



Accounting Quality Under IFRS During Stressed Volatility: An Examination of UK Banks

Tanuja Dominick Baddevithana¹ and Aleksandar Stojanovic²

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ABSTRACT

This paper examines whether accounting quality is maintained for UK banks that report under the IFRS accounting standards during times of stressed market price volatility. We find that the UK banks' accounting quality, measured from 1992 to 2008 using the relationship between *total shareholders' equity* and *market price*, experienced a significant decrease during the high levels of market price volatility in 2008. This paper contributes to research that examines the IFRS accounting standards and to the examination of accounting quality in banks during periods of stressed volatility. Furthermore, this study concludes by calling for the examination of methods and processes to mitigate risks that impact on accounting quality.

Keywords

accounting quality, value-relevance of accounting data, stressed volatility, IFRS, UK Banks

¹ Department of Accounting and Finance, University of Greenwich Business School

² Corresponding author: Aleksandar Stojanovic, Head of Department of Accounting and Finance, Director Centre for Governance, Risk and Accountability, University of Greenwich Business School, Park Row, Greenwich, London SE10 9LS, e-mail: a.stojanovic@gre.ac.uk, Tel.: +44 20 8331 7991

I Introduction

In 2005, the major UK banks listed on the London Stock Exchange (LSE) were subject to significant change in accounting standards governing preparation and presentation of their consolidated financial statements. The purpose of the 2005 accounting change was to help improve and strengthen the efficient functioning of European capital markets by introducing internationally focused International Financial Reporting Standards (IFRS) regulation. In order to check its effectiveness, we examine the expectation that accounting quality is maintained during levels of stressed market price volatility by testing accounting quality in the UK banking sector during the stressed volatile year 2008.

We test accounting quality in UK banks by examining the relationship between the total shareholders' equity, and market price. If there was an improved accounting quality, we would expect a stronger relationship between market price and total shareholders' equity than otherwise. In the time range of our examination, from 1992 to 2008, we find that accounting quality declined during times of stressed volatility in 2008. This evidence also supports Platikanova and Nobes (2006), Paananen and Lin (2009), and Morais and Curto (2008) findings that suggest accounting quality deteriorated after introduction of IFRS.

This paper expects to contribute to research that examines the IFRS accounting standards, i.e., the effectiveness of the 2005 accounting change. Major changes affecting UK banks related to the fair value treatment, accounting for derivatives and categorization of financial instruments and we would expect that these would improve accounting quality, and that, by implication, that quality would hold during stressed volatility. However, the 2008 observation, which can be described as stressed volatility, points towards the possibility that

the accounting system was unable to capture or properly mark to market all instruments, or that the accounting changes may have contributed to increased volatility through their more immediate impact on investors' sentiment.

In addition, we expect this paper to contribute to the body of knowledge that examines accounting quality in banks during periods of stressed volatility. Furthermore, this study advocates the importance, and the lack thereof, for methods and processes to mitigate risks that impact on accounting quality.

Section II looks at the previous studies that examined related issues and which provide the foundation for our approach and method of investigation. Section III details the variables analysed, the sample examined and the null hypothesis together with the methods of testing. Section IV presents our results. We proceed to present our conclusion and recommend future work in Section V.

II Previous studies

In January 2005, the major UK banks listed on LSE experienced a historically important and significant change in accounting standards (Armstrong, Barth, Jagolinzer, and Riedl 2010). These standards govern the preparation and presentation of consolidated financial statements (IASB 2009). Under a European Commission regulation (EC 2002) this change was applicable to banking firms and other organisations registered with the European Community's regulated capital markets. The purpose of the 2005 accounting change was to help improve and strengthen the efficient functioning of European capital markets (EC 2002,

IASB 2009). With this aim, firms in the UK and throughout Europe changed from regionally developed sets of accounting standards, accepted under the local Generally Accepted Accounting Practice (GAAP), to the International Accounting Standards Boards (IASB) framework's internationally focused IFRS accounting regulations.

