

The Impact of IFRS Adoption on Value Relevance of Accounting Information: The Case of Sri Lanka

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This study investigates the impact of IFRS adoption on value relevance of accounting information in a developing country, Sri Lanka. The study uses publicly available data in annual financial statements and Colombo Stock Exchange (CSE) reports of all listed companies in the CSE during 2008 – 2018 to estimate panel data regression models. Findings of the study indicate that price value relevance of Sri Lankan firms' has increased and return value relevance has decreased upon adopting IFRS in 2012. It also reveals that value relevance of book value of equity has increased, value relevance of operating cash flows has not changed, and value relevance of earnings has decreased after the IFRS adoption. This resembles extant research findings on IFRS give more prominence to financial position (balance sheet items) and investors pay more attention on book value of the firm than earnings in their decision making. The study adds empirical evidence on the impact of IFRS adoption on value relevance of accounting information in a developing country contrary to almost all similar past studies provide evidence related to developed and emerging countries. Given the contextual differences in developed, emerging, and developing countries the findings of this study offer a better explanation on the influence of IFRS adoption on value relevance of accounting information in a developing market. The present study controls the impact of company size and incurring losses on value relevance of accounting information of firms as a modification to existing models reported in literature to provide much more robust evidence.

JEL Codes: M40, M41, M49 and C33

1. Introduction

Financial statements are one of the key information sources for companies to communicate with their stakeholders. Despite the availability of additional information sources, financial statements still remain as the most important externally feasible source of information on companies for stakeholders including existing and potential investors. According to Chalmers, Navissi and Qu (2010) a critical challenge for any economy is the allocation of savings to investment opportunities. Given the information asymmetry, matching savings to business opportunities is complicated because firms typically have better information than investors on the value of business investment opportunities. According to Healy and Palepu (2001) financial reporting and disclosures

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are potentially important means for management to communicate information on firm performance and governance to outside investors. Hence, financial statements and financial accounting numbers are expected to provide relevant and useful information for stakeholders who use them in making decisions. Companies should adhere to guidelines stipulated in accounting standards in preparing and presenting financial statements. Preparation of financial statements according to relevant set of accounting standards ensures the provision of relevant and reliable financial and accounting information for investors and other stakeholders to make their decisions. In fact, which figures at which amounts to be presented in financial statements and also which disclosures should be made available in financial statements basically depend on the requirements of relevant accounting standards. In this context accounting regimes and generally accepted accounting principles play a vital role in shaping the preparation and presentation of financial information to external users who rely on this information for decision-making (Ahmed, Chalmers & Khelif, 2013).

According to Barth, Beaver and Landsman (2001) an accounting amount is defined as value relevant if it has a predicted association with equity market values. Francis and Schipper (1999) define the value relevance as the ability of accounting numbers to summarize the information underlying the stock prices. According to them value relevance is indicated by a statistical association between financial information and stock prices or returns. In last few decades, there was a claim that financial statements have lost their value relevance overtime in the world. According to Lev and Zarowin (1999) usefulness of reported earnings, cash flows and book values (equity) has been deteriorating over the past 20 years basically due to both increased importance of unreported intangible assets and failure of the financial reporting models to keep pace with the increased rate of change in the business environment. According to Francis and Schipper (1999) this situation might result either because accounting standards and practices have remained stagnant while businesses have changed or accounting standards and practices have changed in ways that diverge from providing value relevant information or due to both reasons. Stewart (2002) as cited in Balachandran and Mohanram (2011) p.273 has attributed this decreased value relevance to growing omission in reporting intangible assets of companies. According to Stewart, accounting is no longer counting what counts. Therefore, significant changes in the existing financial reporting system were demanded by the beginning of 21st century.

Another criticism for decreasing value relevance of financial statements is increasing the globalization of the world thus local accounting systems fail to satisfy financial and accounting information needs of global stakeholders. According to Samaha and Khelif (2016) globalization of the world economy has created differences in accounting reports used in many different countries. Due to growing internationalization of trade, and globalization of businesses and financial markets financial information prepared under national accounting system may no longer satisfy the needs of users whose decisions are more and more international in scope (Zeghal & Mhedhbi, 2006). Thus, a quest for international harmonization of accounting standards and practices has been widely accepted as expedient and pragmatic (Samaha & Khelif, 2016).

In response to these claims of declining value relevance of financial statements over time, several initiatives have been put forward while the adoption of International Financial Reporting Standards (from now on IFRS which includes both old and revised International Accounting Standards) represents a significant milestone in the international accounting environment. Introduction of IFRS has a significant influence on value relevance of financial reporting through which harmonization of accounting standards and practices would undertake across the globe. The International Accounting Standards Board (IASB), being the international accounting standard setting body, addressed this challenge by developing a high quality, internationally recognized set of accounting standards that bring transparency, accountability and efficiency to financial markets around the world. Currently, more than 166 countries around the world have made a public commitment to IFRS standards as the single set of global accounting standards. Crawford et al. (2013) as cited in Uzma (2016) p.198 has attributed the transition from rule-based accounting systems to IFRS accounting principles as a mean to promote more consistency, credibility, relevance of accounting information and the globalization of economies. According to Jeanjean and Stolowy (2008), with the globalization of international financial markets, the idea of adopting a common language for financial reporting to develop international comparability has become widespread. Subsequently, Europe and many other countries adopted IFRS as an approach to implement a single financial reporting language. In line with this global trend The Institute of Chartered Accountants of Sri Lanka (ICASL), the jurisdictional authority for setting accounting standards in Sri Lanka, also mandated the adoption of IFRS for all listed companies and other Specified Business Enterprises (SBE) in Sri Lanka by issuing Sri Lanka Financial Reporting Standards (SLFRS) and Sri Lanka Accounting Standards (LKAS) which are compatible with IFRS for annual financial periods beginning on or after 1 January 2012.

The adoption of IFRS around the globe has inspired the researchers to investigate the impact of IFRS adoption on financial reporting and capital market efficiency. It is argued that the application of a single set of high quality accounting standards around the globe leads to better functioning of capital markets. According to Ball (2006) mandatory IFRS adoption has the potential to facilitate cross-border comparability, increase reporting transparency, decrease information costs, reduce information asymmetry, and thereby increase the liquidity, competitiveness, and efficiency of markets. These benefits could be achieved through IFRS adoption only if IFRS provide superior information for market participants than the previous sets of local accounting standards. However the extant accounting literature on this contains a handful and conflicting empirical evidence. Some studies (see Hung & Subramanyam, 2007; Agostino, Drago & Silipo, 2011; Tsalavoutas & Dionysiou, 2014) have found that IFRS adoption increases the value relevance of financial statements. Meantime studies such as Paananen (2008), Callao and Jarne (2010) and Garanina and Kormiltseva (2013) documented that IFRS adoption does not make a significant change in value relevance of financial statements. Moreover Okafor, Anderson and Warsame (2016) state that existing findings in literature on the impact of IFRS adoption on value relevance of accounting information is mixed.

