"The relevance of accounting information in the era of Ind AS: Evidence from a Nifty Energy Index"

AUTHORS	K. P. Venugopala Rao (iD) Farha Ibrahim Nidhi Phutela (iD)

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
31	0	5

K. P. Venugopala Rao (India), **Farha Ibrahim** (India), **Nidhi Phutela** (India)

THE RELEVANCE OF ACCOUNTING INFORMATION IN THE ERA OF IND AS: EVIDENCE FROM A NIFTY ENERGY INDEX

Abstract

This paper investigates the value relevance of the financial information reported by energy companies included in the NSE Energy Index after the mandatory adoption of the Indian Accounting Standards (Ind AS) for the 2016–2017 accounting year. The fixed-effects model was employed on the panel data of energy companies included in the NSE Energy Index to study the impact of the accounting information on the market price of the shares for the period 2017–2021. The study suggests that a company's book value consistently explained the variation in the market price across each year individually. Moreover, with the control of time across firms for the study period, book value per share and net cash flow from investing activities have significant explanatory power on the market price of a company's shares. Profit after tax, which is widely used to determine a firm's performance, cannot explain the variability in the market price of shares.

INTRODUCTION

Chaotic trading on the stock exchange, marked by bouts of volatility on the day a listed company announces its financial results, usually put the markets to overdrive. Market participants get into vigorous trading, trying to get the best bargain. Efficient markets quickly impound all the relevant information in the share price (Fama et al., 1969). The constant flow of financial and non-financial information puts markets into intense action as investors interpret new information in accordance with their understanding of investment decisions (Brown & Sivakumar, 2003). Audited financial reports provided by firms are firsthand information about a company's financial performance. Since firms themselves publish these reports, it is evident that stakeholders rely on the information carried in these statements to make investment decisions. However, the critical question that looms large is the quality of information. The conservative approach in accounting, which creates asymmetry in the timeliness and persistence of the bad news (Basu, 1997), raises the question of the quality of information carried in these documents. It has always been a matter of debate on the relevance of the financial statements for investing in financial assets due to the emphasis on recording anticipated losses but not the profits (Stober, 1996; Beaver & Ryan, 2000; Yuan & Jaing, 2008).

The need for additional contrivances in drawing out valuable information from the financial statements to bring it closer to its current values calls for a lucid presentation of the financial statements supported with the relevant information. Accounting information is value-relevant when it supports stakeholders in their investment decisions.

K. P. Venugopala Rao, Professor, Symbiosis Centre for Management Studies, NOIDA, Symbiosis International University, India. (Corresponding author)

Farha Ibrahim, Financial Analyst, G D Research, India.

Nidhi Phutela, Assistant Professor, Symbiosis Centre for Management Studies, NOIDA, Symbiosis International University, India.

Accounting standard setters seek to overcome the shortcomings of historical records and a conservative approach by prescribing standards that reflect a fair view of a firm's financial position (Bray, 2001). India adopted uniform international accounting standards to improve the quality of financial information and make the financial markets investor-friendly. It introduced Indian Accounting Standards (Ind AS) in convergence with the International Financial Reporting Standards (IFRS) in 2016. This paper examines the relevance of accounting information in determining the market price of the shares in the Indian markets after introducing the Indian Accounting Standards (Ind AS). It contributes to the existing body of knowledge in ascertaining the firm-specific accounting information that influences the market price of the shares by employing the modified Ohlson model (Penman et al., 2007).