Armstrong et al. (2010), Ramanna and Sletten (2009), Beuselinck, Joos, Khurana and Van der Meulen (2010), Horton, Serafeim and Serafeim (2013), Platikanova and Nobes (2006), Paananen and Lin (2009) and Morais and Curto (2008) have examined the 2005 accounting change from differing perspectives.

The study by Armstrong et al. (2010) tested the reaction of firms listed in European stock markets to events that took place prior to, but was related to the 2005 accounting change. The study found evidence that firms' stock market reactions to these accounting change related events corroborated investor sentiments. In that, this change would bring about higher quality of information, and thus a decrease in information asymmetry. These benefits were attributed to the expectation of enhanced information transparency. Armstrong et al. (2010) also found positive sentiments attributed to expected benefits from enhanced information comparability between firms. However, contrary to expectations, the study found evidence that firms domiciled in code-law based countries showed market reactions that evidenced a more resistant view to the accounting change than did firms domiciled in common-law based countries.

Ramanna and Sletten (2009) analysed the sentiment to the accounting change in non-European countries from 2002 to 2007. The study finds evidence that the larger economies are resistant to give up standards-setting authority to a single international body, such as the IASB. The study also found that the benefits gained from the accounting change would first increase and then decrease the levels of influence from domestic governing institutions. The study also states that countries are more likely to make the accounting change if trade partners and geographically regional countries adopt the IASB accounting standards.

Beuselinck et al. (2010) measured information quality for European firms from 2003 to 2007 by examining analyst earnings forecasts for firms that adopted the IASB accounting standards. The study finds a reduction in earnings forecast errors especially after 2006. Further, the study finds the largest improvement in forecasts was exhibited by analysts that examined firms in more than one country. Horton et al. (2013) also measured information quality, however, for firms in 46 countries from 2001 to 2007. The study, same as the Beuselinck et al.'s (2010) examination, measured information quality from analyst earnings forecasts for IASB accounting standards adopters. The study finds a reduction of earnings forecast errors and suggests a greater level of forecast accuracy for mandatory IASB accounting standards adopting firms when compared to voluntary adopters.

The findings from both Beuselinck et al (2010) and Horton et al. (2013) suggest an increase in forecasted earnings accuracy for firms that adopted the IASB accounting standards. However, Beuselinck et al. (2010) find that consensus amongst analysts for a firm's forecasted earnings remained unchanged irrespective of the accounting standard the firm

applied. Horton et al. (2013) report that earnings consensus declined for firms that mandatorily adopted the IASB standards.

The studies conducted by Platikanova and Nobes (2006), Paananen and Lin (2009) and Morais and Curto (2008) concentrated on the reaction of firms listed in European stock markets. The study conducted by Platikanova and Nobes (2006) concentrated on reactions at the firm level during the accounting change, while the studies from Paananen and Lin (2009) and Morais and Curto (2008) concentrated on market reactions before and after the 2005 accounting change.

The study by Platikanova and Nobes (2006) found evidence that firms listed in European stock markets exhibited a decrease in value relevance and an increase in information asymmetry during 2005, the year of the accounting change. They report that during 2005, firms in the UK experienced an exceptional increase in stock market price volatility levels compared to years 2003 and 2004, the increase in volatility levels they attributed to information asymmetry. The study by Paananen and Lin (2009), when concentrating on firms listed in the German stock market, found evidence of a decrease in value relevance during and also after the 2005 change. The study by Morais and Curto (2008) that concentrated on firms listed in the Portuguese stock market, also found evidence of a decrease in value relevance after the 2005 accounting change.

Platikanova and Nobes (2006), Paananen and Lin (2009) and Morais and Curto (2008) reveal that contrary to the European Community and IASB expectations, samples of firms in Europe

that adopted the new standards in 2005, soon after exhibited increased levels of market price volatility. In addition, their findings reveal that the adopting firms examined exhibit evidence of decreased accounting data value relevance resulting in lower accounting quality.

Based on the evidence produced from studies that analysed firms in the European stock markets, it is difficult to determine if the European Commission's objectives have been met during the 2005 IASB accounting standards implementation phase. The principal objectives of the Commission were to enhance both transparency and comparability of accounting information.

