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ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | REVIEW ARTICLE

Value relevance and changes in accounting standards: A review of the IFRS adoption literature

Japhet Imhanzenobe^{1*}

Abstract: Share prices reflect available financial information about those firms and a substantial amount of these information come from financial statement figures. The informativeness of the reported earnings and book values in financial statements depend on accounting standards that govern their preparation, thus accounting standards could influence the informativeness of financial statement figures as well as the degree to which investors consider these figures in making investment decision. This relevance of accounting figures to investors is referred to in existing literature as value relevance. This study investigated the relationship between value relevance and the adoption of International Financial Reporting Standards (IFRS). Most pioneer studies on value relevance and changes in accounting standards discovered a decline in the value relevance of financial statements in the US while most of the reviewed studies that address IFRS specifically discovered an increase in value relevance in the respective markets after adoption of IFRS. A few studies also reported a lack in improvement of value relevance following IFRS adoption but attributed the results to anomalies like government interference, mock compliance, improper enforcement, firm-specific



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PUBLIC INTEREST STATEMENT

IFRS is a new set of accounting standards that strives to improve the readability and understandability of financial statements across the globe. IFRS encourages increase in disclosure of financial information and the fair value recognition of financial statement items. This has caused IFRS-based accounting figures to be more correlated with stock prices. The increase in correlation is because firms' stock prices reflect all available information about such firms, and a substantial amount of these information come from financial statements. Where financial statements hold more information, accounting figures will be more correlated with stock prices since there will be more information for investors to anticipate. Thus, IFRS adoption causes financial statements to be more 'value relevant'. Most of the reviewed studies discovered an increase in value relevance after IFRS adoption. Thus, the study recommended the adoption of IFRS standards as a factor that can improve the value relevance of financial statements.

differences and business changes that are outside the scope of financial reporting. The study recommended the adoption of IFRS standards as a possible factor that can improve value relevance.

Subjects: Corporate Finance; Business, Management and Accounting; Accounting

Keywords: Value relevance; transparency; accounting standards; IFRS adoption; adaptive market hypothesis

1. Introduction

Stock markets create an avenue for participants to source for capital and diversify risk. Thus, the efficiency and liquidity of stock markets are critical indicators of the development of any economy (Brown, 2011). In an efficient market, stock prices are a true reflection of companies' performance (Bohl et al., 2020). The truthfulness of the reported performance and position of a company is dependent on accounting standards. The earnings and book value figures provide a summary of the available financial information on a company (Okafor, Anderson & Warsame, 2016). These figures are disclosed in financial statements and are subject to the accounting standards used in preparing them. In existing literature, "value relevance" is a term that has been used to refer to this effect. Value relevance is the extent to which changes in accounting figures explain the changes in stock prices (Brown et al., 1999; Outa et al., 2017).

The International Financial Reporting Standard is a new set of global accounting standards that have been preached and adopted by several countries across the globe (IFRS Foundation, 2019). Differences in accounting standards like IFRS ought to reflect stock prices, and thus influence investors' decisions. Where accounting standards improve the quality and transparency of financial reports, accounting figures are closer to reality and more relevant to investors as more information is included in the stock prices (Dasgupta et al., 2010; Hameed & Ashraf, 2009).

The adaptive market hypothesis suggests that changes in stock prices are predictable and that stock market performance can be explained by the evolution of investors' behavior and institutional policies (Lo, 2004; Trung & Quang, 2019). The evolution of accounting standards is one of such evolutions in institutional policies that could affect the importance that investors place on accounting figures (value relevance), and this affects stock prices. The aim of this study is to systematically review some existing empirical studies on value relevance and changes in accounting standards (particularly IFRS adoption) and discuss some of the empirical studies that have addressed the above research gap.

The study includes a literature review section talking about the concepts, a theoretical and empirical review, a summary and discussion section which summarizes the findings from the empirical review, and a conclusion and policy implication section.

2. Literature review

2.1. Conceptual review

The major concepts to be reviewed are the value relevance of financial statements, the accounting standards used in the preparation of financial statements, and the International Financial Reporting Standards as a new set of accounting standards and the main focus of this study.