1. LITERATURE REVIEW

The incessant flow of information from several quarters of the market gets impounded in the share price, giving it a specific direction that reflects investors' sentiments (Ball et al., 1993) and in the process generates volatile trades. Markets react to accounting information based on their efficiency in transmitting the information. A region's business environment, which includes economy, market structure, and socio-political situation, influences the value relevance of accounting information. Studies of the value relevance and the market environment across the economies reveal differing results, and it is observed that the accounting information has relative usefulness in advanced economies (Battacharya et al., 2003). The relation of accounting information in the financial markets was found to be lower in an environment where countries adopted bank-oriented financial systems as opposed to market-oriented financial systems. The nations where the accounting standards were heavily influenced by the government policies, leaning to fulfill the social and political objectives, found the relevance of accounting information to be of little value (Choi & Mueller, 1992). The economies that are largely dominated by the tertiary sector and those working closely with the private sector in framing their economic policies derive value from the accounting information. Firm-specific characteristics and their accounting policies influence the presentation of financial statements. Studies on the factors affecting the value relevance of accounting information in Tehran suggest that factors like profitability, size, earnings stability, and firm growth influenced the value relevance of accounting information (Nayeri et al., 2012). Whereas, it was found that there was a reduction in the value of accounting information when the firms engaged in earnings management (Whelan & McNamara, 2004). As GAAP-based financial reporting differs by region, there is

a high possibility of misinterpretation and alteration of outcomes without the knowledge of local GAAP. To reduce the asymmetry in the accounting information arising out of different accounting practices across the globe, the introduction of a single set of accounting standards, International Financial Reporting Standards (IFRS), is well received by many economies. Studies on the relevance of financial information based on the IFRS revealed that the fair value accounting is more relevant and transparent. A sample of 21 countries for the period 1994 to 2003 selected for the study by Barth Landsman and Lang (2008) on the presentation of financial information disclosed that the introduction of IFRS increased the accounting quality and carried value relevance against the reporting in domestic GAAP. While, there was no significant improvement in the quality of information on the adoption of IFRS in heavily enforced countries (Ahmed et al., 2013). The results of a study conducted to investigate the influence of IFRS on publicly traded Indonesian banks from 2007–2013 revealed that the value relevance and risk relevance of accounting information declined after the adoption of IFRS, which is contrary to the hypothesis that reporting as per IFRS improves the quality of accounting information (Anggraita et al., 2020). Similar results were found in the case of US banks under fair value accounting; the IFRS was found to be less value relevant when compared to reporting in GAAP (McInnis et al., 2018). The reliability of the accounting value was found to negate the benefit of value relevance due to the fair value estimation error associated with the fair value gains or losses (Barth, 1994) in contradiction to the findings in the Chinese markets (Bao & Chow, 1999). IFRS exerted lesser influence on the relevance of accounting information in the smaller, less liquid, and weakly enforced capital markets (Ali & Hwang, 2000). Knowledge of the firm-specific information in determining the market price of financial instruments can make investment

decisions a breeze. Profitability ratios are the most popular and frequently used accounting information variable (Bhatia & Dhamija, 2015). Studies in this direction reveal a significant negative association of earnings per share (EPS) and book value per share (BVPS) with the market value of a firm (Clarkson et al., 2009; Oyerinde, 2009; Alfaraih & Alanezi, 2011). Contrary to this, book value and EPS positively influenced the market price of the share and was found value relevant (Clarkson et al., 2011; Bhatt & Sumangala, 2012; Suadiye, 2012). However, Hunt et al. (1997) indicated a higher explanatory power of BVPS over the EPS. The value relevance of earnings and book values was inversely related, influencing the quality of information (Burgstahler & Dichev, 1997). The study of the efficiency of the accounting information on IFRS adoption on firms listed on the Nigerian Stock Exchange revealed an incremental effect on the value relevance of book value, earnings per share, and cash flow from operations, with earnings per share having the highest incremental value (Okafor et al., 2017). Contrary to this, Chinese markets exhibited strength in the information provided by the earnings and book value to explain the stock prices of firms in pre-IFRS reporting (Bao & Chow, 1999; Chen et al., 2001). Literature indicates a mixed response of the value relevance of accounting information on investment decisions after introducing IFRS, depending on the geography, political and economic conditions. Publicly listed companies in India have embraced the Indian Accounting Standards (Ind AS) from the accounting year 2016–2017. The introduction of Ind AS in convergence with IFRS is an effort to make market investors friendly for both domestic and international players. The Indian economy has grown at a rate of 7% and has witnessed a considerable interest of investors in the capital markets, as reflected in the market capitalization of Rs.199 trillion of NSE India as of March 31, 2021, from Rs.109 trillion on March 31, 2020. The Indian Stock market is dominated by two exchanges, namely the BSE and the National Stock Exchange of India Limited (NSE India). With the robust infrastructure in a virtual environment, the NSE India attracts many participants, making it the topmost exchange for total and average daily turnover of equity shares. The derivatives segment of NSE is ranked first in the world for the year 2020 as per the Futures Industry Association (FIA) and is ranked in the fourth place globally in the cash segment by the number of trades as per the World Federation of Exchanges (WFE) for

the calendar year 2020. A large number of trades indicate the popularity of the exchange; it generates liquidity and attracts a constant flow of information, making it an ideal marketplace to capture the data for this study.

