienced the global financial crisis, which affected results and share prices, particularly during the year 2008. Therefore, a second scatterplot was made of the four year period post the change, juxtaposed against the three years prior, but without 2008, (i.e. 2006, 2007 and 2009 only). This plot had a slightly lower slope coefficient of 0.622, suggesting much lower MTBs (and even lower conservatism) post the change.

Two further plots were tested, both based on figure 1, but both without the transitional year of 2010. This was on the basis that the CF change was effective only from September 2010 and therefore companies were unlikely to have changed their accounting behaviour significantly in such a short time frame. These plots took the four years (2006-2009) prior to the CF change against only three years post (2011, 2012 and 2013), and then the three years (2006, 2007 and 2009) prior and three years post (2011, 2012 and 2013), again to determine whether the global financial crisis in 2008 caused the MTB to skew the results. (For sake of space, these plots are not shown). The four years prior against three year post has a slope coefficient of 0.614, again indicating lower MTBs since the CF change, thus lower conservatism. The three years prior and post the change has a flatter line, with a coefficient of 0.573, demonstrating that conservatism has been reducing more markedly since the CF change, despite any changes for the turbulent year (2008) of the financial crisis and the transitional year of the CF change. This is unexpected given the general finding that conservatism as measured by MTB tends to increase over time (Feltham, Ohlson 1995, Givoly, Hayn 2000). Indeed, a straight plot of MTB ratios over the eight time period in figure 2 below would seem to show a change in direction in MTB since 2008. This may be because of reduced expectations of growth in the market following the

inancial crisis (Givoly, Hayn 2000) rather than marked changes in accounting reporting behaviour, as it is perhaps too short a time frame as yet to make such an inference.

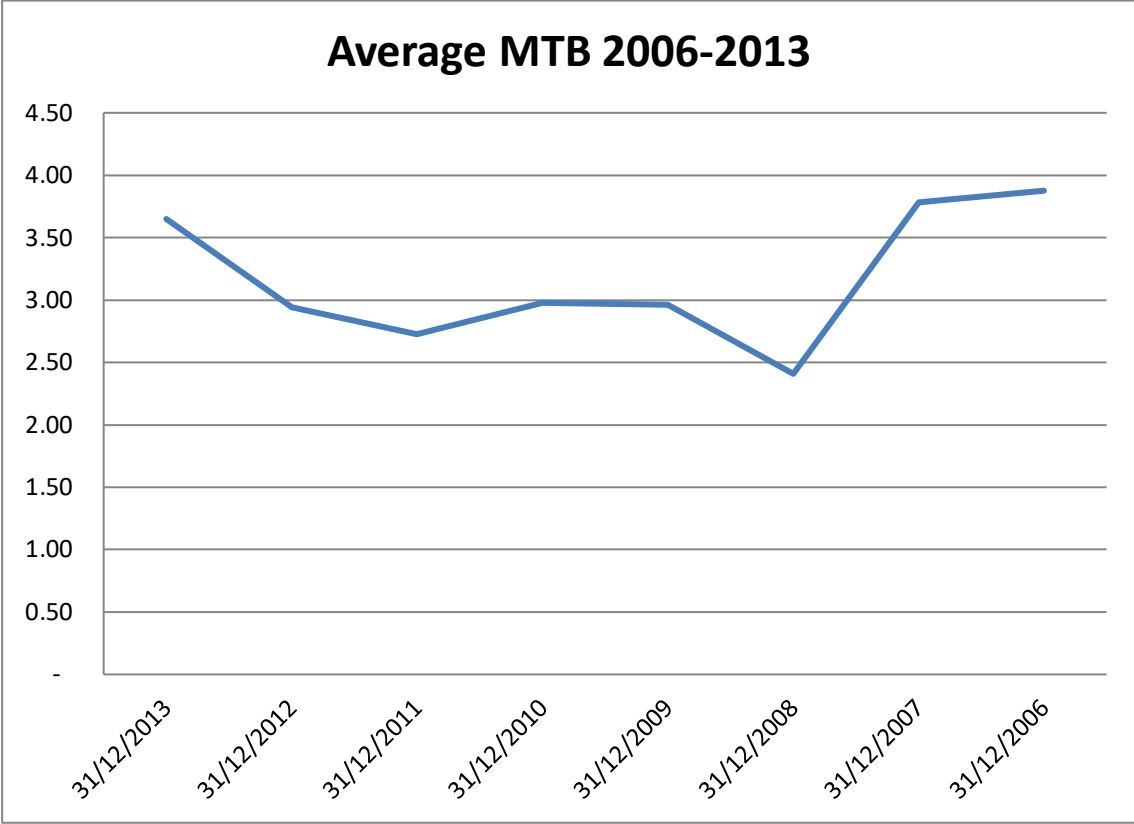


Figure 2: Plot of average MTB ratios for four years prior to CF change and four years post the CF change.