2.1.1. Value relevance

Value relevance is a term that has been commonly used to refer to the extent to which investors consider accounting figures in financial statements in making equity investment decisions. It is the extent to which changes in accounting figures explain the changes in stock prices (Brown et al., 1999; Outa et al., 2017). Most existing literature have measured value relevance using the

coefficient of determination of the regression model of market value of equity against earnings and book values (Brown et al., 1999; Collins et al., 1997; Ely & Waymire, 1999; Francis & Schipper, 1999; Lev & Zarowin, 1999; Nwaeze, 1998). In this study, value relevance can be described as the degree of association between financial statement items and stock prices. It is the extent to which cash and accrual performance measures (often found in financial statements) are reflected in the market-based performance measures (often captured in changes in stock prices).

The market value of equity comprises two parts; the present value of future dividend and the risk premium (Lee, 1995). Dividends and risk are functions of earnings and leverage, respectively, and these items are captured in the earnings and book value figures in the financial statements. The presented figures for earnings and book values (as well as other items in financial statements) are dependent on the accounting standards used in the preparation of the financial reports.

2.1.2. Accounting standards

Accounting standards are the set of rules that govern the recognition, presentation, and disclosure of the different kinds of accounting transactions (Benston et al., 2006). Different accounting standards require different disclosure requirements (Ding et al., 2007). These disclosure requirements could be in terms of types and formats of financial statements, as well as conditions for the recognition of individual items in those financial statements. Individual financial statement items differ under several accounting standards in several aspects; asset recognition (cost, market value, fair value, net realizable value), components of assets costs (financial costs, transportation costs, refurbishing, renovation, major repairs), treatment of depreciation (reduction in cost of assets, provision, contra asset), treatment of income from ordinary and extraordinary activities, the timing of recognition of revenue (point of agreement, point of exchange completion, point of payment), etc.

Accounting standards can generally be described as the set of norms, concepts, conventions, and policies that guide the preparers of financial reports in their objective of providing a true and fair view of the financial position and performance of the organization. The different definitions that different standards give to each financial statement item also reflect the different recognition requirements for such items under those standards. Also, several accounting standards introduce new concepts that are absent in others and can affect the bottom-line figures (e.g., impairment). All these differences can lead to variance in accounting figures (assets and earnings) when prepared using different financial reporting standards. One of the most recent sets of accounting standards that have gained the attention of both scholars and practitioners is the IFRS and this constitutes the main focus of this study. Compared to most local standards, IFRS standards value financial statement items from a wider lens (Achim & Tiron-tudor, 2018).

2.1.3. History and development of IFRS

The term “IFRS” is often widely used to refer to both the International Accounting Standards (IASs) and International Financial Reporting Standards (IFRSs) as we have them today. The IASs were first established in 1973. As of 1st of April, 2001, subsequently established standards were called International Financial Reporting Standards (IFRS). The IASs were issued by the International Accounting Standards Committee (IASC) while the more recent IFRSs are issued by the International Accounting Standards Board (IASB). The committee charged with the interpretation of the IAS was the Standard Interpretation Committee (SIC) while the body responsible for interpreting the IFRS standards is the IFRS Interpretations Committee (IFRIC). About 41 IAS standards (IAS 1 to IAS 41) were issued before the advent of the IASB in 2001 (IFRS Foundation, 2019). However, some of the IASs (IAS 3, IAS 4, IAS 5, IAS 6, IAS 9, IAS 13, IAS 14, IAS 17, IAS 18, IAS 22, IAS 25, IAS 30, IAS 31, IAS 35, and IAS 39) have been superseded by others (IAS 27, IAS 28, IAS 36, IAS 1, IAS 38, IFRS 15, IFRS 8, IFRS 16, IFRS 3, IAS 39, IAS 40, IFRS 7, IFRS 11, IFRS 12, IFRS 5, IFRS 9, IFRS 17) such that only 24 of the 41 IASs are still fully operational as at November 2021. IAS 11 (accounting for Construction contracts) has been superseded by IFRS 15 (Revenue from contract with customers) and IAS 15 (Information

Reflecting the Effects of Changing Prices) has been withdrawn completely without replacement. The IASB, upon replacing the IASC, has issued 17 IFRSs (IFRS 1 to IFRS 17). However, IFRS 4 has been superseded by IFRS 17 such that only 16 of the IFRSs are fully operational as of November 2021 (IAS Plus, 2021). This comes to a total of about 40 fully operational standards that have been issued so far by the IFRS Foundation to improve the quality and comparability of financial reporting across borders.