The literature review suggests that several studies have been carried out in the area of accounting relevance in the developed economies and scant studies on the influence of the uniform international accounting standards on the firm's value in Indian markets after the introduction of Ind AS, leaving a gap in the studies undertaken. This study attempts to fill the gap by exploring the influence of the financial information reported as per Ind AS in determining the price of a firm's shares.

2. AIMS

Accounting standards provide broad guidelines to present financial information aiming at clarity and comparability among firms; the policies flowing out of these standards apply to specific industries. Industries adopt accounting policies that are more suitable to their area of activity. A sector-specific study provides better insights into the value relevance of accounting information on the market prices. Since the infrastructure industry is the backbone of every burgeoning economy, it is of interest to evaluate the markets' response to the published financial statements in this sector.

The objective of this study is to investigate the influence of accounting information reported as per Ind AS in determining the market price of energy companies included in the Nifty Energy Index. The specific objectives of the study are as follows:

To evaluate the strength of financial parameters that influences the market price of equity and to examine the value relevance of the reported financial information.

3. METHODOLOGY

The NSE Energy index is chosen to study the influence of accounting information on infrastructure companies. The Nifty Energy index comprises 10 companies from the oil and gas and the power sec-

tor. As of March 31, 2021, its composition was 63.82% occupied by companies from the oil and gas sector and 36.18% from the power sector. The market capitalization of the Nifty Energy index has grown from Rs.5,03,015 crores in 2017 to Rs.9,54,366 crores in 2021, registering a growth of 13.67% CAGR during this period of five years. It is of interest to note that out of the 10 listed companies in the Nifty Energy index, 6 are included in the NIFTY 50 Index, covering 13.45% of the total market value of the flagship index.

Nine companies from the Nifty Energy Index were included in the study, excluding Adani Green Energy Ltd as it was introduced in the index from 2018. This was done to bring parity in the representation during the study period. Firm-specific data was obtained from its annual reports, and the market prices of the scrips were collected from the National Stock Exchange.

The Ohlson pricing model has been adopted to evaluate the markets' response to the accounting information flowing into the markets. Literature suggests that EPS and BVPS have sufficient information to evaluate the organization's health, and investors primarily rely on these indicators while strategizing their investments. Since cash flows are largely used in determining the value of a firm by financial analysts, cash flows in investing activities can add value relevance in determining the market price. The authors have modeled the market price as a function of Profit after Tax, Book Value Per share along with the Net Cash flow from investing activities, representing the performance, position, and information on cash spent in investments.

Initially, cross-sectional data of the individual accounting years has been analyzed, followed by the evaluation of the panel data for the study period, employing the fixed effects model.

3.1. Measure of variables

3.1.1. Dependent variable

The dependent and the independent variables considered for the study are discussed below.

Market price per share (MPS): The price determined by market participants in the stock markets is based on the information flow from various sources; it is also influenced by the information derived from the announcement of a firm's financial results. In efficient markets, the information flowing from the result announcement gets quickly factored in the market price; hence, the 5th day share price at market close is taken as the dependent variable in this model.

3.1.2. Independent variables

The independent variables employed in this model provide a summarized view of a firm's performance, its financial position for the accounting year, and its future direction.

Book value per share (BVPS): Each share's value is based on a firm's financial position. The balance sheet is a statement carrying the value of assets and liabilities at both historical and fair values, reflecting a business's financial position. Book value is one of the crucial variables that affect the market value of equity share.

Net cash from investing activities (NCFIA): The net cash from investing activities (NCFIA) indicates a firm's plans. It is a forward-looking indicator, as it provides the possible future revenues of a firm. This component of the cash flow statement reflects a firm's strategies and the direction of its plans.