According to Chebaane and Othman (2014) adoption of IFRS by developing economies is controversial as IFRS require a high level of economic development in order to be implemented successfully. But developing countries are characterized by low human development indices, predominance of the public sector and the presence of relatively underdeveloped accounting profession. Perera (1989) argues that IFRS are not suitable for developing countries because these standards are very complicated, highly developed and influenced by Anglo-American culture. Hofstede (2004) as cited in Ismail et al.(2013: p.54) found that developing countries are substantially different from developed markets in terms of the institutional, organizational and market aspects of the economy and society. According to Zehri and Chouaibi (2013) developing countries with high economic growth rate, a high level of education and common law based legal system are more favorable to adopt IFRS. Tyrrall, Woodward, and Rakhimbekova (2007) claimed that IFRS were developed in advanced economies though they are increasingly being applied in emerging economies by potentially ignoring considerations of whether IFRS are appropriate for such economies.

While having these contradictory arguments on the adoption of IFRS in emerging and developing countries, IFRS are increasingly being applied in emerging and developing nations. According to Samaha and Khlif (2016), in recent years, many developing countries have adopted IFRS despite the cognition of the view that if accounting and reporting systems are to be effective they must reflect the context within which they function. Despite this widespread adoption little research has directly addressed the impact of IFRS adoption on the quality of financial reporting of those markets (Ismail et al., 2013). According to Samaha and Khlif (2016), evidence for the economic consequences of IFRS is still limited in developing countries specially with respect to the impact of IFRS adoption on foreign direct investment and the cost of equity capital. Garanina and Kormiltseva (2013) highlight the existence of limited research on this topic related to the emerging markets and dearth of empirical research on the impact of IFRS adoption on value relevance of accounting information. According to Chebaane and Othman (2014) a little attention is assigned to study the consequences of IFRS adoption on value relevance in emerging and developing economies. There is no similar study available for Sri Lankan companies and existing evidence related to other countries cannot be replicated to Sri Lanka as country specific factors contribute immensely in deciding the success of IFRS adoption (Ismail et al., 2013). Therefore the present study attempts to examine whether the financial statements prepared under IFRS in Sri Lanka are value relevant, and to investigate whether the value relevance of financial statements has changed from pre-IFRS adoption to post-IFRS adoption period in Sri Lanka.

According to the Conceptual Framework for Financial Reporting (2010) issued by IASB, the objective of general purpose financial statements is 'to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity'. Therefore, if financial statements provide useful information for investors and other stakeholders for their decision making purposes with regard to the businesses, then those financial statements have the characteristic of value relevance. Many studies have investigated the value relevance of financial statements and accounting information which has a long

history. As explained, given the fact that significant changes occurred in the accounting environment with the adoption of IFRS, it can be argued that the impact of IFRS adoption on value relevance of accounting information has not been researched adequately specially in the context of developing countries. Hence, this study examines the impact of IFRS adoption on the value relevance of accounting information in the context of developing countries. In order to achieve this purpose, this study attempts to address the following research question: has the value relevance of financial statements of listed companies in Sri Lanka improved from pre IFRS adoption to Post IFRS adoption period?

Remainder of the paper is organized as follows. Section 2 of the paper reviews relevant past studies on the impact of IFRS on value relevance of accounting information. Section 3 develops hypotheses and explains other methodological concerns of the study. Findings of the study are presented in Section 4, and Section 5 concludes the paper.

2. Literature Review

In case of emerging and developing countries, much attention has not been given to examine the value relevance of accounting information compared to developed nations. According to Chalmers et al. (2010) the relevance of accounting information in the developed markets has been well documented but the role of accounting information in securities pricing in the emerging markets, however, continues to remain an empirical issue. Mostafa (2016) highlighted that in emerging markets and transition economies, the value relevance of accounting information has not yet been extensively examined where only a small number of studies have investigated this topic. But, this examination would be important in the context of emerging and developed markets since their accounting systems are largely influenced by the accounting regimes of developed nations and therefore they may not have been addressed the country's particular accounting needs and the role of accounting in the development process of those countries. According to Perera (1989), most developing countries reveals that they had little chance to evolve accounting systems which would truly reflect the local needs and circumstances. Their existing systems are largely extensions of those developed in other countries, particularly the Western capitalist countries, such as the UK and US and those systems were either imposed through colonial influence or by powerful investors or multinational corporations. Further Outa, Ozili, and Eisenberg (2017) emphasized that value relevance is an important topic in capital market research and this is crucial to East Africa and other developing countries where capital is scarce and investment risk is relatively high and there is need to attract more investment.

Accordingly, despite widespread adoption of IFRS in many countries little research has conducted to examine the impact of IFRS adoption on the quality of financial reporting also in emerging and developing markets (Ismail, Kamarudin, Zijl & Dunstan, 2013). Okaforet al. (2016) reported that few empirical studies so far have examined the effects of the mandatory adoption of IFRS on the relevance of accounting information. Further the same authors have stated that such empirical studies document mixed results. Therefore literature on the effects of IFRS adoption on value relevance of financial

information is, at best, inconclusive. According to Chalmers, Clinch and Godfrey (2011) many countries and firms devote ample amount of resources to IFRS adoption foreseeing its ability to provide quality information for managers, accounting report preparers, regulators and investors to draw rational decisions.

With the same expectation several studies have conducted in developed countries to investigate the impact of IFRS adoption on value relevance of accounting information. Most of them have reported an increase of value relevance of accounting information upon IFRS adoption (e.g. Agostino et al., 2011; Chalmers et al., 2011; Gjerde, Knivsfla & Sættem, 2008; Hung & Subramanyam, 2007; Morais & Curto, 2009; Okafor et al., 2016; Seng Cheong, Kim & Zurbrugg, 2010; Tsalavoutas & Dionysiou, 2014). Meanwhile some studies have concluded that there is no improvement or decrease of value relevance upon IFRS adoption in the context of developed countries (e.g. Callao & Jarne, 2010; Devalle, Onali & Magarini, 2010; Garanina & Kormiltseva, 2013; Gaston, Garcia, Jarne & Laínez-Gadea, 2010; Goodwin, Ahmed & Heaney, 2008; Paananen, 2008).

Some researchers have highlighted the benefits of adopting IFRS in emerging and developing countries. According to Tyrrall et al. (2007) advantages to developing nations of harmonizing IFRS include: the elimination or reduction of set-up costs in developing national accounting standards; the potential for rapid national improvement in the perceived quality and status of financial reports; increase in market efficiency in (inter)national financial markets through the provision of more understandable, comparable, and reliable financial statements; and a reduction of cost for firms to prepare financial statements. Wolk, Francis and Tearney (1989) argue that international accounting harmonization is beneficial for developing countries as it provides them with better-prepared standards as well as the best quality accounting framework and principles.

While having these contradictory arguments on the adoption of IFRS in emerging and developing countries IFRS are increasingly being applied in emerging and developing nations. In recent years many developing countries have adopted IFRS despite the cognition of the view that if accounting and reporting systems are to be effective (Samaha & Khelif, 2016). Despite the widespread adoption a little research has directly addressed the impact of IFRS adoption on the quality of financial reporting of emerging and developing nations (Ismail et al., 2013). According to Samaha and Khelif (2016) evidence on the economic consequences of IFRS is still limited in developing countries. Garanina and Kormiltseva (2013) highlighted that limited research available in extant literature on the impact of IFRS adoption on value relevance of accounting information in emerging markets. Despite the growing adoption of IFRS by emerging economies and developing countries a little attention is assigned to study the consequences of IFRS adoption on value relevance of accounting information (Chebaane & Othman, 2014).