Several countries have adopted these new standards. About 166 countries have adopted IFRS worldwide (IFRS Foundation, 2019). Meanwhile, out of the 54 countries in Africa, about 45 have adopted IFRS fully or partially, either as a permitted standard or as a mandatory standard for listed companies and public interest entities (Efobi, 2016). Out of the 45 countries, only about 32 have adopted IFRS as a mandatory requirement. There have been claims that the adoption of IFRSs by different countries around the world has brought about several benefits. These benefits are often consequences of improvement in transparency and comparability of financial reporting (Armstrong et al., 2010; Ball, 2016; Covrig et al., 2007; Daske et al., 2008).

2.1.4. IFRS adoption and value relevance

Transparency has often been used as an indicator of efficiency (Ball, 2016; Uwuigbe et al., 2017; Watanabe et al., 2019). IFRS-based values tend to possess more information content. The increase in transparency is due to the fact that the increase in disclosure requirements and closeness to reality of accounting figures reported under IFRS provides investors with a more realistic snapshot of the company's performance (Hameed & Ashraf, 2009). Several aspects of information on assets, liabilities, incomes, and expenses are considered before valuing such items and so the values hold more information than those of local standards. Where accounting figures are more transparent, investors tend to consider such figures as more relevant in making decisions on the value of the company. The increase in IFRS's disclosure requirements causes more information to be made available to the public. As investors value such information and incorporate them in their investment decisions, this information is reflected in stock prices (Ding et al., 2007).

2.2. Theoretical framework

The assumptions behind the EMH theory have been criticized on the grounds that a perfectly efficient market is practically impossible and the so-called "anomalies" occur too frequently to be ignored as mere market anomalies (Hiremath & Kumari, 2014; Lo, 2004). Also, the risk component of stock prices can be reasonably predicted thus rendering the assumption of the randomness of returns questionable. These criticisms gave rise to the Adaptive Market Hypothesis (AMH). The AMH theory suggests that the dynamics of capital markets are a function of competition and the evolution of behavior, strategies, and policies of market participants and institutions. The theory links stock market behavior to evolutionary principles and suggests that stock prices reflect as much information as provided from the environmental condition, market participants and institutions. Arbitrage opportunities are available and stock return can be explained by changes in investors' behavior and institutional standards (Tran & Leirvik, 2019). These investors' behavior and institutional standards evolve in a way that is similar to natural selection. The key to stock market survival is evolution and innovation among market participants and institutions.

The evolution of accounting standards is one of the innovations that can influence the value relevance of financial statement figures and this is reflected in the dynamics of stock prices. Accounting information is considered to possess quality and value relevance if, when released, can cause stock price movements in a manner that reflects reality (Aveh et al., 2017; Soewarno & Utami, 2010).

3. Materials and methods

Several studies have investigated the changes in value relevance of financial statement figures over time. In this section, we reviewed existing empirical literature on value relevance trends as

well as the impact of changes in accounting standards in general (and IFRS standards in particular) on the value relevance of financial statement figures. In accordance with the suggestions of O’Gorman et al. (2013), a systematic review was done with the aim of extracting and mapping the different research findings as well as detecting patterns that could answer some pertinent questions or suggest areas for further research.

3.1. Article search and selection strategy

Although several studies have investigated changes in value relevance of financial statement figures, certain selection criteria were applied to channel the literature review towards the research objectives of this study. The two selection criteria include the hypothesis being tested and the Journal quality. The justification for the above criteria includes the fact that to be relevant to our research problem, the reviewed literature must address the issue of the relationship between accounting standards (majorly IFRS) and the value relevance of accounting information. Also, the journals must be of high-quality ranking, particularly ranked by Scopus and the Chartered Association of Business Schools, as these top-ranked journals often go through a more rigorous review process.