Profit after tax (PAT): Efficiency in utilizing the resources in the given accounting period is reflected in the residual revenues, post the firm's expenses to meet their commitment for the resources utilized. This is the amount that shareholders can maneuver with, either giving it back or collecting as a reward for the risk they had undertaken. This assists in gauging the firm's performance.

All the variables were checked for stationarity. All the variables barring the book value per share were stationary. The log transformation of book value per share made the variable stationary; hence the log values of this variable were considered.

The variables expressed in the model are as follows:

5DMP is the Market price at the close of the 5th day after the financial results announced by a company;

LOGBVPS is Log Book Value of a share, including reserves and surplus;

PAT is the Profit after Tax;

NCFIA is the Net cash flow from investing activities.

The companies selected from the Nifty Energy Index are BPCL (Bharat Petroleum Corporation Ltd), GAIL (Gas Authority of India Ltd), HPCL (Hindustan Petroleum Corporation Limited), IOC (India Oil Corporation), NTPC (National Thermal Power Corporation), ONGC (Oil and Natural Gas Corporation), Powergrid Corporation of India, Reliance Industries Limited and Tata Power. The Government of India is the largest shareholder in BPCL, GAIL, HPCL, IOC, NTPC, and Powergrid. Reliance Industries Ltd and Tata Power have significant promoter group holdings. BPCL is taken as a reference company in the study for evaluating the fixed effects in the panel data.

The Model

$$MP_{jt} = \alpha_i + \beta_1 \log BVPS_{jt} + \\ + \beta_2 PAT_{jt} + \beta_3 NCFIA_{jt} F_t + T_j + \varepsilon_t, \quad (1)$$

MP_{jt} is the 5th day Market Price of the company j in the year t, $\log BVPS_{jt}$ is the log of the Book value per share, including the revaluation reserves of the company j in the year t, PAT_{jt} is the Profit After Tax of the company j in the year t, $NCFIA_{jt}$ is Net cash flow from investing activities of the company in the year t, ε_t is the error term, α_i is the ($i = 1….n$) is the unknown intercept for each company-specific intercepts, F_t is Fixed effect in year t, T_j is Fixed time effects for company j.

β_1, β_2 and β_3 reflect the value relevance of the BVPS, PAT, and NCFIA of a firm, respectively.

4. RESULTS AND DISCUSSION

Descriptive statistics in Table 1 indicate that the market price of the shares ranges from Rs.1,926 to Rs.35.8. The wide range in the stock price provides a good choice for investors to build a portfolio or trade. This indicates a healthy marketplace that encourages small and large market participants

to place their orders, thereby generating liquidity. The median of Rs.195.4, which is below the mean of Rs.363.8, indicates that most investments have happened in the small-priced scrips over those in the high price bracket. A high standard deviation of Rs.424 in this data is due to the distribution of scrips in the basket, which is characterized by a wide range of Rs.1,891, and the shares of lower market price traded in large volumes. The reported profits after Tax, with companies reporting Rs.13,259.9 crores on the higher side and a loss of Rs.3,242 crores, indicate that the firms in this index have mixed results in their annual performance. The average market price was a multiple of 1.6 of the mean of the book value, indicating a positive outlook among market participants in quoting above a firm's book value. The data was not normally distributed, confirmed by the Jarque Bera statistic, while this is a typical characteristic of the financial time series data.

Table 1. Descriptive statistics, 2017–2021

Descriptive Statistics	5DMP	BVPS	PAT	NCFIA
Mean	363.85	225.49	13259.90	−25221.89
Median	195.45	167.51	10056.45	−17118.70
Maximum	1926.80	1240.39	53223.00	667.60
Minimum	35.80	55.76	−3242.41	−141634.0
Std. Dev.	424.54	230.81	12245.62	28711.18
Skewness	2.27245	2.89071	1.322044	−2.111417
Kurtosis	7.44354	11.31831	4.43148	7.93866
Jarque-Bera	75.7524	192.4109	16.9506	79.1675
Probability	0.000000	0.000000	0.000209	0.000000
Sum Sq. Dev.	7930352	2344204	6.60E+09	3.63E+10
Observations	45	45	45	45