Therefore investigating the impact of IFRS adoption on the value relevance of accounting information in the context of a developing country would address this important gap in the literature as following reasons exist. First, there has been a

considerable debate over the value relevance of accounting information prepared under IFRS compared to the local sets of accounting standards (Alali & Foote, 2012). Second, ample amount of empirical evidence available on the impact of IFRS adoption on value relevance of accounting information of developed countries though the findings may not be replicated for emerging and developing countries because of the differences exist between developed and developing countries in terms of institutional, organizational and market aspects of the economy and society (Ismail et al., 2013). Third, it has been argued in the literature that IFRS are highly developed standards, which require high level of economic development in order to successfully implement (Chebaane & Othman, 2014; Tyrrall et al., 2007), and IFRS are not suitable for developing countries as these standards are highly complicated (Perera, 1989). Fourth, many developing countries have adopted IFRS in recent years by ignoring the considerations of whether IFRS are appropriate or relevant to such economies (Samaha & Khlif, 2016; Tyrrall et al., 2007). Fifth, a little research has directly addressed the impact of IFRS adoption on the quality of financial reporting in developing markets (Ismail et al., 2013; Chebaane & Othman, 2014), and available few empirical studies which examined the effects of the mandatory adoption of IFRS on the relevance of accounting information of such markets report mixed results (Okafor et al., 2016). Moreover, the findings available may not be applicable to another country like Sri Lanka since the value relevance of accounting information is influenced by country-specific factors (Ali & Hwang, 2000; Barth et al., 2008; El-Gazzar & El-Sadek, 2001). Therefore the present study examines the impact of IFRS adoption on value relevance of accounting information in a developing nation using data of listed companies on CSE in Sri Lanka.

3. Methodology

3.1 Hypotheses

It is generally suggested that IFRS adoption leads to an improvement in value relevance of accounting information despite mixed results report in extant literature. Number of studies document a positive influence from IFRS adoption as it improves the qualitative characteristics of accounting information such as understandability (Ball, 2006; Barth et al., 2008), comparability (Ball, 2006; De George et al., 2016), timeliness (Ahmed et al., 2013; Tan et al., 2011), verifiability (Ball, 2006; Daske et al., 2008), relevance (Garanina & Kormiltseva, 2013; Lantto & Sahlström, 2009; Tan et al., 2011) and faithful representation (Ball, 2006; Daske et al., 2008; Tan et al., 2011).

According to Eisenhardt (1989) agency theory is directed at the ubiquitous agency relationship in which one party (the principal) delegates work to another (the agent) who performs that work. Agency theory is concerned with resolving problems that can occur in agency relationships. Here the agency problem arises when desires or goals of the principal and agent conflict and it is difficult or expensive for the principal to verify what the agent is actually doing (Eisenhardt, 1989). One of the most common agency relationships exists is manager–shareholder relationship where interests of principal and agents are separated and imposing agency costs. Shareholders expect the provision of relevant, reliable and useful information in financial statements about performance of resources entrusted to the management. However, this expectation may

not always be met by the management and they may tend to work in the interest of themselves rather the interest of shareholders. There would be a conflict between these two parties because the principal (shareholder) is not aware of actions of the agent (manager) and shareholders are restricted from accessing information which is available to managers. Given this conflict, Samaha and Khlif (2016) stated that accounting choices and disclosure can be used to reduce agency cost thus information asymmetry exist between principal and agent. In listed companies, the main source of information available to shareholders is financial statements. Therefore, management is expected to provide accurate, understandable, reliable and relevant information to shareholders on firm performance in order to assist them in future investment and other decisions. With the adoption of IFRS the quality of accounting and financial information is expected to be increased by enabling shareholders to take more informed decisions on their current and prospective investments.

Spence (2002) analyzed information structure of markets using signaling theory and found an information asymmetry. As explained in agency theory there would be a principal agent conflict in the business world because of information asymmetry between shareholders (principal) and management (agent). According to Watson et al. (2002) signaling is a reaction to informational asymmetry in markets. In this case companies have information that investors do not have. This can be led to take wrong decisions by the users of financial statements. According to Healy and Palepu (2001) one of the main reasons for demanding financial reporting is due to this information asymmetry and agency principal conflict. Thus, financial information plays a critical role in minimizing this information asymmetry and ensure the efficient functioning of capital markets (Chalmers et al., 2010). With the adoption of IFRS the quality of accounting and financial information is expected to be increased and enable shareholders to receive more quality signals on the business firms while minimizing information asymmetry.

Accordingly, the following hypotheses (H_1, H_2, H_3 and H_4) are developed to find out empirical evidence on the impact of IFRS adoption on value relevance of accounting information in Sri Lanka. Since the value relevance is measured using two value relevance models namely price value relevance and return value relevance, sub hypotheses are also developed under each main hypothesis.

H_1 : The accounting information of listed companies in Sri Lanka prepared under IFRS is price value relevant.

H_{1a} : The book value per share (BVPS) of listed companies in Sri Lanka has price value relevance.

H_{1b} : The earnings per share (EPS) of listed companies in Sri Lanka has price value relevance.

H_{1c} : The operating cash flow per share (OCFPS) of listed companies in Sri Lanka has price value relevance.

H_2 : The accounting information of listed companies in Sri Lanka prepared under IFRS is return value relevant.

H_{2a} : The EPS of listed companies in Sri Lanka has return value relevance.

- H_{2b}: The change in earnings per share (CEPS) of listed companies in Sri Lanka has return value relevance.
- H₃: Price value relevance of accounting information of listed companies in Sri Lanka has increased after the IFRS adoption.
 - H_{3a}: The price value relevance of BVPS of listed companies in Sri Lanka has increased after the IFRS adoption.
 - H_{3b}: The price value relevance of EPS of listed companies in Sri Lanka has increased after the IFRS adoption.
 - H_{3c}: The price value relevance of OCFPS of listed companies in Sri Lanka has increased after the IFRS adoption.
- H₄: Return value relevance of accounting information of listed companies in Sri Lanka has increased after the IFRS adoption.
 - H_{4a}: The return value relevance of EPS of listed companies in Sri Lanka has increased after the IFRS adoption.
 - H_{4b}: The return value relevance of CEPS of listed companies in Sri Lanka has increased after the IFRS adoption.

3.2 Sample and data

The ICASL mandated the adoption of IFRS for all listed companies and other SBE in Sri Lanka from 1 January 2012. All 294 listed companies on the CSE were considered in collecting data for the study. Sample period of the study was 2007/2008 to 2017/2018 which includes pre-IFRS adoption period (2007/2008 – 2011/2012) and post-IFRS adoption period (2012/2013 – 2017/2018). Data related to accounting variables were extracted from audited annual financial statements of the companies and variables on stock market performance were calculated using the data available in CSE data library. However the data of 50 companies were excluded (244 retained) due to unavailability of financial statements or stock market information during the sample period.