Given the possibility that the nature of reported accounting figures can influence the value relevance of financial statements as suggested by the adaptive market hypothesis, we selected some studies that tested for changes in value relevance following the adoption of IFRS. Some pioneer works in the field of value relevance and accounting standards have provided a methodological framework for the evaluation of value relevance. They evaluated changes in value relevance by comparing the R^2 of the price-earnings model over different accounting regimes (Brown et al., 1999; Collins et al., 1997; Ely & Waymire, 1999; Francis & Schipper, 1999; Lev & Zarowin, 1999; Nwaeze, 1998). This method was first propounded by Ohlson (1995) and is commonly referred to as the Ohlson model. Also, it is worth mentioning that most of these pioneer works were carried out in the US (the US has not adopted IFRS to date) and discovered a decline in value relevance of accounting figures over several accounting regimes.

To achieve the research objectives of this paper, some articles in high ranking journals that directly address the impact of IFRS adoption and value relevance of accounting data were selected (Abdel-khalik et al., 1999; Awokeni, 2018; Barth et al., 2008; Chua et al., 2012; Clarkson et al., 2011; Dobija & Klimczak, 2010; Garanina & Kormiltseva, 2013; Horton et al., 2013; Iatridis, 2010; Khanagha, 2011; Odoemelam, Okafor & Ofoegbu, 2019; Okafor et al., 2016; Outa et al., 2017). These selected articles were more recent since they had to give sufficient time after IFRS adoption in order to provide substantial data post-IFRS adoption. Most of these works follow a similar methodology as the pioneer studies.

3.2. Review of literature on value relevance and IFRS adoption

Several studies have investigated changes in value relevance in countries that have adopted IFRS (then IAS) standards. They manage to relate the changes in value relevance to the changes in accounting quality caused by IFRS adoption. One of the earliest of such studies was that of Abdel-khalik et al. (1999). They tried to investigate the information environment of the two categories of shares that are sold in the Chinese stock markets. Class A shares are traded only to locals and its issuers do not comply with IAS/IFRS while Class B shares are traded only to foreigners and its issuers comply with IAS/IFRS. They used a longitudinal research design and collected Secondary panel data on earnings and returns (daily and weekly) from different stock markets in China for 1994 and 1995. They used the event study analysis to estimate the impact of IAS/IFRS adoption on value relevance with Class A shares and Class B shares as the control and test group, respectively. They discovered that changes in stock prices for the firms selling class B shares were not strongly correlated with disclosed IAS-based accounting earnings in 1994 but were correlated in 1995. On the other hand, changes in stock prices for the firms selling class A shares were strongly correlated with disclosed domestic standard-based accounting earnings in 1994 but were not correlated in 1995. These results suggest that accounting figures reported under the Chinese Generally

Accepted Accounting Principles (GAAP) are more related to returns than accounting figures reported under the IAS.

More recent studies have evaluated the effect of IFRS adoption on financial reporting quality. For instance, Barth et al. (2008) did a study on the IFRS and accounting quality as measured by increase in value relevance, timeliness of loss recognition, and decrease in earnings management. They collected secondary data from DataStream database and WorldScope list of IFRS adopters for share prices, earnings per share, and book value per share. They also used control variables like firm size, growth, leverage, cash flow from operations, audit quality, listing status, and number of closely held shares. The sample contained 327 firms located in 21 different countries that adopted IFRS between 1994 and 2003 (1,896 observations). They used regression analysis. They found that firms that adopted IFRS experienced less earnings management (higher variance of changes in earnings and lower negative correlation between cash flow and accruals), more timely loss recognition (higher occurrence of large losses) and more value relevance of book value and earnings for share prices than non-adopters.