To meet the first objective of this study, the Pearson correlation is employed on the market price, profit after tax, book value, and the net cash flow from investing activities at 5% significance to assess the strength in their relationship. Statistics in Table 2 show that the BVPS has a strong relationship with the market price at 0.96, followed by the strength of profit after tax that stands at 0.74. A negative correlation of 0.745 indicates that market participants relate strongly to the cash outflow due to investing activities, which supports the premise of deriving future benefits from such investments. Further, to check whether the data suffer from multicollinearity, which hampers the precision of the inferences, the Variance Inflation Factor (VIF) tool was employed. The centered VIF ranges of 2.4

to 4.7, as given in the results presented in Table 3, indicates that the independent variables do not have a linear relationship and do not suffer from multicollinearity.

Table 2. Pearson correlation

	PAT	LOGBVPS	NCFIA	5DMP
Sample: 2017–2021				
Included observations: 45				
PAT	1.00000	0.76267	−0.86674	0.73991
LOGBVPS	0.76267	1.00000	−0.72217	0.90933
NCFIA	−0.86674	−0.72217	1.00000	−0.74524
5DMP	0.73991	0.90933	−0.74524	1.00000

Table 3. Variance inflation factors

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
Sample: 2017–2021			
Included observations: 45			
NCFIA	3.47E-06	7.460472	4.169615
PAT	2.18E-05	10.48776	4.768973
LOGBVPS	3841.902	153.9876	2.479505
C	82896.46	123.5941	NA

To address the second objective of the study, the market price of the shares is regressed on the accounting variables in the cross-sectional data for five years individually. As seen in Table 4, book value of the shares has explanatory power in all the years except the year 2021. This confirms a strong relationship of BVPS with the market price,

as seen in Table 2. However, in 2021, the BVPS is positive and statistically significant above 10% in determining the association of book value with the market price of the shares. Whereas the explanatory power in the PAT and NCFIA was found to be insignificant in four years, 2017, 2018, 2020, and 2021. R-squared of 0.84 and above in all the years indicates a good fit of the variables in the model.

During the study period, the results of the year 2019 are exceptional, as all the accounting variables, i.e., BVPS, PAT, and NCFIA, have demonstrated their influence in explaining the market price. From the results of the five years, it is observed that the book value of the scrip has a positive influence on the share price. The PAT and the NCFIA exhibited significant explanatory power in 2019. The negative PAT coefficient may be due to the growing enthusiasm of market participants in driving the share price in anticipation of good performance ahead of the result day, which later gets factored in the market price on the fifth day after the announcement of the results.

The results suggest that all the accounting variables explain the market price variability only in the year 2019. However, book value per share has been consistent in providing direction in the market price to market participants across the study period. Each year's results have mixed

Table 4. Year-wise cross-sectional regression

Variable		2017	2018	2019	2020	2021
Total observations: 9						
LOGBVPS	Coefficient	551.8467	433.4393	361.6146	515.8123	432.7573
	Std. Error	81.80677	119.3182	68.98545	195.4312	227.7318
	t-Statistic	6.745734	3.632633	5.241896	2.639355	1.900293
	Prob.	0.0011	0.0150	0.0033	0.0460	0.1158
PAT	Coefficient	−0.024593	0.003339	−0.023152	0.016804	−0.008611
	Std. Error	0.010813	0.009706	0.005278	0.010213	0.019231
	t-Statistic	−2.274389	0.343977	−4.386664	1.645350	−0.447769
	Prob.	0.0720	0.7449	0.0071	0.1608	0.6731
NCFIA	Coefficient	−0.009807	0.001819	−0.014966	0.003800	−0.008072
	Std. Error	0.004899	0.003700	0.002643	0.004584	0.005736
	t-Statistic	−2.001650	0.491606	−5.662448	0.828914	−1.407286
	Prob.	0.1017	0.6438	0.0024	0.4449	0.2184
C	Coefficient	−2344.505	−1872.866	−1548.044	−2368.377	−1958.578
	Std. Error	384.0671	550.2647	329.2354	899.1649	1029.613
	t-Statistic	−6.104415	−3.403572	−4.701938	−2.633975	−1.902247
	Prob.	0.0017	0.0192	0.0053	0.0463	0.1155
R-squared		0.930590	0.841822	0.978707	0.907483	0.908530
Adjusted *R*-squared		0.888944	0.746915	0.965930	0.851972	0.853647