3.3 Model specification

This study uses two main regression models based on Ohlson (1995) which is the most extensively used model in value relevance literature. According to Ohlson value relevance is measured under two sub categories namely price value relevance and return value relevance. Price value relevance model is one of the commonly used regression models in value relevance literature to measure the value relevance in examining the relationship between market value of equity with accounting numbers such as book value of equity per share, earnings per share and operating cash flow per share. Following Ball and Brown (1968), El-Shamy and Kayed (2005), Liu et al.(2014), Musthafa and Jahfer (2013), Ohlson (1995), Okafor et al.(2016) and Turel (2010) the present study examines price value relevance before and after the IFRS adoption using the explanatory power of book value of equity per share, earnings per share and operating cash flows per share using;

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 OCFPS_{it} + U_{it} \dots \dots \dots (1)$$

Where, P_{it} is market price per share of firm i three months after the financial year ending in year t to accommodate time lag between the issuing of financial statements and reflecting them in the share market; $BVPS_{it}$ is book value of equity per share of firm i for the financial year ending at year t ; EPS_{it} is earnings per share of firm i during the financial year t ; $OCFPS_{it}$ is operating cash flows per share of firm i for the financial year ending at year t ; and U_{it} is error term.

Balachandran and Mohanram (2011) found that the goodness of fit of the above model can be decreased when there is loss earning firms in the sample. Therefore, in the current study an additional dummy variable ($D1$) is added to the model 1 to control the effect of loss earning firms and developed model 2 of the study which cannot be seen in the previous studies. Moreover Pathirawasam (2013) showed that value relevance is higher for larger firms than smaller firms in Sri Lanka. Since the current study uses data of eleven financial years, size of the firms can be changed over time and can have an impact on changes in value relevance. Therefore model 2 incorporates market capitalization (MC) as a proxy variable to control the firm size of sample firms. Accordingly model 2 is used in the present study to measure price value relevance of selected companies.

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 OCFPS_{it} + \beta_4 MC_{it} + \beta_5 D1_{it} + U_{it} \dots\dots\dots (2)$$

Though the share price of a company is an important performance indicator the return arises through share price fluctuations would be a main consideration once investors have committed their funds in shares of a company. Hence, the impact of accounting numbers on market return of shares which is known as return value relevance is another branch of value relevance. Return value relevance is assessed by regressing annual returns (R) on earnings (EPS) and changes in earnings (ΔEPS) (Ali & Hwang, 2000; Balachandran & Mohanram, 2011; Liu et al., 2014; Mostafa, 2016; Ohlson, 1995; Okafor et al., 2016). To control the effect of changes in firm size over time MC is used as a control variable in model 3. Accordingly, model 3 of the study is used to estimate the return value relevance of selected companies for the study.

$$R_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 \Delta EPS_{it} + \beta_3 MC_{it} + U_{it} \dots\dots\dots (3)$$

The present study examines whether there is a significant difference in value relevance of accounting information between pre and post IFRS adoption periods in the sample. The following statistical test suggested by Clogg, Petkova and Haritou (1995) and modified by Paternoster et al. (1998) was used in this regard:

$$Z = \frac{b_1 - b_2}{\sqrt{SEb_1^2 + SEb_2^2}} \dots\dots\dots (4)$$

Following Ismail *et al.* (2013) the following extended models (models 5 and 6) which include IFRS adoption as a dummy variable and its interaction with each independent variable to identify the impact of IFRS adoption on value relevance of accounting

information. According to Ismail et al. (2013) this mechanism helps to assure the robustness of value relevance regression models.

$$P_{it} = \beta_{01} + \beta_{11} BVPS_{it} + \beta_{21} EPS_{it} + \beta_{31} OCFPS_{it} + \beta_{41} IFRS + \beta_{51} BVPS_{it} * IFRS + \beta_{61} EPS_{it} * IFRS + \beta_{71} OCFPS_{it} * IFRS + \beta_{81} D_{it} + \beta_{91} MC_{it} + U_{it} \dots \dots \dots (5)$$

$$R_{it} = \beta_{02} + \beta_{12} EPS_{it} + \beta_{22} \Delta EPS_{it} + \beta_{32} IFRS + \beta_{42} EPS_{it} * IFRS + \beta_{52} \Delta EPS_{it} * IFRS + \beta_{62} MC_{it} + U_{it} \dots \dots \dots (6)$$

Where; IFRS is an indicator variable coded 1 for observations in the post-IFRS adoption period (2012/2013-2017/2018) and 0 otherwise (2007/2008-2011/2012) and all other variables as defined in models 1-3.

Before estimating the above regression models, correlation coefficients between explanatory variables were analyzed to ascertain the absence of multicollinearity issue. The highest coefficient reported for the association between BVPS and EPS(0.51), thus concluded the absence of multicollinearity issue. Im, Pesaran and Shin Test (Im, Pesaran & Shin, 2003) was used to check the stationarity of data. Results of the test led to reject the null hypothesis of unit-root for all variables in regression models indicate that variables are stationary at levels. Regression models were estimated in the form of pooled, fixed effects and random effects to select better estimates. Estimates of both fixed and random effects models were affirmed through employing Hausman Specification Test (Hausman, 1978). In instances where both models were found significant the results of random effects model were used to test hypotheses. In assessing the validity of fixed effects models *F*- redundant test was carried out to check whether fixed effects model or pooled ordinary least squares (OLS) method is more appropriate. All regressions used in the current study are adjusted using Huber-White Sandwich Estimator (White, 1980) as it provides control for heteroscedasticity and auto-correlation.

4. Empirical Results

Descriptive statistics of variables used in the study are presented in Table 1. Values related to pre and post-IFRS periods are presented separately in the Table. According to the Table, mean of BVPS in pre-IFRS period (72.97) has increased in post-IFRS adoption period (111.20). Mean EPS for both pre (11.65) and post (10.85) IFRS periods are positive although there is a slight decline in the value during post-IFRS adoption period. A noticeable increase of approximately 95% can be seen in the mean of OCFPS in post-IFRS period. Furthermore, skewness of OCFPS has become positive in post-IFRS period which indicates majority of firms reported OCFPS below the mean value whereas some companies maintained very high OCFPS in post-IFRS period. The Δ EPS is measured as the annual change in the EPS compared to the previous year. The mean Δ EPS in pre-IFRS (3.60) is positive whereas the mean Δ EPS in post-IFRS (-0.165) is negative. Furthermore, the skewness of Δ EPS has become negative in post-IFRS period which indicates a change in the distribution of this variable upon IFRS adoption. A key observation on the distribution of independent and dependent variables

of this study is leptokurtic distributions for all variables. This indicates the values of such variables are gathered around the mean values. Another noticeable observation on the distribution of dependent variables of this study is a discernible decrease in their average values in post-IFRS period reflecting a decline in market share price and market return in post-IFRS adoption period.

Table 1: Descriptive Statistics for Independent and Dependent Variables

Variable	Mean		Median		Std. Deviation		Skewness		Kurtosis	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
BVPS	72.97	111.20	29.83	39.85	138.69	215.47	4.05	3.46	22.42	16.35
EPS	11.65	10.85	3.52	3.48	33.68	30.29	4.81	2.51	44.57	30.27
OCFPS	5.40	10.66	2.10	2.29	69.38	55.61	-5.64	8.23	103.92	152.22
ΔEPS	3.06	-0.16	0.61	0.11	26.28	23.13	0.43	-1.26	42.13	63.18
MC	21855.80	11722.90	3146.01	2620.82	178763.94	28914.11	22.58	5.78	534.83	44.84
P	260.52	244.31	71.60	55.05	675.10	1077.34	6.88	12.41	67.09	174.70
R	47.81	5.86	9.20	-0.02	340.50	531.19	1.25	12.25	32.06	312.51

Note: Number of observations is 1,220 for pre and 1,464 for post-IFRS adoption periods, respectively. BVPS is book value of equity per share, EPS is earnings per share, OCFPS is operating cash flows per share, ΔEPS is changes in earnings, MC is market capitalization, P is market share price, and R is market return.