Iatridis (2010) also did a comparative study on the benefits of adoption of the IFRS over the UK GAAP. The aim was to ascertain whether IFRS adoption has had similar effect with that discovered in the study by Barth et al. (2008). The study adopted a longitudinal design and data was collected for 241 firms listed on the London Stock Exchange for 2004 and 2005 (excluding banks, insurance, pension, and brokerage firms). The data collected include share prices, book values, and earnings per share, operating cash flow, market capitalization, operating profit margin, total liabilities, and total shareholders' fund. Firm profitability, size, growth, leverage, and investment were used as control variables. The study used changes in net profit and book values caused by IFRS adoption (2004 net profit and book values that were converted to IFRS minus original GAAP net profit and book values for 2004) to proxy IFRS adoption effect. The author used Pearson correlation, logistic regression, and ordinary least square regression. For earnings management and timely recognition of losses, the results showed that changes in earnings were more volatile (less smooth) compared to cash flows under IFRS regime (2005). Also, under IFRS regime, discretionary accruals were positively correlated with cash flows while they were negatively correlated under GAAP. IFRS adoption (dummy variable of 0 for pre-adoption period and 1 for post-adoption period) was also found to have a negative relationship with discretionary accruals and small positive profits. For value relevance, the IFRS-based model had a higher R^2 and positive significant coefficients for both net profit and book value compared to the GAAP-based model. In the model of profit on stock returns, the IFRS model also had a higher R^2 and positive coefficient compared to the UK GAAP model. This proved that financial statement profit reacts positively to good news (in form of positive returns) and bad news (in form of negative returns). Finally, the variables for IFRS adoption effect were found to have a positive and significant impact on stock returns. Overall, the findings were similar to those of Barth et al. (2008). They also affirmed that less earnings manipulation and information asymmetry would lead to higher disclosure and quality of accounting information which can assist investors in unbiased decision-making.

Clarkson et al. (2011), in their study, concentrated on firms in either Common Law or Code Law countries. They also applied a longitudinal design (for 2004 and 2005) and collected data on share prices, book values, and earnings per share from DataStream and WorldScope. The population of the study included companies in Australia and Europe for the period 2004 and 2005 that have data on GAAP and restated IFRS accounting figures available. A sample of 3,488 companies from 14 European Union countries and Australia (12 Code Law and 3 Common Law countries) that adopted IFRS in 2005. The study applied the Ohlson price model using ordinary least squares, weighted least squares, and the product model (share price against EPS and BVPS). A cross-product term ($\text{EPS} \times \text{BVPS}$) was included in the linear price model on EPS and BVPS to control for nonlinearities. After the inclusion of the cross-product term, there was an observed increase in comparability but no change in price relevance for both country classes. The coefficient of the cross-product term was negative and significant.

Khanagha (2011) did a comparative study on value relevance in the UAE before IFRS and after IFRS implementation. A longitudinal design was used and both the price regression and portfolio return approach were applied. For the regression analysis, data were collected for 17 companies listed on the Abu-Dhabi Stock Exchange from 2001 to 2008 (136 observations). For the portfolio return approach, data was collected for 17 companies over 7 years (119 observations). Secondary panel data were collected for share prices and returns, book values of equity per share, earnings per share and cash flow per share. The data were gotten from the Gulfbase database, Bloomberg and DataStream. Using both methods (regression and portfolio approach), the results showed a deterioration in value relevance of book value and earnings post-IFRS. However, results based on and portfolio approach showed an increase in value relevance for cash flows figures post-IFRS.

Chua et al. (2012) also did a study similar to that of Barth et al. (2008). A longitudinal design was used and data was collected for 172 companies quoted on the Australian Stock Exchange from 2001 to 2009), leading to 1,376 firm-year observations. Secondary panel data on share prices (3 months after financial year-end), book values of equity, and earnings per share were collected. Firm size, growth, leverage, cash flow from operations, audit quality, listing status, closely-held shares, industry class, and asset turnover were used as control variables. Data were obtained from Connect4, Worldscope, and Thomson One databases. They used Spearman's rank correlation and regression analysis. The results were similar to those of Barth et al. (2008) and Iatridis (2010). Garanina and Kormiltseva (2013) did a study on the effects of IFRS adoption in Russia. They did this by testing for significant differences between the value relevance under the Russian Accounting Standard era and value relevance under the IFRS era. The population included Russian public companies that voluntarily implement IFRS for a minimum of 2 years. The sample was 67 public companies in Russia that reported using both IFRS and RAS for four consecutive years (from 2006 to 2009). Data was collected on inefficiency-adjusted share prices for 6 months after fiscal year-end, book values, and earnings per share. They deflated the variables with the difference between book value per share and earnings per share to reduce collinearity. The data were analyzed using a parametric test of market-to-book value comparison and price regression model (adjusted R^2 comparison with Cramer test of significant difference). The results showed an absence of increase in value relevance of financial reports to investors of financial statement information after IFRS adoption.