results individually, with only book value influencing the dependent variable in four of the five years at 5% significance, but failed to do so in 2021. The other accounting variables could not prove to help determine the market price for four years. However, the overall results were found to be inconsistent across the study period when studied year-wise.

It may be noted that the Indian economy was influenced due to significant policy shifts in the financial system and indirect taxation like the demonetization in the year 2016, followed by the introduction of the Goods and Services Tax (GST) in 2017. The introduction of these legislations during the study period saw a noticeable impact on the way the banking transactions took place. It also affected the consumption and investments; hence, it makes each year unique during this study period. Further, to study the influence of the accounting information on the market price, which varies across each year individually during the study period due to the inherent quality of individual company's finan-

cials, the fixed effects model was employed. This helps to control the time-specific effects and the unobservable inherent strengths of each company's financial reporting due to its accounting policies while avoiding the bias in the slope of the accounting variables included in the model.

As Table 5 shows, the addition of the dummy variables in the fixed effects model demonstrates a good fit of 96.6%. It is noticed that the variation in the market price was explained by the BVPS and NCFIA. The BVPS and NCFIA were statistically significant at 5%. They had a positive and negative influence on the share price, respectively.

The analysis of data in the long run controlling the time effects indicates the influence of the BVPS on the market price of the share. For an incremental unit of change in the book value, the change in the share price was Rs.384.6, whereas the net cash from investing activities influenced the market price by Rs -0.004. The Profit after Tax remained insignificant, confirming the findings of Brown and Kumar (2003).

Table 5. Fixed effects model

Model Description			
Estimation Method			**FixTwo**
Number of Cross Sections			9
Time Series Length			5
Fit Statistics			
R-Square			0.9749
Parameter Estimates			
	Estimate	**Standard Error**	**t Value**	**Pr**
Company				
GAIL	−128.658	100.9	−1.28	0.2123
HPCL	−174.949	83.6297	−2.09	0.0453
IOC	−233.365	97.1443	−2.40	0.0229
NTPC	−319.716	78.0377	−4.10	0.0003
ONGC	−332.234	72.6179	−4.58	0.0001
POWERGRID	−628.794	103.3	−6.08	0.0001
RELIANCE	−191.174	66.9611	−2.86	0.0079
TATA POWER	−173.34	203.5	−0.85	0.4013
Period				
2018	120.3529	41.4706	2.90	0.0070
2019	37.27114	42.2120	0.88	0.3845
2020	31.39905	40.2640	0.78	0.4418
2021	33.3105	45.5530	0.73	0.4705
Variable				
Intercept	−1600.94	329.5	−4.86	0.0001
PAT	0.005245	0.00305	1.72	0.0961
LOGBVPS	384.6322	76.7407	5.01	0.0001
NCFIA	−0.00456	0.00118	−3.85	0.0006

The fixed effects were employed across companies with reference to BPCL to evaluate the intrinsic nature of reporting of individual firms' information. The results revealed that the information flowing out of the companies' financial statements in this sector was comparable. The information from the financial statements of six companies, namely HPCL, IOC, NTPC, ONGC, and Reliance Industries, was relevant at 5% significance. Two companies, Gail and Tata power, were not significant in providing the information when compared to BPCL.

The influence of the time period on the market price was significant in the year 2018, it was indicating this period to be a favorable year compared to 2017. This could be attributed to the early phase of reforms introduced during 2016 and 2017. However, the following years from 2019 to 2021, were not significant in explaining the impact on the market price.