Table 2 presents regression estimates for price value relevance of pre and post-IFRS adoption periods. The estimates indicate that BVPS and OCFPS are significantly value relevant in the post-IFRS adoption period. Based on these estimates H_{1a} (the book value per share [BVPS] of listed companies in Sri Lanka has price value relevance) and H_{1c} (the operating cash flow per share [OCFPS] of listed companies in Sri Lanka has price value relevance) of the study can be established. Meanwhile the reported coefficient for BVPS is positive and OCFPS coefficient is negative. Considering low level of statistical significance reported for EPS coefficient H_{1b} (the earnings per share [EPS] of listed companies in Sri Lanka has price value relevance) of the study cannot be established. According to R^2 value in Table 2 the variables in Model 2 collectively explain 94 percent of the variation in share price of selected firms for the study. Hence, it can be concluded that accounting information is collectively value relevant with market price of shares in the post-IFRS adoption period as predicted in H_1 (the accounting information of listed companies in Sri Lanka prepared under IFRS is price value relevant) of the study.

Table 2: Regression Estimates for Price Value Relevance of Pre and Post IFRS Adoption Periods

<i>Model 2: $P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + \beta_3 OCFPS_{it} + \beta_4 MC_{it} + \beta_5 D1_{it} + U_{it}$</i>						
	Coefficient		t-Statistic		p-value	
	Pre	Post	Pre	Post	Pre	Post
Constant	147.48	108.89	4.24	3.35	0.00 ^a	0.00 ^a
BVPS	-0.08	0.85	-0.41	4.19	0.68	0.00 ^a
EPS	6.52	0.70	11.64	1.32	0.00 ^a	0.19
OCFPS	0.16	-0.54	0.75	-3.52	0.45	0.00 ^a
MC	0.0001	0.001	4.68	2.18	0.00 ^a	0.03 ^b
D1	-26.76	0.87	-0.71	0.03	0.48	0.97
	Pre	Post				
Adjusted R ²	0.66	0.94				
F-statistic	7.46 ^a	65.19 ^a				

Note: Number of observations is 1,220 for pre and 1,464 for post-IFRS adoption periods, respectively; estimates are based on fixed effects model; significance levels: ^a $p < 0.01$ and ^b $p < 0.05$.

Table 3 summarizes regression results of Model 3 which estimates the return value relevance of accounting information. Accordingly the results highlight that CEPS is not significantly value relevant with market return whereas EPS is value relevant with market return. Therefore, H_{2a} (the earnings per share [EPS] of listed companies in Sri Lanka has return value relevance) of the study can be established with a high statistical confidence and H_{2b} (the changes in earnings per share [Δ EPS] of listed companies in Sri Lanka has return value relevance) can not be established. Given a low R^2 of Model 3 estimates (7%) it can be concluded that accounting information is not collectively value relevant with market return in the post-IFRS adoption period contrarary to the prediction in H_2 of the study.

Table 3: Regression Estimates for Return Value Relevance Of pre and Post-IFRS Adoption Period

Model 3: $R_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 \Delta EPS_{it} + \beta_3 MC_{it} + U_{it}$						
	Coefficient		t-Statistic		p-value	
	Pre	Post	Pre	Post	Pre	Post
Constant	23.60	4.26	1.31	0.41	0.19	0.68
EPS	-2.56	0.84	-4.06	2.71	0.00 ^a	0.00 ^a
Δ EPS	10.30	-0.40	12.74	-1.20	0.00 ^a	0.23
MC	0.0001	0.0001	4.25	1.05	0.00 ^a	0.29
	Pre	Post				
Adjusted R^2	0.24	0.07				
F-statistic	64.32 ^a	3.08 ^a				

Note: Number of observations is 1,220 for pre and 1,464 for post-IFRS adoption periods, respectively; estimates are based on pooled OLS regression model; significance level: ^a $p < 0.01$.

Second objective of the study examines whether the value relevance of accounting information has improved from pre-IFRS adoption period to post-IFRS adoption period. Therefore, price value relevance and return value relevance estimates of both pre and post-IFRS adoption periods in Tables 2 and 3 are compared. A fundamental question whether the value relevance is significantly increased upon IFRS adoption has been addressed by employing a statistical test suggested by Clogg et al. (1995)(Model 4) and by using extended regression models (Models 5 and 6) which include IFRS adoption as a dummy variable. Calculated z values using Model 4 are presented in Table 4. Estimates of Models 5 and 6 are presented in Table 5 and 6, respectively.

Estimates summarise in Table 2 indicate that explanatory power of accounting variables in the price value relevance model has increased from 66% to 94% in the post-IFRS adoption period. Therefore H_3 of the study (price value relevance of accounting information of listed companies in Sri Lanka has increased after the IFRS adoption) can be established. It could also observe that only EPS is significantly price value relevant in the pre-IFRS adoption period. However, both BVPS and OCFPS have become significantly price value relevant whereas EPS has become not price value relevant upon IFRS adoption. According to statistics in Table 4a high z-statistic (3.24) for BVPS leads to reject the H_0 of the test (BVPS coefficients in price value relevance model are

equal in pre and post sub samples). This concludes that value relevance of BVPS in deciding the market price per share has significantly increased upon IFRS adoption. This is further confirmed by the significance of the interaction term of BVPS with IFRS obtained using Model 5 (see Table 5). Therefore, H_{3a} of the study (price value relevance of BVPS of listed companies in Sri Lanka has increased after the IFRS adoption) can be accepted. In case of H_{3b} (price value relevance of EPS of listed companies in Sri Lanka has increased after the IFRS adoption) cannot be accepted since its impact become insignificant in post IFRS adoption period. The relevant z-statistic (-7.53) in Table 4 and the coefficient for the interaction term of IFRS and EPS in Table 5 confirms this decline in value relevance of EPS upon IFRS adoption. The remaining variable in price value relevance model, OCFPS which is not significantly value relevant in pre-IFRS adoption period has become value relevant in the post-IFRS adoption period. A low z-statistic of 1.46 in Table 4 indicates that this improvement is not statistically significant. The interaction term of IFRS and OCFPS in Table 5 is also not statistically significant. Accordingly, H_{3c} of the study (price value relevance of OCFPS of listed companies in Sri Lanka has increased after the IFRS adoption) cannot be confirmed.

Results in Table 3 evident that explanatory power of accounting variables on market return has decreased from 24% to 7%. This is a significant decline in return value relevance upon IFRS adoption which leads to reject H_4 (return value relevance of accounting information of listed companies in Sri Lanka has increased after the IFRS adoption) of the study. Table 3 indicates that both EPS and Δ EPS are significantly value relevant with the market return in pre-IFRS adoption period. However only EPS is significantly value relevant in post IFRS adoption period. As per the z-statistic (4.85) in panel B of Table 4 the change in coefficients of EPS is statistically significant. This finding can be confirmed with statistically positive impact from the interaction term of IFRS with EPS in Table 6. Hence H_{4a} (return value relevance of EPS of listed companies in Sri Lanka has increased after the IFRS adoption) can be established. The impact of Δ EPS is significant on return value relevance in pre-IFRS adoption period (see Table 3) and became insignificant in the post-IFRS adoption period. A high z-statistic for Δ EPS coefficients (-12.4) in Table 4 confirms that this decline is statistically significant. This is further evident in statistically significant negative coefficient of the interaction term of IFRS and Δ EPS reports in Table 6. Subsequently, H_{4b} (return value relevance of Δ EPS of listed companies in Sri Lanka has increased after the IFRS adoption) is rejected.