Horton et al. (2013) did their study on different countries in the Institutional Brokers' Estimate System (I/B/E/S) database. They tested the hypothesis that mandatory IFRS adoption provides comparability and information quality benefits by comparing analyst earnings forecast accuracy between mandatory IFRS adopting companies, voluntary IFRS adopting companies and non-adopting companies. A longitudinal design was applied and data was collected for 8,124 listed from 2001 to 2007. Secondary panel data was collected on earnings (under IFRS and Local GAAP) and Analysts' forecasts of those earnings for the sample period. The rationale for the study was that if IFRS has led to comparability and information quality benefits, then analyst forecast errors ought to decrease after the mandatory adoption of IFRS. The authors used regression analysis to test the hypothesis. The results showed that forecast errors decreased for firms that mandatorily adopt IFRS compared to the forecast errors of other firms. The authors also found decreasing forecast errors for voluntary IFRS adopters, but this effect was smaller compared to that of mandatory adopters.

The study by Okafor et al. (2016) was done in Canada. The theoretical framework, like this one, was based on the market efficiency theory as well as other disclosure theories. A longitudinal design consisting of a panel data set of 646 listed firms from 2008 to 2013 was used. Secondary panel data on share prices and returns, level and changes in book values of equity per share, earnings per share and cash flow per share were collected from the data archive of companies listed on the Toronto Stock Exchange and the Bloomberg Database. Firm size, loss, industry classification and leverage were used as control variables. The study applied the Ohlson price regression model and the modified Balachandran and Mohanram model (B&M model). The B&M

model regresses share price and returns against BVPS and both BVPS and EPS for incremental relevance (since earnings is a change in book value over a period). The results showed a rise in R^2 from 55% to 75.9% for the Ohlson model and from 57.5% to 84.1% for the B&M model for adopting firms but no similar development for non-adopting companies.

Few literature on IFRS adoption and value relevance situation in African markets were also reviewed. Outa et al. (2017) did a study on IFRS implementation and value relevance in East Africa. A longitudinal design was used and data was collected for companies listed in Nairobi Securities Exchange (NSE) for the period 2005 to 2014 (five years pre-IFRS revision and five years post-IFRS revision) with available data. Fifty-two companies were selected (520 observations) and four of the companies were cross-listed in Uganda, Tanzania, and Rwanda. They used the same companies before and after IFRS implementation so that each company acts as its own control for sampling variation bias. They also included a cross-product term of both earnings and book value to control for non-linearity. They used Ohlson's price regression model (share price against EPS) and random effects GLS in analyzing the data. The results showed a positive and significant relationship of share prices with book values and earnings as well as an increase in R^2 in the period after IFRS implementation, thus suggesting higher value relevance.

Awokeni (2018) also contributed to the value relevance argument in Africa. The study tested the assumption of financial statements information providing all the domain variables for predicting market value. Investors tend to consider both the financial position and the prospect of firms when making investment decisions. The study investigates whether market participants depend on financial statement information or place a premium on the future prospect of firms when deciding on equity investment. The author used a longitudinal design and collected data for 57 manufacturing firms listed on the Nigerian Stock Exchange for the periods of 2010, 2011, 2013 and 2014 (2 years before IFRS and 2 years after IFRS implementation). Data were collected from annual reports and the Nigerian Stock Exchange fact book 2012/2013. The secondary panel data consisted of net income, book value of equity, and stock prices for 6 months after the companies' financial year-end. The study analyzed the data using price regression model on earnings and equity book values using R^2 comparison and average mean prediction. Using R^2 comparison, the study detected a decrease in value relevance during the GAAP regime and an increase during IFRS regime. Overall, the average relevance was lower in IFRS regime by 2.4%. However, using average means prediction, GAAP and IFRS regimes had unit premiums of 51.94 and 111.05 respectively (investors place a higher premium on IFRS earnings).