CONCLUSION

The study was undertaken to determine the strength and influence of accounting information reported as per Ind AS on the market price of shares in the Nifty Energy index. The modified Ohlson model suggests that BVPS positively influenced the market price, whereas the cash flow in investing activities had a negative impact. The intrinsic value captured in book value remains a vital source of information in determining the market price of the shares. The negative value of the NCFIA confirms the enterprising approach of investors in determining the share price. However, profit after tax was not relevant in determining the share price. Since the firm's performance is an outcome of firm-specific and external factors determined during a specific period, the market participants have laid emphasis on the information that reflects the value in the longer run. The firm's Book Value captures the firm's intrinsic value and contributes to the direction of the market price of the share. The control of the unobservable factors among the firms indicates that the nature of the business and the ownership determined the value relevance of accounting information.

The study argues that information from book value per share and net cash flow from investing activities presented as per Ind AS is value relevant for investors, and metrics provide the direction of investments in the capital markets.

AUTHOR CONTRIBUTIONS

Conceptualization: K. P. Venugopala Rao.
Data curation: Farha Ibrahim.
Formal analysis: Farha Ibrahim.
Investigation: Farha Ibrahim, Nidhi Phutela.
Methodology: K. P. Venugopala Rao.
Resources: K. P. Venugopala Rao.
Software: Farha Ibrahim, Nidhi Phutela.
Supervision: K. P. Venugopala Rao.
Validation: K. P. Venugopala Rao.
Visualization: Nidhi Phutela.
Writing – original draft: K. P. Venugopala Rao.
Writing – review & editing: Farha Ibrahim, Nidhi Phutela.

REFERENCES

1. Ahmed, S. A., Neel, M., & Wang, D. (2013). Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. *Contemporary Accounting Research, 30*(4), 1344-1372. https://doi.org/10.1111/j.1911-3846.2012.01193.x

2. Alfaraih, M., & Alanezi, F. (2011). The Usefulness Of Earnings And Book Value For Equity Valuation to Kuwait Stock Exchange Participants. *International Business & Research Journal, 10*(1), 73-90. https://doi.org/10.19030/iber.v10i1.929

3. Ali, A. & Hwang, L. (2000). Country-Specific Factors Related to Financial Reporting and the Value Relevance of Accounting Data. *Journal of Accounting Research, 38*(1), 1-21. https://doi.org/10.2307/2672920

4. Anggraita, V., Rossieta, H., Wardhani, R., & Wibowo, B. (2020). IFRS adoption on value-relevance and risk-relevance of accounting information among Indonesian banks. *Pertanika Journal of Social Sciences and Humanities, 28*(1), 515-532.

5. Ball, R., Kothari, S., & Watts, R. (1993). Economic Determinants of the Relation between Earnings Changes and Stock Returns. *The Accounting Review, 68*(3), 622-638.

6. Bao, B. H., & Chow, L. (1999). The Usefulness of Earnings and Book Value in Emerging Markets: Evidence from Listed Companies in the People's Republic of China. *Journal of International Financial Management and Accounting, 10*(2), 85-104. https://doi.org/10.1111/1467-646X.00045

7. Barth, M. (1994). Fair Value Accounting: Evidence from investment securities and the market valuation of banks. *The Accounting Review, 69*(1), 1-25. Retrieved from https://www.gsb.stanford.edu/faculty-research/publications/fair-value-accounting-evidence-investment-securities-market-valuation

8. Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467-498.

9. Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics, 24,* 3-37. https://doi.org/10.1016/S0165-4101(97)00014-1

10. Battacharya, U., Daouk, H., & Welker, M. (2003). The World Price of Earnings Opacity. *The Accounting Review, 73*(3), 641-678.

11. Beaver, W. H., & Ryan, S. G. (2000). Biases and Lags in Book Value and Their Effects on the Ability of the Book-to-Market Ratio to Predict Book Return on Equity. *Journal of Accounting Research, 38*(1), 127-148. https://doi.org/10.2307/2672925

12. Bhatia, M., & Dhamija, S. (2015). Voluntary Disclosure of Financial Ratios in India. *South Asian Journal of Management, 22*(1), 28-49.