Looking at the one sector of industry which was arguably most impacted by the financial crisis, that of the banks, all of the five banks in the study showed on average lower MTBs (less conservatism) than the general sample of 45 both pre and post the change (2.18 in the four years prior to the CF change versus a sample average of 3.26, falling to a banking average of 0.98 in the four years post the CF change in comparison with a sample average of 3.07). This suggests that banks have become markedly less conservative over time, although again, this could be more attributable to changed valuations of banks by the market which has depressed their share values, than actual reporting changes. Clearly, given the perceived risk-taking behaviour of the banking sector in general prior to the crisis, this may well represent a re-adjustment of market to book values, especially given the financial restructuring which took place in several banks post the crisis period.

One interesting observation from the data is that the standard deviations of the average MTBs over the same time scales also suggests much less variability of MTB post the CF change as shown in table 1. This suggests that whilst the market has undergone an adjustment to market values, the reduced variability between market and book values indicates more consensus and acceptance of the value of the underlying assets relative to potential gains and losses.

Table 1: Standard deviations of Market-to-book ratios

	4 years pre-change (2006-2009)	4 years post change (2010- 2013)
Standard deviation	2.79	2.39

4.2 Basu model

The second model used was the most popular conservatism proxy in the literature (Wang 2009), that of the Basu (Basu 1997). Two models, the original Basu model (Model 1 below) and a revised model to take account of the removal of prudence from the Conceptual Framework were estimated (Model 2 below).

$$\text{Model 1: } \frac{EPS_{it}}{P_{it}} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} DR_{it} + \varepsilon_{it}$$

$$\text{Model 2: } \frac{EPS_{it}}{P_{it}} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} DR_{it} + \gamma_0 CF_{it} + \gamma_1 CF_{it} * DR_{it} + \gamma_2 CF_{it} * R_{it} + \gamma_3 CF_{it} * R_{it} * DR_{it} + \varepsilon_{it}$$

where:

EPS_{it} : Earnings per share for firm i year t

P_{it}: Opening stock market price for firm i year t

R_{it}: Stock markets return for firm i year t

DR_{it}: Dummy variable that is equal to 1 if the stock market return for firm i in year t is negative, and equal to 0 if the stock market return for firm i in year t is non- negative.

CF_{it} Dummy variable that is equal to 1 if the period was post the change in the CF and 0 otherwise.

As a first step, Basu's (Basu 1997) model is reproduced using the FTSE100 dataset. This model regresses earnings, as expressed by deflating earnings per share by price, on total stock returns. These regressions are run for 'good news years', where stock returns are positive, and 'bad news years' where stock returns are negative. This is modelled using a dummy variable, DR, which is 0 in a 'bad news year', and 1 in a 'good news year'. By using the β_0 slope coefficient as 'good news' and the $\beta_0 + \beta_1$ slope coefficients as 'bad news', therefore β_1 represents the Basu asymmetric timeliness coefficient, which equates to a measure of conservatism in the sample, or how quickly good news is reflected in

earnings compared with bad news. This model sets the base line of the study for all 360 firm years.

In order to evaluate the effect of the removal of the concept of prudence from the Conceptual Framework, model 2 is estimated. This uses the Basu (Basu 1997) model as its base, but after Lobo and Zhou (Lobo, Zhou 2006), it introduces the coefficient γ_2 , which with β_0 , measures how quickly earnings reflect good news after the CF change compared with β_0 alone which measures it in the period prior to the CF change. If this change has affected companies' reporting behaviour by encouraging them to be less conservative and recognising good news in their earnings figures earlier, we would expect γ_2 to be greater than 0. If the change to the CF has encouraged companies to reflect bad news less quickly (i.e. be less prudent) in their accounting figures, the measure of conservatism of β_1 prior to the CF change should be greater than post the change, which is represented by $\beta_1 + \gamma_3$, such that γ_3 should be less than 0.

As with the MTB model, further iterations of the test were also carried out. These are summarised in table 2 below:

Table 2: Basu model variants tested

	Model 2a	Model 2b	Model 2c	Model 2d
Years prior to CF change	2006-2009	2006-2009	2006, 2007, 2009 only	2006, 2007, 2009 only
Years post the CF change	2010-2013	2011-2013	2010-2013	2011, 2012, 2013 only

The results of the regressions are in table 3.