Lastly, Odoemelam et al. (2019) also did a study on value relevance in Nigeria. They also applied a longitudinal design and collected data for 101 listed companies from 2006 to 2017 (1212 firm-year observations). The sample included only companies that had adopted IFRS in or before 2012. The data were gotten from annual reports and the Nigerian Stock exchange database. The secondary panel data comprised book value per share, earning per share, and other control variables. They analyzed the data using pairwise correlation analysis and regression analysis (with cross-product variables). They found the cross-product of earnings and IFRS dummy variable to be significant, thus inferring a significance of the interaction of earnings with IFRS in predicting market prices of shares. They also found that the interaction of book value per share with IFRS was insignificant. Thus, they concluded that IFRS has improved the value relevance of earnings but not that of book values.

4. Summary and discussion of results

Most of the pioneer studies on changes in accounting standards and value relevance address the US financial reporting environment and discovered a decline in value relevance across all periods; before the era of the Committee on Accounting Procedure (1927–1938), during the era of the Committee on Accounting Procedure (1939–1959), during the era of the Accounting Principles Board (1960–1973), and during the era of the Financial Accounting Standards Board (1974–1993).

This indicates a negative effect of the different regulatory standards on financial reporting quality in the US (Ely & Waymire, 1999).

Strong financial reporting quality ought to improve value relevance and increase the efficiency of financial markets (and vice versa). The US stock market is one of the most efficient markets in the world and constitutes almost 44.29% of the world's market capitalization. As at the end of 2020, the world's market capitalization was about 91,931,860 million US dollars while the capitalization of the New York Stock Exchange stood at about 40,719,661 million US dollars (Knoema, 2020). However, its high market efficiency and liquidity may be attributed to other factors outside financial reporting quality. Although several advanced market countries are subject to decrease in financial reporting quality, strong legal structures and regulatory bodies help to mitigate the adverse effects (El-Helaly et al., 2020; Samaha & Khelif, 2016). On the other hand, several authors have tested the efficiency and growth of African stock markets and have found them to be neither weak-form efficient nor semi-strong form efficient. The reason has been largely attributed to information asymmetry and low level of literacy (Afego, 2015). Changes in accounting standards can be traced more directly to the information asymmetry problem. Outa et al. (2017) affirmed that IFRS adoption may be less effective in developing economies compared to advanced and emerging economies. Although they discovered an increase in value relevance of accounting information in East Africa after implementation of IFRS standards, they also found that value relevance in East Africa is relatively lower than that of the developed markets.

The potential benefits of IFRS adoption rely on the presumption of more information to market participants and increase in accounting comparability as opposed to previous accounting regimes. However, there is conflicting empirical evidence that this is the case. Among the reviewed studies on IFRS adoption and value relevance, a few have cast doubts on the improvement of financial reporting quality caused by IFRS adoption. Abdel-khalik et al. (1999) used event analysis and discovered a decrease in value relevance of IFRS-based earnings for Chinese Class B shares. However, the authors identified some limitations. Availability and verifiability of the data was a challenge as the Chinese government tends to restrict the availability of financial data on their listed firms and often interfere with the market dynamics as is often the case with socialist economies. Several other works that have used the traditional method of comparison of explanatory power (R^2) have arrived at different results. Thus, it could be inferred that results on IFRS adoption and value relevance may depend on the methodology used. The increase in value relevance of cash flow figures discovered by Khanagha (2011) after IFRS adoption may be due to the special resistance of cash flow items to earnings management. In the study by Garanina and Kormiltseva (2013), they found no significant improvement in the value relevance after IFRS adoption. The authors attributed the result to the mock compliance that originated as a result of institutional differences between the RAS and IFRS development environments. This suggests that adoption of the accounting standard alone may not be sufficient. The enforcement of those standards by regulators must be facilitated. Also, compliance with those standards must be perceived by investors for them to trust the transparency of the resultant accounting figures.