It may be contended that there was little doubt regarding the high level of expectation for the 2005 accounting standards to meet the principal objectives. Referred to earlier, this importance is reflected by Armstrong et al. (2010) who consider the 2005 accounting change to be one of the most significant accounting changes in recent years. The significance attached to the 2005 event may remain for some years, with considerable research and debate directed at the planned transparency and comparability aims for the accounting standards' convergence on a global level and its implied improvement to accounting quality.

Turning our attention to specifying the measure of accounting quality, it is determined by Barth, Landsman and Lang (2008), Morais and Curto (2008), Paananen and Lin (2009) and Liu, C, Yao, Hu and Liu, L (2011) to be a function of value relevance, and earnings quality. Where, earnings quality is specified by the level of earnings management and loss recognition. They determine that an improvement in accounting quality is attributed to an

increase in value relevance, decrease in earnings management, or a reduction in the time taken for losses to be recognised. Although the general approach in determining improved accounting quality shows evidence that it relies upon quantifying both value relevance and earnings quality, Platikanova and Nobes (2006) specifies this improved quality to be predominantly a function of an increase in value relevance.

It may be argued that it is difficult to quantify accounting quality. This may be considered a valid assertion as the current banking risk management, regulatory and accounting standards frameworks do not specifically detail the measurement and management of this important information quality.

In this paper we take the value relevant view in quantifying the quality of accounting information. With the expectation that market prices follow, at a minimum, the semi-strong form of the efficient market model (Fama 1965, 1970), we measure accounting quality from the basis of market price and total shareholders' equity. In doing so, we expect improved accounting quality to exhibit a stronger relationship between market price and total shareholders' equity than otherwise.

Comparing shareholder equity and market price to assess accounting quality, as per our approach, is akin to examination of the book-to-market ratio (BM) used for identifying how well it can measure a firm's risk and return. The book-to-market ratio has been extensively treated in the work of Banz (1981), Bhandari (1988), and Fama and French (1992, 1993, 2008). The attention given to the book-to-market ratio is justifiable as it combines the accounting measure of a firm's value, the book value, to its financial market's measure of

value, the market value. Fama and French (1992, 1993) evaluated that the BM measure provided a more accurate measure of portfolio returns for a single time period than the capital asset pricing model (CAPM) beta measure. Fama and French (1992, 1993, 2008) termed stocks with high BM as value stocks, and stocks with low BM as growth stocks. Empirically they evaluated that the measure of a stock's BM is a direct reflection of its level of financial risk. They evaluated that value stocks with a high BM would be in financial distress and exhibit lower earnings, that is a lower net income accounting total, and thus exhibit a greater level of financial distress risk when compared to low BM growth stocks.

Studies conducted by Fama and French (1992, 2008), Rosenberg, Reid, and Lanstein (1985), Lakonishok, Shleifer, and Vishny (1994) found evidence that the high-risk high BM value stocks had higher average returns compared to low BM growth stocks. The increase in returns may be explained as the expected investor compensation for carrying high-risk high BM value stocks. Even though Fama and French (1992, 1993) evaluated the BM to be a better measure for a firm's expected return compared to the CAPM beta, Vuolteenaho (2002) and Fama and French (2008) recognised that the BM is a *noisy* measure of expected returns for portfolios of stocks.

This study extends the essence of BM by focusing on the shareholders' equity, as a difference between the total assets and total liabilities, and market price. Comparison of accounting measure of shareholder equity and market measure of market price, as motivated by these studies, forms a basis for our approach and methodology described in section III. Next, we focus on the motivations and background analysis for this study.

II Motivation

In 2005, five large banking institutions³ registered in LSE's UK banking sector changed their financial reporting from the UK GAAP to IASB accounting standards. The purpose of the 2005 accounting change was to help improve and strengthen the efficient functioning of European capital markets (EC 2002, IASB 2009). Contrary to the expectations of the processes and frameworks implemented by accounting and regulatory bodies to improve the financial system (EC 2002, IASB 2009) a deficiency is noted to have arisen. This deficiency is the earlier mentioned deterioration in the quality of accounting information during the 2005 accounting standards adoption event (Platikanova and Nobes 2006, Paananen and Lin 2009, Morais and Curto 2008). This deficiency is observed to have remained for the subsequent years after 2005 (Paananen and Lin 2009).