Table 4: Z-Statistics for Price and Return Value Relevance Coefficients

	Z -statistic
<i>Panel A: Price value relevance variables</i>	
BVPS	3.24
EPS	-7.53
OCFPS	1.46
<i>Panel B: Return value relevance variables</i>	
EPS	4.85
Δ EPS	-12.24

Table 5: Impact of the Interaction of IFRS with Accounting Variables on Price Value Relevance

$$\text{Model 5: } P_{it} = \beta_{01} + \beta_{11} \text{BVPS}_{it} + \beta_{21} \text{EPS}_{it} + \beta_{31} \text{OCFPS}_{it} + \beta_{41} \text{IFRS} \\ + \beta_{51} \text{BVPS}_{it} * \text{IFRS} + \beta_{61} \text{EPS}_{it} * \text{IFRS} + \beta_{71} \text{OCFPS}_{it} \\ * \text{IFRS} + \beta_{81} \text{D}_{it} + \beta_{91} \text{MC}_{it} + U_{it}$$

	Coefficient	t-Statistic	p-value
Constant	175.95	6.12	0.000 ^a
BVPS	-0.60	-3.20	0.001 ^a
EPS	5.99	11.33	0.000 ^a
OCFPS	-0.29	-1.45	0.148
IFRS	-54.26	-2.79	0.005 ^a
IFRS*BVPS	1.44	10.65	0.000 ^a
IFRS*EPS	-4.36	-6.09	0.000 ^a
IFRS*OCFPS	-0.32	-1.08	0.281
D1	-8.81	-0.30	0.759
MC	0.0001	4.96	0.000 ^a

Notes: Adjusted R² is 0.772; F-statistic is 24.28^a; number of observations is 2,684; estimates are based on fixed effects model; significance level: ^ap < 0.01.

Table 6: Impact of the Interaction of IFRS with Accounting Variables on Return Value Relevance

$$\text{Model 6: } R_{it} = \beta_{02} + \beta_{12} \text{EPS}_{it} + \beta_{22} \Delta \text{EPS}_{it} + \beta_{32} \text{IFRS} + \beta_{42} \text{EPS}_{it} * \\ \text{IFRS} + \beta_{52} \text{CEPS}_{it} * \text{IFRS} + \beta_{62} \text{MC}_{it} + U_{it}$$

	Coefficient	t-Statistic	p-value
Constant	23.71	1.75	0.080 ^b
EPS	-2.55	-5.40	0.000 ^a
ΔEPS	10.29	16.93	0.000 ^a
IFRS	-21.91	-1.24	0.213
IFRS*EPS	3.54	5.82	0.000 ^a
IFRS*ΔEPS	-10.66	-13.53	0.000 ^a
MC	0.0001	5.66	0.000 ^a

Note: Adjusted R² is 0.19; F-statistic is 58.32^a; Number of observations is 2,684; estimates are based on fixed effects model; significance level: ^ap < 0.01; ^bp < 0.1.

5. Conclusion and Discussion

Present study found that accounting information generates upon IFRS adoption is price value relevant. This finding is consistent with prior studies such as Ismail et al. (2013), Agostino et al. (2011), Alali and Foote (2012), Devalle et al. (2010), Gjerde et al. (2008) and Liu et al. (2011). When individual accounting variables are concerned, BVPS and OCFPS are significantly value relevant with market price, and EPS is not significantly price value relevant. The accounting information of listed companies on the CSE is collectively not return value relevant. This finding corroborates with the findings of Devalle et al. (2010), Goodwin et al. (2008) and Hung and Subramanyam(2007).

However, EPS variable is a significant determinant of return value relevance of selected companies for the study.

Findings of the present study highlight that the price value relevance of BVPS has significantly increased, the price value relevance of EPS has significantly decreased and the price value relevance of OCFPS has not significantly changed upon IFRS adoption. This is consistent with the findings of prior literature (i.e. Kadri et al., 2009; Hung & Subramanyam, 2007). Overall, the price value relevance of selected companies for the present study has increased in post-IFRS adoption period from its magnitude in pre-IFRS adoption period. A similar finding is evident in Ismail et al. (2013), Agostino et al. (2011), Ahmed et al. (2013), Chalmers et al. (2008), Gjerde et al. (2008), Okafor et al. (2016), Tsalavoutas and Dionysiou (2014) and Turel (2010). Return value relevance of accounting information shows a significant decline between pre and post IFRS periods. This pattern is consistent with the findings of prior studies conducted by Clarkson et al. (2011), Goodwin et al. (2008), Kadri et al. (2009), Hung and Subramanyam (2007) and Morais and Curto (2008).

It was evident in the present study that the value relevance of book value of equity has increased, value relevance of operating cash flows has not changed and the value relevance of earnings has decreased upon IFRS adoption in Sri Lanka. In other words, book value plays a more important valuation role and earnings play a less important valuation role under IFRS than previously used local set of Sri Lankan Accounting Standards. The introduction of new, improved and comprehensive accounting standards under IFRS in Sri Lanka has led to a situation where book value becomes more value relevant than earnings. The reason for this behavior might be related to the fact that investors rely on IFRS financial position figures than IFRS performance figures. The following reason could be responsible for decreasing return value relevance as evident in the study. Introducing new standards or changes to the existing standards (i.e. LKAS 16 - Property, Plant and Equipment; LKAS 17 – Leases; LKAS- 19 Employee Benefits; LKAS-32/39 Financial Instruments; LKAS- 38 Intangible Assets; LKAS 40- Investment Property; LKAS-41 Agriculture; SLFRS- 2 Share Based Payments; SLFRS - 4 Insurance Contracts; SLFRS- 3/10 Consolidated Financial Statements; SLFRS- 13 Fair Value Measurement) are oriented towards promoting fair values of net assets rather than earnings. Further, the IFRS has allowed investors to trust on the accuracy of the comparability of firms' performance in making their portfolio investment decisions.

As discussed, although several studies have been carried out to investigate on the impact of IFRS adoption on value relevance of accounting information, those have reported conflicting empirical evidences and thus, the literature on the impact of IFRS adoption on value relevance of accounting information is, at best, inconclusive. Since many developed countries have adopted IFRS from the beginning in preparing financial statements of companies, a large number of studies have provided empirical evidences on the impact of IFRS adoption in the context of developed countries. But as per the literature, in case of emerging and developing countries, from the inception, there were contradictory arguments for and against the adoption of IFRS given the differences identified in those countries compared to the developed countries. Still literature shows that, despite these contradictory arguments, IFRS are increasingly being applied in

emerging and developing economies, potentially ignoring the consideration whether IFRS are relevant and appropriate to such economies where little attention is assigned to study in the accounting literature. As such, it is important to revisit this area of research using the data from a developing country under the changed accounting environment upon IFRS adoption. Thereby, this study makes a significant empirical contribution to the body of knowledge concerning the impact of IFRS adoption on value relevance of accounting information in emerging and developing countries.