Table 3: Comparisons of Basu's model of conservatism pre and post change to the Conceptual Framework

<u>Variable</u>	<u>Model 1</u>	<u>Model 2a</u>	<u>Model 2b</u>	<u>Model 2c</u>	<u>Model 2d</u>
	Basu basic	Revised	Revised	Revised	Revised
	<u>4+4</u>	<u>4+4</u>	<u>4+3</u>	<u>3+4</u>	<u>3+3</u>
Intercept	0.072	0.076	0.076	0.078	0.078
	(7.796)**	(5.688)**	(5.433)**	(6.843)**	(6.574)**
DR	0.009	0.005	0.005	-0.005	-0.005
	(0.552)	(0.218)	(0.211)	(-0.200)	(-0.190)
R	0.025	0.055	0.055	0.053	0.054
	(1.355)	(2.255)	(2.159)	(2.633)**	(2.536)
R*DR	0.165	0.137	0.137	0.004	0.004
	(3.199)**	(2.236)	(2.136)	(0.037)	(0.035)
CF		-0.002	-0.004	-0.003	-0.006
		(-0.091)	(-0.196)	(-0.203)	(-0.320)
CF*DR		0	0.007	0.011	0.017
		(0.009)	(0.172)	(0.325)	(0.471)
CF*R		-0.081	-0.104	-0.08	-0.102
		(-2.151)	(-2.287)	(-2.552)	(-2.743)**
CF*R*DR		0.07	0.102	0.204	0.236
		(0.548)	(0.711)	(1.525)	(1.623)
Adjusted R ²	7.10%	10.40%	11.20%	5.90%	7.30%
N	360	360	315	315	270

t statistics are in

Parentheses

** indicates significance at $p < 0.01$

In model 1, the β_0 slope coefficient is small and not significant in this sample, whilst the $\beta_0 + \beta_1$ coefficients are positive and significant. This suggests that earnings are significantly more sensitive to negative returns as positive returns in this sample of 360 firm years over this eight year time period. This finding is agreement with Basu (2007). The explanatory power of the model is not particularly strong; although the p-value statistical hypothesis test is less than 0.05 and therefore this combination of independent variables can predict the outcome of the dependent variable, this explanatory power is only 7.10%.

Model 2a estimates the effect of the change in the Conceptual Framework which excluded the concept of prudence with effect from September 2010. Under model 2a, CF denotes the change period, with the assumption that accounts with a December 31 year end in the four years prior to 2010, that is 2006, 2007, 2008 and 2009 are prepared under 'prudent' conditions, whilst accounts with a year end from December 31 2010, up to 2013 (at date of writing) are prepared under conditions where prudence was no longer a recognised concept. In this case, we can see that γ_2 is actually slightly negative, albeit not significantly, which would suggest that earnings are slightly less sensitive to good news in the period following the CF change. For γ_3 , the coefficient on CF*R*DR, the result is also negative, although not to a significant level. This would indicate that companies are slightly more conservative post the CF change compared with in prior years, which is in contrast to the MTB findings.

With an adjusted R^2 of 10.40%, the CF change does not appear to provide more explanatory evidence to the impacts of conservatism in this sample. Clearly, behavioural change takes time (and the author would certainly advocate a longer time frame to be considered in future studies), and it may be quite unlikely that companies preparing accounts to December 31 2010 would have reflected all significant accounting changes in the intervening period between September and December 2010. For that reason, model 2 was re-estimated, using years 2006-2009 inclusive as the period pre-CF change, and

only 2011, 2012 and 2013 as the three years post-CF change, giving a total of 315 firm years and this is summarised by model 2b.

The results for model 2b do provide a slightly higher adjusted R^2 at 11.2%. This would suggest that the impact of the change year has had some (relatively minor) impact, but that there are other events which have occurred during this time period which may have created further 'noise'.

The most precipitous event during the 2006-2013 period was the global financial crisis, which significantly impacted earnings and stock returns worldwide, in particular in 2008. Therefore model 2c attempts to evaluate the possible effect of this 'noise', by removing the 2008 figures from the pre-CF change period, such that this is now represented by 2006, 2007 and 2009 years only. In model 2c, the post-CF change period includes the years 2010-2013 inclusive.

Regarding the results of model 2c, the score and significance of β_1 falls such that earnings are now much less sensitive to negative returns than positive ones. γ_2 is negative whilst γ_3 is positive (neither to a significant level). If γ_2 were greater than zero, this would indicate less conservatism, but this finding would indicate that firm earnings are now less sensitive to good news post the CF change than in prior years (γ_2) (although this is not at a significant level) and that firms were more conservative in reporting in the years prior to the CF change. This is also reflected in the negative γ_3 , which indicates that bad news is being reflected more quickly in earnings, which again suggests an increase in conservatism post the changes.