The importance of improved accounting quality for the stability of the financial system is asserted by Merton and Bodie (1996), the CFA Institute (1997), Walton and Aerts (2006), Cheney (2008) and reported by Leone (2008). In addition, given the Platikanova and Nobes (2006), Paananen and Lin (2009), and Morais and Curto (2008) evidence that accounting quality deteriorated after the 2005 accounting change may be argued to support efforts to examine the UK banks reaction during this important accounting standards change.

A useful starting point in our investigation is to look at the level of volatility of the UK banks' prices to establish if it increased after the introduction of new accounting standards. This cannot confirm causality but provides a motivation for further investigation.

³ HSBC Holdings PLC, Barclays PLC, RBS Group PLC, Lloyds Banking Group PLC, Standard Chartered PLC - the population of LSE UK Industry Sector: Banks, i.e. UK Banks.

Furthermore, it can be argued that if the accounting standards influence how banks report and manage their positions, i.e. risk and return on their investments, that can impact on the levels and volatility of their share prices. Therefore, it would be useful to identify the measure of accounting quality in order to find a test of the functioning of the accounting standards during periods of increased levels of market volatility and investigate how effectively accounting information maintained its quality during this volatility.

The market volatility and related financial risk can be observed by looking at the market price returns and Value-at-Risk levels in the five large banks which constitute the banking population i.e. LSE listed banks. Therefore, in order to examine the volatility exhibited by the UK banks during and after the 2005 accounting change, we plot the stock market price returns from 2004 to 2009 for the banks in the UK banking sector, Figure 1. We observe that the level of market price return volatility increases and Value-at-Risk levels become breached during March and May 2006 and during March 2007. There are also increasing volatility levels and significant Value-at-Risk breaches near the start of July 2008 and then continuing into the first half of 2009.