On the other hand, several studies have identified a positive significant relationship between IFRS adoption and value relevance as well as other financial reporting quality variables like reduction in earning management and timely recognition of losses after IFRS adoption (Barth et al., 2008; Chua et al., 2012; Horton et al., 2013; Iatridis, 2010; Okafor et al., 2016; Outa et al., 2017). Horton et al. (2013), in their study, discovered an increase in value relevance as captured by analyst forecast accuracy. They attributed the magnitude of the forecast error decrease to firm-specific differences between local GAAP and IFRS rather than a correlated unobservable factor. The study by Avwokeni (2018) discovered an increasing trend in value relevance post-IFRS adoption. However, the study also detected a significant increase in mean premium prediction after equalizing backgrounds for both GAAP and IFRS earnings and book values, suggesting that a substantial part of share price cannot be explained by financial statements information alone but by other factors that can affect the future prospect of firms. Information on factors like relationship with

host communities, new product development, business life cycle, new disruptive government policies, and technological changes are seldom disclosed in financial statements. However, this information can have significant effect on the future prospects of companies and so constitute the determinants of share prices.

5. Conclusion

Stock markets play an important role in the development of any economy as it helps in the efficient allocation of capital. The market value of listed companies reflects available financial information about those companies and a substantial amount of this financial information can be found in financial statements. The transparency of the reported performance and position of a company is dependent on accounting standards that govern the preparation of financial statements. The earnings and book value figures provide a summary of the available financial information on a company. The information content of financial statement figures often determines the degree to which investors consider these figures in making investment decisions. Thus, accounting standards are capable of influencing the value relevance of financial statements.

Most of the pioneer studies on changes in accounting standards address the US financial reporting environment. Most of the reviewed studies discovered a decline in the value relevance of financial statements in the US. Although this was expected to create inefficiencies in the US stock market, other factors like strong legal structures and regulatory bodies help to mitigate the adverse effect. For this reason, value relevance is relatively lower in developing markets. Several studies were reviewed on changes in value relevance and the adoption of IFRS which has been promoted on the basis of some financial reporting and comparability benefits. Most of the reviewed studies discovered that the adoption of IFRS led to increase in value relevance in the respective markets. A few studies also reported a lack in improvement of value relevance following IFRS adoption. However, the authors attributed these results to some anomalies like government interference, mock compliance (in the case of voluntary adoption), lack of proper enforcement, firm-specific differences, and other information in the business environment (business changes) that are outside the scope of financial reporting. Also, the difference in methodology in some existing literature led to varying results.

6. Policy implications

African investors who lack the basic financial expertise on the mechanism of the stock market often treat equity investments like a passive saving scheme similar to landed properties (Oteh, 2009). Long periods of investors' inactivity have affected the volume and frequency of stocks trading and the overall growth of the stock markets. The review of the empirical studies on value relevance and accounting standards reveals some results that cannot be ignored. Firstly, as shown in the reviewed studies, the fairly consistent significance of accounting information in explaining market prices should cause governments, regulatory bodies, investors, and market participants to give more attention to accounting figures. Financial statements provide substantial (but not complete) information for making investment decisions since they are highly correlated with share prices. Thus, investors should consult financial statements often in making investment decisions.

The reviewed studies revealed a decline in value relevance in the US across the different accounting regimes. These results may reveal some deficiencies in the US accounting standards. Thus, the US should consider adopting the IFRS standards or work on increasing the convergence of their local standards (US GAAP) with IFRS.

Some barriers to the effectiveness of the increase in value relevance caused by IFRS adoption were revealed in the reviewed studies. Factors like superficial compliance and lack of proper enforcement can be mitigated by empowering regulatory institutions. Also, establishing policies geared towards investor protection can help to protect investors from risks arising from business

changes. Availability of market makers and trading halts can help to reduce investment risk and thus boost investor confidence and overall market liquidity.

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