The results do not change significantly when the transitional year of 2010 is removed from the post-CF change period, which is reflected in model 2d. In this case, three years pre-CF change and three years post-CF change are included, giving a sample size of 270

firm years. This suggests that 2010 itself was not a pivotal year of change in accounting reporting behaviour.

5. DISCUSSION AND CONCLUSION

Taking the two most accepted measures of conservatism, the MTB and Basu's AT (Basu 1997) and analysing them in the period prior to and after the removal of the concept of prudence from the IASB Conceptual Framework, this study has found that there has been an apparent conflicting picture in the level of conservatism demonstrated by the sample firms in the eight year time study, with the MTB method showing a fall in conservatism and the asymmetrical timeliness measure finding an increase in conservatism. The results do not change when removing the year of implementation of the Conceptual Framework 2010 and the peak year of the financial crisis, 2008. This finding is perhaps surprising given previous studies which have found conservatism to be generally increasing over time (Basu 1997, Givoly, Hayn 2000), although the findings are in line with Roychowdhury and Watts (2007) which found a negative relationship between the two measures, albeit that this was on a short run basis. Interestingly, an earlier version of this paper took the same sample firms over a shorter time frame (three years pre the change and three years post) and both MTB and the Basu model resulted in decreased conservatism. The addition of two extra years at the beginning and end of the study period appear to have mitigated the effects of large falls in earnings reported during the 2008 financial crisis which then corrected in the shorter study period hence showing an apparent fall in conservatism. Firms will have perhaps taken the opportunity of a general bad news event to 'clear their decks' of any stored up bad news and reviewed policies to address the changing economic realities. The financial crisis will have resulted in a re-calibration of firm values and growth perceptions, and a renewed focus on the timeliness and evidence required to recognise gains and losses in the accounting books, and therefore it is perhaps not surprising that the Basu model will see an increase in conservatism.

This study is not suggesting that the apparent decrease in unconditional conservatism (as evaluated by the MTB) is causally related to the decision of the IASB to remove the reference to prudence in the Conceptual Framework 2010. During the time frame of the

study, the UK economy was dramatically affected by the financial crisis of 2007-2009, which had a significant impact on the values of shares as growth prospects were reviewed and numbers of shares (both criteria in the MTB ratio), as some firms would have had to re-evaluate their capital structure as a result of the crisis and the reduced availability of debt financing.

Earnings (a determinant in Basu's model) would also have been impacted by the crisis to the extent that Because of this, further research should be carried out to determine more precisely the impacts of the financial crisis on the policies and practices of firms in the FTSE100 to pinpoint the determinants to this apparent decrease in conservatism.

It remains surprising that after the financial crisis (which one might expect to impact on conservatism) that post-crisis there was not a trend towards increased conservatism. Whilst the crisis may have precipitated some managers to write down assets and include as much bad news as possible during the height of the crisis, since then, it is not unreasonable to expect a return to more conservative practices. Added to this is the fact that practitioners have long been trained and practised conservative accounting practices, so it is unlikely that there would be any rapid change in accounting policies to produce this result.

With the many cited benefits to conservatism (lower agency costs, bank charges, less chance of default, higher share prices and higher profits (although this latter one is open to contention)), it would seem generally good business sense for firms to adopt conservative accounting. Indeed, it is already embedded within accounting standards without it being explicitly mentioned in the Conceptual Framework.

So is prudence a necessary inclusion in the Conceptual Framework? The challenge now is the perception and understanding of the word has changed from the original meaning of 'a moral virtue conducive to honesty and competence in business' (Maltby 2000) to that of having a degree of caution in ensuring assets/gains are not overstated and liabilities/losses are not understated (International Financial Reporting Standards Foundation 2013), but that can be deliberately taken to extremes for personal gain. By insisting that the financial statements must be neutral and unbiased, the IASB is possibly attempting to re-introduce the original intent back into accounting, stating that they have

concern that by keeping prudence in the Conceptual Framework would cause conflict with the need for accounts to be unbiased (International Financial Reporting Standards Foundation 2013). Clearly, the period since the introduction of the Conceptual Framework 2010 introduction is still short, and a more longitudinal study should be carried out to determine whether a clearer picture emerges of the impact of removing prudence from the CF.

The findings in this study should be treated with caution; the sample size was small, sample selection necessarily excluded some industries and the time frame since the change in the Conceptual Framework is short. Although it appears that prudence has decreased since the change, there has been a significant economic event in the same time period, which will have inevitably affected the results. More longitudinal research should be carried out on this issue, using a wider range of conservatism measures not included in this study, to help to determine any other trends. Whilst there may be an apparent decrease in the accounting conservatism in the UK FTSE companies, it may not be

appropriate to extrapolate this finding into a different jurisdiction because of the individual impacts of economies, government and culture.

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