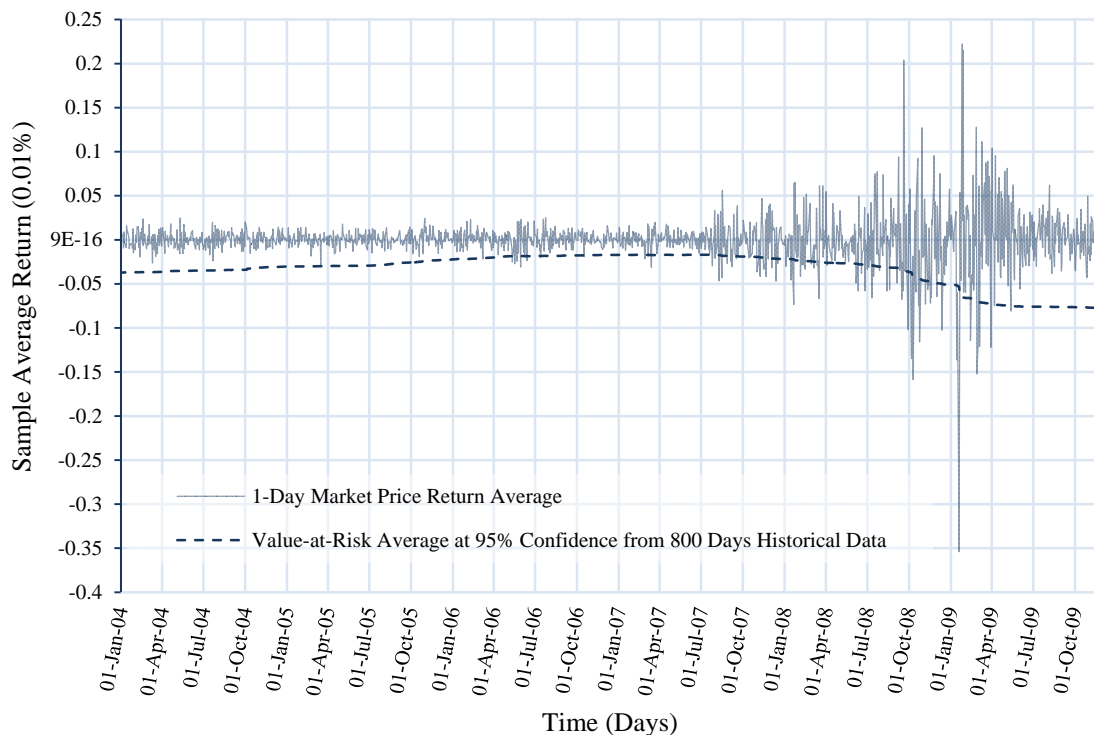


Figure 1. 1-Day Market Price Return and 1-Day Value-at-Risk for UK Banks from 2004 to 2009

Plot of the 1-day market price returns average for the banks in the LSE's UK banking sector (solid line). Plot of the 1-day Value-at-Risk at the 95% confidence level (dashed line), from January 2004 to November 2009, using Monte Carlo Simulation Value-at-Risk modelled from 800 1-day historical market price returns with 1 million simulations.

Figure 1 illustrates that the banks experienced market price return volatility during the 2005 to 2009 period, but that there was volatility before 2005. However, the volatility levels were more significant after 2005. Examining Figure 1, to inform the firm-wide risk management and banking regulatory frameworks, it would be difficult to argue against focusing the attention to a significant gradual increase in volatility levels after March 2006. This coincides with the period of the first annual reports under the new IFRS accounting standard, approximately a year after their introduction. Value at Risk⁴ shows similar trend and illustrates increase in financial risk in the post 2005 period.

⁴ The Value-at-Risk measure for a financial instrument computed with the Monte Carlo simulation model is detailed by JPMorgan and Reuters (1996) and Dowd (2003). This model applies a future market price return

It is difficult to interpret the specific role accounting played in the observed UK banks' volatility shown in Figure 1. Accounting's normal role is expected to report the increase in volatility levels exhibited during 2008. Therefore, we need to look at the deviations from this role. If the level of deviation is significant, i.e., if the quality of accounting information decreases, then the level of investor uncertainty would increase with the resulting financial market volatility.

From this basis, several explanations may be considered for the cause of the significant levels of volatility exhibited after 2005. Firstly, especially before the second half of 2008, this may be due to normal capital market activity and has no connection with the 2005 accounting change. Secondly, it could be that the accounting change provided a more transparent view of the bank's accounting figures with subsequent investor reactions creating the observed volatility. Thirdly, the accounting process applied after 2005 may have presented information, which, compared to other available information, is found to be unexpected or biased. It is also possible that there may be interrelated combination of the three explanations.

In this paper, we narrow our focus on the quality of accounting information during levels of stressed or compressed market price volatility (Basel 2011), observed during 2008. We expect such an examination to provide for a robust test of the accounting standards during periods of increased levels of market volatility. In that, this paper aims to provide an

distribution that is constructed using a simulation model. This simulation process considers that a probability distribution for future price movements can be generated by simulating *near-random* stochastic market prices or market price returns.

examination of how effectively accounting information maintained its quality during this volatility.

III Data and Methodology

The variables that we test to evaluate accounting quality are the *market price* variable and the accounting *total shareholders' equity* variable. To formally introduce the measure of total shareholders' equity, we examine the accounting equation presented in equation (1),

$$\text{Total Shareholders' Equity} = \text{Total Assets} - \text{Total Liabilities} \quad (1)$$

Total shareholders' equity, total assets and total liabilities are reported in the principal financial statement, the balance sheet. From the accounting equation, the balance sheet reports the total shareholders' equity to be the difference between the measurement of asset items and the measurement of liability items. The IASB (2011) specifies the *total shareholders' equity amount* as a balance sheet element that is the residual interest in assets after the deduction of all liabilities⁵.