13. Bhatt, P., & Sumangala, J. K. (2012). Impact of Earnings per share on Market value of an equity share: An Empirical Study in Indian Capital Market. *Journal of Finance, Accounting and Management, 3*(2), 1-14. https://www.proquest.com/openview/1344cae23cd384d16a4d2fc6d8acdff3/1?pq-origsite=gscholar&cbl=2032035

14. Bray, C. (2001). SEC looking at pro forma earnings with 'purpose in mind'. *Dow Jones Newswires, November 8.*

15. Brown, L. D., & Sivakumar, K. (2003). Comparing the Value Relevance of Two Operating Income Measures. *Review of Accounting Studies, 8*(4). https://link.springer.com/article/10.1023/A:1027328418571

16. Burgstahler and Dichev. (1997). Earnings, Adaptation and Equity Value. *The Accounting Review, 72,* 187-216. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2634

17. Chen, C. J. P., Chen, S., & Su, X. (2001). Is accounting information value relevant in the emerging Chinese stock market? *Journal of International Accounting, Auditing & Taxation, 10* (1), 1-22. https://doi.org/10.1016/S1061-9518(01)00033-7

18. Choi, F. D. S., & Mueller, G. G. (1992). *International Accounting.* New Jersey: Prentice-Hall.

19. Clarkson, P., Hanna, J. D., Richardson, G., & Thompson, R. (2011). The impact of IFRS adoption on the value relevance of book value and earnings. *Journal of Contemporary Accounting and Economics, 7*(1), 1-17. https://doi.org/10.1016/j.jcae.2011.03.001

20. Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics, 18*(1), 3-42. https://doi.org/10.1016/0165-4101(94)90016-7

21. Fama. E. F., Fisher L., Jenson, M., & Roll, R. (1969). The Adjusted of Stock Price to New Information. *International Economics Review, 10*(1), 21. https://doi.org/10.2307/2525569

22. Hunt, A., Moyer, S. E., & Shevlin, T. (1997). *Earnings Volatility, Earnings Management, and Equity Value* (Working Paper).

23. McInnis, J. M., Yu, Y., & Yust, C. G. (2018). Does Fair Value Accounting Provide More Useful Financial Statements than Current GAAP for Banks? *The Accounting Review, 93*(6), 257-279. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3082333

24. Nayeri, M. D., Ghayoumi, A. F., & Bidari, M. A. (2012). Factors Affecting the Value Relevance of Accounting Information. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 2*(2), 76-84. https://econpapers.repec.org/article/hurijaraf/v_3a2_3ay_3a2012_3ai_3a2_3ap_3a76-84.htm

25. Okafor, T. G., Ogbuehi, A., & Anene, N. O. (2017). IFRS Adoption and the Value Relevance

of Accounting Information in Nigeria: An Empirical Study. *Journal of Modern Accounting and Auditing, 13*(10), 421-434. http://www.davidpublisher.com/Public/uploads/Contribute/5a5ff7fa4f7f9.pdf

26. Oyerinde, D. T. (2009). Value Relevance of Accounting Information in Emerging Stock Market in Nigeria. *Proceedings of the 10th Annual International Conference of International Academy of African Business and Development (IAABD)*, 19-23 May 2009, Uganda.

27. Penman, S. H., Richardson, S. A., & Tuna, I. (2007). The book-to-price effect in stock returns: Accounting for leverage. *Journal of Accounting Research, 45*(2), 427-467.

28. Stober, T. (1996). *Do Prices Behave as if Accounting Book Values are Conservative? Cross-Sectional Tests of the Feltham-Ohlson (1995) Valuation Model* (Working Paper). University of Notre Dame.

29. Suadiye, G. (2012). Value Relevance of Book Value & Earnings Under the Local GAAP and IFRS: Evidence from Turkey. *Ege Academic Review, 12*(3), 301-310. https://econpapers.repec.org/article/egejournl/v_3a12_3ay_3a2012_3ai_3a3_3ap_3a301-310.htm

30. Whelan, C., & McNamara, R. (2004). *The Impact of Earnings Management on the Value-Relevance of Financial Statement Information.* http://dx.doi.org/10.2139/ssrn.585704

31. Yuan, J., & Jaing, Y. (2008). Accounting information quality, free cash flow and over investment: A Chinese study. *The Business Review, 11*(1),159-166.