Further, in measuring the value relevance, value relevance is measured using two regression models namely the price value relevance model and return value relevance model. Specially, when testing the impact of IFRS adoption, analysis is conducted using two statistical techniques to cross check and validate the results obtained. This method makes interpretation of IFRS impact on value relevance of accounting information clear and straightforward. Moreover, most of the studies which have been carried out to investigate the impact of IFRS adoption on value relevance of accounting information have ignored the impact of other factors that can have an impact on changing value relevance except IFRS adoption. Therefore an another methodological contribution is, current study tries to control the impact of changes in company size and incurring losses on value relevance of accounting information of companies by doing modifications to the model in order to identify the pure impact of IFRS adoption on value relevance of accounting information thus providing robust evidence on the research topic.

Regulatory bodies such as Securities and Exchange Commission in Sri Lanka, CSE and ICASL can use the findings of the present study to attract foreign investors by effectively communicating the effects of IFRS adoption on firm performance. So far the preparation of financial statements according to IFRS is mandatory for SBEs in Sri Lanka and a large number of organizations either not preparing financial statements at all or preparing according to previous accounting regulations existed before introducing IFRS. Therefore, the regulatory bodies may take necessary steps to educate such organizations about the benefits of preparing financial statements using IFRS to improve their accounting practices as evident in the present study.

Present study contains several limitations that the users of research outcomes of the study may aware though most of them are common in this type of research. The sample of companies selected for this study is limited to Sri Lankan context. Hence, care needs to be taken when generalizing the findings to another country as IFRS practices would vary from country to country as a result of socio, cultural, economic, political and technological factors. IFRS standards are often revised and new standards are introducing. The current study does not control for changes in accounting standards over the post-IFRS adoption period. The study assumes that all sample firms equally adopt and comply with IFRS though in practice there can be compliance differences. The above limitations open several avenues for future research as mentioned below. Single case studies and cross-country comparative case studies can be carried out to understand the process of IFRS adoption, and perceived benefits, barriers and limitations of IFRS. There are opportunities for future researchers to replicate the present study for other emerging and developing countries to enhance the robustness

of present findings. Present study used two models to measure value relevance based on the model introduced by Ohlson (1995) despite there are different models available in the literature to measure the value relevance. This opens another direction for further studies to test and validate whether extant findings in the literature on the impact of IFRS on value relevance vary due to measuring value relevance through different methods.

References

- Agostino, M, Drago, D and Silipo, DB 2011, 'The value relevance of IFRS in the European banking industry', *Review of Quantitative Finance and Accounting*, Vol.36, No. 3, pp.437–457.
- Ahmed, AS, Neel, M and Wang, D 2013, 'Does mandatory adoption of IFRS improve accounting quality? Preliminary Evidence', *Contemporary Accounting Research*, Vol. 30, No. 4, pp.1344–1372.
- Ahmed, K., Chalmers, K. and Khlif, H. (2013), 'A meta-analysis of IFRS adoption effects', *The International Journal of Accounting*, Vol. 48, No 2, pp.173–217.
- Alali, FA and Foote, PS 2012, 'The value relevance of international financial reporting standards: Empirical evidence in an emerging market', *The International Journal of Accounting*, Vol. 47, No. 1, pp.85–108.
- Ali, A and Hwang, L 2000, 'Country-specific factors related to financial reporting and the value relevance of accounting data', *Journal of Accounting Research*, Vol.38, Retrieved from <https://ssrn.com/abstract=184648>.
- Balachandran, S and Mohanram, P 2011, 'Is the decline in the value relevance of accounting driven by increased conservatism?', *Review of Accounting Studies*, Vol.16, No. 2, pp.272–301.
- Ball, R 2006, 'International Financial Reporting Standards (IFRS): pros and cons for investors', *Accounting and Business Research*, Vol.36 No. 1, pp.5–27.
- Ball, R and Brown, P 1968, 'An empirical evaluation of accounting income numbers', *Journal of Accounting Research*, Vol.6, No. 2, pp.159-178.
- Barth, ME, Beaver, WH and Landsman, WR 2001, 'The relevance of the value relevance literature for financial accounting standard setting: Another view', *Journal of Accounting and Economics*, Vol.31, No.1, pp.77–104.
- Barth, ME, Landsman, WR and Lang, MH 2008, 'International accounting standards and accounting quality', *Journal of Accounting Research*, Vol.46, No. 3, pp.467–498.
- Callao, S and Jarne, JI 2010, 'Have IFRS affected earnings management in the European Union?', *Accounting in Europe*, Vol.7, No. 2, pp.159–189.
- Chalmers, K, Clinch, Gand Godfrey, JM 2011, 'Changes in value relevance of accounting information upon IFRS adoption: Evidence from Australia', *Australian Journal of Management*, Vol.36, No.2, pp.151–173.
- Chalmers, K, Clinch, G and Godfrey, JM 2008, 'Adoption of international financial reporting standards: Impact on the value relevance of intangible assets', *Australian Accounting Review*, Vol.18, No.3, pp.237–247.
- Chalmers, K, Navissi, F and Qu, W 2010, 'Value relevance of accounting information in China pre-and post-2001 accounting reforms', *Managerial Auditing Journal*, Vol.25 No.8, pp.792–813.

- Chebaane, S and Othman, HB 2014, 'The impact of IFRS adoption on value relevance of earnings and book value of equity: The case of emerging markets in African and Asian regions', *Procedia - Social and Behavioral Sciences*, Vol.145, pp.70–80.
- Cheong, CS, Kim, S and Zurbrugg, R 2010, 'The impact of IFRS on financial analysts' forecast accuracy in the Asia-Pacific region', *Pacific Accounting Review*, Vol. 22, No.2, pp.124–146.
- Clarkson, P, Hanna, JD, Richardson, GD and Thompson, R 2011, 'The impact of IFRS adoption on the value relevance of book value and earnings', *Journal of Contemporary Accounting and Economics*, Vol.7, No.1, pp.1–17.
- Clogg, C, Petkova, E and Haritou, A 1995, 'Statistical methods for comparing regression coefficients between models'. *American Journal of Sociology*, Vol.100, No.5, pp.1261–1293.
- Collins, DW, Maydew, EL and Weiss, IS 1997, 'Changes in the value-relevance of earnings and book values over the past forty years', *Journal of Accounting and Economics*, Vol. 24, No. 1, pp.39–67.
- Daske, H, Hail, L, Leuz, C and Verdi, R 2008, 'Mandatory IFRS reporting around the world: Early evidence on the economic consequences', *Journal of Accounting Research*, Vol.46, No.5, pp.1085-1142.
- De George, ET, Li, X and Shivakumar, L 2016, 'A review of the IFRS adoption literature', *Review of Accounting Studies*, Vol.21, No.3, pp.898–1004.
- Devalle, A, Onali, E and Magarini, R 2010, 'Assessing the value relevance of accounting data after the introduction of IFRS in Europe', *Journal of International Financial Management & Accounting*, Vol.21, No.2, pp.85–119.
- Eisenhardt, KM 1989, 'Agency theory: An assessment and review', *Academy of Management Review*, Vol.14, No.1, pp.57–74.
- El Shamy, MA and Kayed, MA 2005, 'The value relevance of earnings and book values in equity valuation: An international perspective - The case of Kuwait', *International Journal of Commerce and Management*, Vol.15 No.1, pp.68–79.
- El-Gazzar, SM and El-Sadek, ZM 2001, 'The value relevance of accounting information in thin and emerging capital markets: The case of Egypt's equity market', *International Advances in Economic Research*, Vol.7, No.3, pp.368–368.
- Francis, J and Schipper, K 1999, 'Have financial statements lost their relevance?', *Journal of Accounting Research*, Vol.37, No.2, pp.319-352.
- Garanina, TA and Kormiltseva, PS 2013, 'The effect of international financial reporting standards (IFRS) adoption on the value relevance of financial reporting: A case of Russia', *Research in Accounting in Emerging Economies*, Vol.13, pp. 27–60.
- Gastón, SC, García, CF, Jarne, JIJ and Gadea, JAL 2010, 'IFRS adoption in Spain and the United Kingdom: Effects on accounting numbers and relevance', *Advances in Accounting*, Vol.26, No.2, pp.304–313.
- Gjerde, Ø, Knivsflå, K and Sættem, F 2008, 'The value-relevance of adopting IFRS: Evidence from 145 NGAAP restatements', *Journal of International Accounting, Auditing and Taxation*, Vol.17, No.2, pp.92–112.
- Goodwin, J, Ahmed, K and Heaney, R 2008, 'The effects of international financial reporting standards on the accounts and accounting quality of Australian firms: A retrospective study', *Journal of Contemporary Accounting and Economics*, Vol.4, No.2, pp.89–119.