The market price data is from Datastream and the total shareholders' equity data is from the Thomson Reuters World Source database. For each bank the variable data is collected on a

⁵ The IASB (2011) sub classifies the total shareholders' equity amount to include an equity reserve item termed retained earnings. The retained earnings figure includes amounts that have been credited from tax liabilities and amounts reserved under regulatory ordinance and legal ordinance. The amount reserved under regulatory ordinance is a key measure in the Basel (2011) regulatory standards where it forms a part of what is termed the *regulatory capital*.

yearly basis from 1992 to 2008. For each of these years the market price variable represents the market price on, or the business day before, the 31st December. This same record date applies to the total shareholders' equity. The banks we examine are presented in Table I.

Table I
Banking Institutions Listed in the London Stock Exchange (LSE)

The table shows the banks listed in the LSE's Industry Sector: *Banks*, as at March 2010. The Bank Name column presents the banks name. The ISIN (International Securities Identification Number) column and the LSE Symbol column present unique identifiers for the respective bank presented in the Bank Name column.

Bank Name	ISIN	LSE Symbol
HSBC HOLDINGS PLC	GB0005405286	HSBA
BARCLAYS PLC	GB0031348658	BARC
ROYAL BANK OF SCOTLAND GROUP PLC (THE)	GB0007547838	RBS
LLOYDS BANKING GROUP PLC	GB0008706128	LLOY
STANDARD CHARTERED PLC	GB0004082847	STAN

The LSE categorises the five banks presented in Table I in the Financial Times Stock Exchange (FTSE) 100 Index within the Industry sector: *Banks*. The question may arise as to the credibility of results produced from a population comprising five banks. However, it may be argued from the Berkowitz and O'Brien (2002) sample of six banks, examined over a time period that is less than applied in this study, that it is possible to produce credible and robust results based on such a refined sample size, especially since this sample is our population of interest.

Our null hypothesis is that during times of stressed volatility, the relationship between the total shareholders' equity variable and the market price variable remain unchanged. The

alternative hypothesis is that during times of stressed volatility the relationship between the total shareholder's equity variable and market price variable does not hold.

There is an uncomplicated way to test the null hypothesis. This is to examine the time series regression slope from the market price on the total shareholders' equity variable,

$$M_t = a + bE_t + e_t \quad (2)$$

Where, M_t is the sample average market price at time t ; E_t is the sample average total shareholders' equity at time t ; and t is the time index.

We examine the time series regression in (2) for 11 rolling time ranges. The first time series tests from 1992 to 1998. The subsequent time series test from 1992 to progressive years, incrementing on a yearly basis. The final time series range tests from 1992 to 2008. In addition, to support our regression analysis we also plot the market price and the total shareholders' equity variables on a yearly basis from 1992 to 2008.

IV Results

The results for the sample of banks in the LSE UK banking sector from regression and chart analysis are presented in Table II and Figure 2 respectively. Table II presents the results for the time-series regression analysis that tests the yearly sample average total shareholders' equity and the yearly sample average market price for a series of 11 regressions, as per the equation (2). These regressions are estimated using overlapping time ranges from 1992 to 1998 and increasing on a yearly basis to 1992 to 2008. Figure 2 plots the sample average total

shareholders' equity and sample average market price using a dual axis graph. The variables are plotted on a yearly basis from 1992 to 2008.

Table II
Time Series Regression Analysis of Market Price (M_t) and Total Shareholders' Equity (E_t) for the UK Banking Sector for Selected Time Ranges From 1992 to 2008

The table columns present the following: The Time Range column presents the *from* and *to* time ranges applied in the time series regression, with the 31st December selected as the variable record date. The Slope column presents for the respective time series regressions the slope coefficient b and the t -statistic, $t(b)$. The R^2 column presents the Coefficient of Determination for the series of regression models. The T column presents the number of years in the time series regression; the *Obs. (T x N)* column presents the number of pooled observations, where N is the number of sample firm observations.

Time Range	Slope		R^2	T	<i>Obs.</i> ($T \times N$) ^b
1992 to	b^a	$t(b)$			
1998	0.057*	3.28	0.68	7	32
1999	0.07**	4.29	0.75	8	37
2000	0.043**	4.35	0.73	9	42
2001	0.034**	4.54	0.72	10	47
2002	0.028**	3.99	0.64	11	52
2003	0.025**	4.27	0.65	12	57
2004	0.023***	4.69	0.67	13	62
2005	0.022***	5.38	0.71	14	67
2006	0.022***	6.38	0.76	15	72
2007	0.02***	6.44	0.75	16	77
2008	0.013**	3.37	0.43	17	82

^a *, **, *** Significant at the .05, .01 and .001 levels respectively

^b For the years 1992, 1993 and 1994 the sample tested consisted of four banking firms, for subsequent years thereafter the sample consisted of five banking firms. This paper considers this effect not to impact on its results significantly.

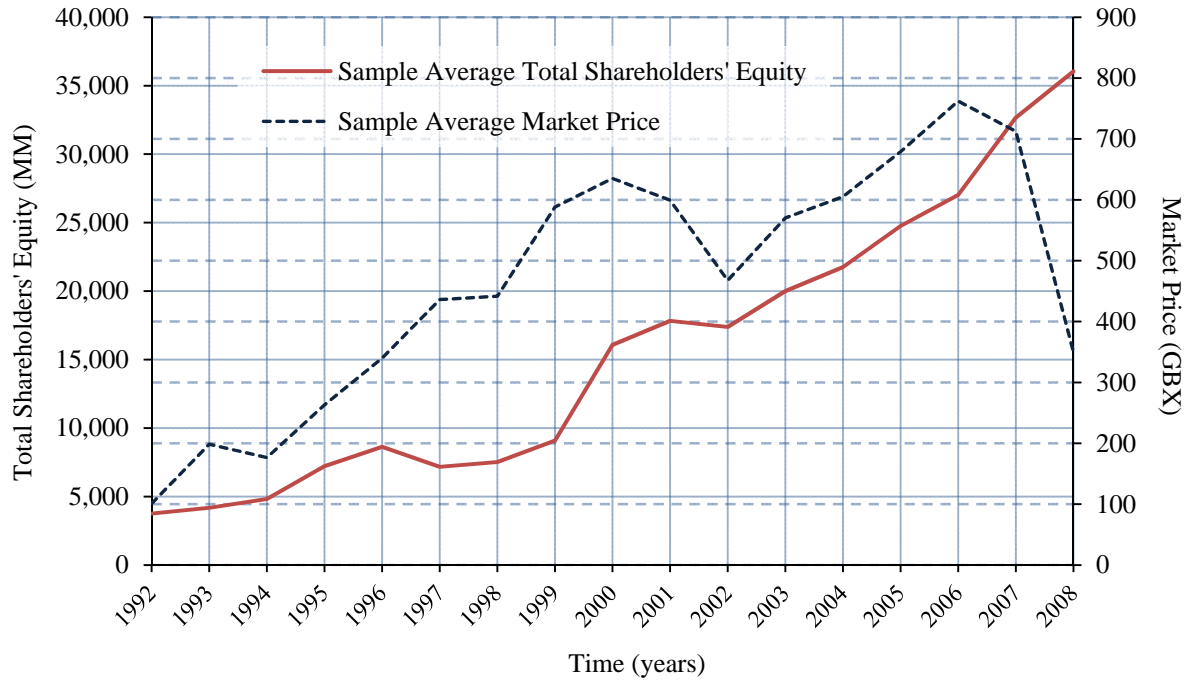


Figure 2 Yearly Total Shareholders' Equity and Market Price for UK Banks from 1992 to 2008

Plot of the total shareholders' equity average for the banks in the LSE's UK banking sector is charted using the solid line. The average total shareholders' equity levels are presented on the left-hand-side axis and scaled using 1 million GBP represented by MM. Plot of the market price average for the banks in the LSE's UK banking sector is charted using the dashed line. The average market price levels are presented on the right-hand-side axis and scaled using GBP pence sterling represented by GBX. Both plots are from 1992 to 2008 on a yearly basis. This yearly time scale is presented on the x-axis and represented by the time unit years.

Examining the Table II results, from 1992 to 2007, between 64% and 76% ($R^2 = 0.64$ and 0.76) of variability in average market price is explained by total shareholders' equity. However, this explanatory power reduced in 2008 to 43% ($R^2 = 0.43$).