- Hausman, JA 1978, 'Specification tests in econometrics', *Econometrica*, Vol.46, No.6, pp.1251-1271.
- Healy, PM and Palepu, KG 2001, 'Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature', *Journal of Accounting and Economics*, Vol.31, No.1-3, pp.405-440.
- Hung, M and Subramanyam, KR 2007, 'Financial statement effects of adopting international accounting standards: The case of Germany', *Review of Accounting Studies*, Vol.12, No.4, pp.623-657.
- Im, KS, Pesaran, MH and Shin, Y2003, 'Testing for unit roots in heterogeneous panels', *Journal of Econometrics*, Vol. 115, No.1, pp. 53-74.
- Ismail, WAW, Kamarudin, KA, van Zijl, T and Dunstan, K 2013, 'Earnings quality and the adoption of IFRS-based accounting standards', *Asian Review of Accounting*, Vol.21 No.1, pp.53-73.
- Jeanjean, Tand Stolowy, H 2008, 'Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption'. *Journal of Accounting and Public Policy*, Vol.27, No.6, pp.480-494.
- Kadri, MH, Aziz, RA and Ibrahim, MK 2009, 'Value relevance of book value and earnings: Evidence from two different financial reporting regimes', *Journal of Financial Reporting and Accounting*, Vol.7 No.1, pp.1-16.
- Lantto, A and Sahlström, P 2009, 'Impact of international financial reporting standard adoption on key financial ratios', *Accounting & Finance*, Vol.49, No. 2, pp.341-361.
- Lev, B and Zarowin, P 1999, 'The boundaries of financial reporting and how to extend them', *Journal of Accounting Research*, Vol.37, No.2, pp.353-385.
- Liu, C, Gould, G and Burgan, B 2014, 'Value-relevance of financial statements', *International Journal of Managerial Finance*, Vol.10, No.3, pp.332-367.
- Liu, C, Yao, LJ, Hu, N and Liu, L 2011, 'The impact of IFRS on accounting quality in a regulated market: An empirical study of China', *Journal of Accounting, Auditing & Finance*, Vol.26, No.4, pp.659-676.
- Morais, AI and Curto, JD 2009, 'Mandatory adoption of IASB standards: Value relevance and country-specific factors', *Australian Accounting Review*, Vol.19, No.2, pp.128-143.
- Mostafa, W 2016, 'The value relevance of earnings, cash flows and book values in Egypt', *Management Research Review*, Vol.39, No.12, pp.1752-1778.
- Musthafa, SL and Jahfer, A 2013, 'Value relevance of accounting information: Evidence from Sri Lanka', Paper presented at the 3rd International Symposium Proceedings, South Eastern University of Sri Lanka.
- Ohlson, J A 1995, 'Earnings, book values, and dividends in equity valuation', *Contemporary Accounting Research*, Vol.11, No.2, pp.661-687.
- Okafor, ON, Anderson, M and Warsame, H 2016, 'IFRS and value relevance: Evidence based on Canadian adoption', *International Journal of Managerial Finance*, Vol.12, No.2, pp.136-160.
- Outa, E. R., Ozili, P., and Eisenberg, P. (2017). IFRS convergence and revisions: value relevance of accounting information from East Africa. *Journal of Accounting in Emerging Economies*, 7(3), 352-368.
- Paananen, M 2008, 'The IFRS adoption's effect on accounting quality in Sweden', *SSRN Working Paper Series*. Retrieved from <http://ssrn.com/abstract=1097659>.

- Paternoster, R, Brame, R, Mazerolle, P and Piquero, A 1998, 'Using the correct statistical test for the equality of regression coefficients', *Criminology*, Vol. 36, No. 4, pp.859–866.
- Pathirawasam, C 2013, 'The value relevance of earnings and book value: The importance of ownership concentration and firm size', *Journal of Competitiveness*, Vol.5, No.2, pp.98–107.
- Perera, MHB 1989, 'Accounting in developing countries: A case for localised uniformity', *The British Accounting Review*, Vol.21, No.2, pp.141–157.
- Samaha, K and Khlif, H 2016, 'Adoption of and compliance with IFRS in developing countries', *Journal of Accounting in Emerging Economies*, Vol.6, No.1, pp.33–49.
- Spence, M 2002, 'Signaling in retrospect and the informational structure of markets', *American Economic Review*, Vol.92, No.3, pp.434–459.
- Tan, H, Wang, S and Welker, M 2011, 'Analyst following and forecast accuracy after mandated IFRS adoptions', *Journal of Accounting Research*, Vol. 49, No.5, pp.1307–1357.
- Tsalavoutas, I and Dionysiou, D 2014, 'Value relevance of IFRS mandatory disclosure requirements', *Journal of Applied Accounting Research*, Vol.15, No.1, pp.22–42.
- Turel, A 2010, 'The value relevance of IFRS: The case of Turkey', *CECONOMICA*, Retrieved from <http://journals.univ-danubius.ro/index.php/oconomica/article/viewFile/81/78>.
- Tyrrall, D, Woodward, D and Rakhimbekova, A 2007, 'The relevance of international financial reporting standards to a developing country: Evidence from Kazakhstan', *The International Journal of Accounting*, Vol.42, No.1, pp.82–110.
- Uzma, SH 2016, 'Cost-benefit analysis of IFRS adoption: Developed and emerging countries', *Journal of Financial Reporting and Accounting*, Vol. 14, No. 2, pp.198–229.
- Watson, A, Shrives, Pand Marston, C 2002, 'Voluntary disclosure of accounting ratios in the UK', *The British Accounting Review*, Vol.34, No.4, pp.289–313.
- White, H 1980, 'A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity', *Econometrica*, Vol. 48, No.4, pp.817-838.
- Zeghal, D and Mhedhbi, K 2006, 'An analysis of the factors affecting the adoption of international accounting standards by developing countries', *The International Journal of Accounting*, Vol.41, No.4, pp.373–386.
- Zehri, F and Chouaibi, J 2013, 'Adoption determinants of the international accounting standards IAS/IFRS by the developing countries', *Journal of Economics, Finance and Administrative Science*, Vol.18, pp.56–62.