Examining from 1992 to 2007 the Table II slopes show that a 100% increase in total shareholders' equity increases market price in the range 2% to 7% ($b = 0.02$ and 0.07). In 2008 the slope shows that a 100% increase in total shareholders' equity increases market price by 1.3% ($b = 0.013$) in 2008.

Examining the variables graphed in Figure 2 show a similar pattern to the regression results presented in Table II. The graph shows that from 2007 total shareholders' equity increased, while the market price exhibits an opposite trend and decreased. This trend continues on to 2008 with a marginal increase in total shareholders' equity and a materially significant decrease in market price.

V Conclusions

We examine the expectation that accounting quality is maintained during levels of stressed market price volatility. We do so by testing accounting quality in the UK banking sector during the stressed volatile 2008 period. This examination is made more important due to application of the IFRS accounting standards by UK banks during this time period. Studies that have empirically examined the 2005 IFRS adoption event found that firms in Europe experienced deterioration in accounting quality during and after the adoption.

We test accounting quality in UK banks by examining the relationship between the total shareholders' equity, and market price. In the time range of our examination (from 1992 to 2008) we find that accounting quality declined in 2008.

Our results show a significant difference in the relationship, i.e. much flatter slope, between total shareholders' equity and market price in 2008 compared to 2007, implying reduction in accounting quality in UK banks under stressed volatility. Furthermore, if we examine the explanatory power from the regressions, in 2007 about two thirds (64%) of variability in average market price is explained by total shareholders' equity. This explanatory power is reduced in 2008 to less than a half of the variability i.e. 43%. In examining both the slope and model strengths we would have ideally expected the parameter levels to remain at similar levels during times of stressed volatility than otherwise.

The Figure 2 results corroborate these findings by indicating a significant deterioration in accounting quality in 2008. Surprisingly, Figure 2 indicates that for the period of observation, accounting quality began to decline in 2007.

From the results presented, it may be contended that examination of the banking sector during the 2008 financial crisis would bring into question the results reported in this study. However, it may be a reasonable expectation that accounting quality is maintained at times of both non-stressed and stressed volatility. Our null hypothesis expects accounting quality to hold during periods of stressed volatility. Our findings especially from the plots presented in Figure 2 indicate that *total shareholders' equity* accounting quality deteriorated significantly for UK banks in 2008, the time of high or stressed levels of volatility. Such a finding provides evidence that weakens the null hypothesis and strengthens the alternative hypothesis. In that, accounting quality did not hold, and deteriorated during times of stressed volatility. Further, this evidence infer support for the Platikanova and Nobes (2006),

Paananen and Lin (2009), and Morais and Curto (2008) findings that suggest accounting quality deteriorated after 2005.

We would expect that the adoption of IFRS by banks, and especially changes in accounting for derivatives and emphasis on fair value, would have the effect of increasing accounting quality. Increased accounting quality would, therefore, be expected to hold during stressed volatility. If we take the view that the values were perhaps marked to model rather than marked to market, or arguably that the accounting system had not captured some instruments, then we could expect less reliable information and, therefore, lower quality. This requires further investigation from the banks' risk management and regulators' point of view.

From our findings we expect this paper to contribute to literature that analyses the important 2005 accounting change. We extend the studies that focus on the IFRS change by concentrating on the reaction of the UK Banking sector. This research complements other European and globally focused studies looking at the impact of IFRS change, and also provides new insights into value relevant accounting quality reactions to year 2008, during the global banking and financial crisis. Our aim was to provide insights into the reactions and robustness of the IFRS standards, to stressed volatility especially in the UK banking sector.

In addition, we expect that this paper will contribute to the further examination of accounting quality in banks during periods of stressed volatility. Furthermore, an important question that may arise from this and similar research is what methods and processes are available for bank

supervisors, accounting standards setters and risk management regulators to recognise, measure, monitor and act to mitigate risks that impact on accounting quality.

This study aims to contribute to the debate regarding accounting quality and its treatment within the banking industry, accounting framework and practice, and risk regulatory context. This paper emphasizes the importance of the measure and management of accounting quality and makes a call for its implementation details, which is beyond its scope and can be subject of further studies.

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