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Value Relevance of Financial Derivatives: Evidence from Nigerian Listed Banks

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Abstract

The usefulness of accounting information to the investors can be measured by the relevance of such information. In literatures relevance is operationalized by the value relevance which is the extent to which accounting information summarises the information in stock prices. The primary objective of this paper was to ascertain the relevance of financial derivates instruments. The paper uses a sample of fourteen quoted banks in the Nigerian stock Exchange over the period 2012 to 2015. Using a modification of the standard Ohlson model which regresses earnings and book value deflated by shares outstanding at year end, the variables of financial derivative assets and liabilities are in included in the standard model. The paper employes a Panel regression method to accommodate the heterogeneity of the sample data. Findings in this study indicate that derivative assets do not have a statistical significant association with share prices of listed commercial banks in Nigeria. The analysis reveals that except for the variable of earnings per share and firm size, all other independent variables of derivative assets, derivative liabilities and book value per share did not show any significance value relevance in the Nigerian commercial banks during the period of under consideration. Premised on this, the study recommends that investors should pay close attention to the book value per share in the financial statements rather than the net derivatives with a view to maximizing wealth

Keywords: Derivatives, Value Relevance, Ohlson Model, Panel Regression

INTRODUCTION

Following the Financial Crises that occurred in the Asian continent during the period of 1997/98 in addition to the global financial crises of 2008, the relevance of financial derivatives in hedging the adverse impact of interest and exchange rates on firm's risk and value became more glaring (Paligorova & Staskow 2014). Incredibly notable, even after manifest concerns from regulators and policy makers about substantial losses arising from the use of derivatives, non-financial firms still employ financial derivatives for managing firm's risk (Fabin 2010). The increase in the use of financial derivatives as a channel to curb financial risk, has diverted the interest of practitioners and academicians from the traditional perspective of finding solutions to risk management. More importantly is the question as to the value relevance of financial derivates, the extent to which such financial derivates are associated with firm value.

In defining financial derivatives, Fabin (2010) considered market imperfections and pointed out that derivative usage for hedging firm's exchange rate and interest rate risk will reduce firm's risk thereby maximize firm's value. From a different perspective, Black and Scholes (1973) noted that corporations employ financial derivative instruments for risk taking. However, in situations where firm's value for equity holders matches the payoff pattern of the out-of the money option, managers are more likely to increase the risk of the firm in order to maximize the value of their option thereby resulting in a negative firm value. In the cases of highly levered firm, Meckling (1976) stated that an incentive to shift funds from bondholders to equity holders requires undertaking highly risky projects which may invariably put up an upward and downward pressure on firm's risk and its value respectively.

Hull (2009) described derivatives as financial instruments whose intrinsic value depends on the value of a number of underlying variables. Usually the variables underlying derivatives are the prices of the traded assets. These instruments are basically designed to achieve results that are economically viable when there is a price movement on the underlying security, index, interest rate or commodity. Futures are seen as standardized contracts in which the purchaser is allowed to buy or sell a specific quantity of a commodity, financial instrument or index at a specified price. A swap is an exchange of payment streams among two parties for a certain period of time (Crawford et al. 1997). According to International Accounting Standards (IAS) 32 - Financial Instruments Presentation, a financial instrument can be defined as "any contract that gives a rise to a financial asset of one entity and a financial liability or equity instrument of another entity" Mirza & Holt, (2011). IAS 39 (Financial Instruments: Recognition and Measurement) requires derivatives to be measured at fair value to provide more useful information in the balance sheet Mirza & Holt, (2011). IFRS 13 (Fair Value Measurement) defines fair value as a "price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date" IFRS 13, (2011). As indicate by

Mirza & Holt, (2011) the best evidence of fair value may be found in a published price quotation in an active market. For assets and liabilities that are not quoted in active markets, fair value is determined by different valuation techniques, such as discounted cash flow models.

Following Omokhudu & Ibadin (2015) value relevance of accounting information addresses the degree to which accounting information summarizes the information that is impounded on financial variables. But Barth, Beaver & Landsman (2001) defined value relevance as the capacity of financial statement information to hold or summarize information that influences share value.

Prior research study on value relevance concentrated extensively on stock markets of UK and US. (Barth & Clinch, 1996; Barth et al., 1999; Barth, 1994) but due to the rising importance with more demand for financial reporting within the international capital markets, subsequent related research studies have examined the value relevance of financial reporting in stock exchanges considered to be non-US developed markets Graham et al., (2000), while recent times studies have been conducted in other emerging markets (Chen et al., 2001; Kargin, 2013; Mironiuc et al., 2015; Umoren & Enang, 2015; Păşcan, 2015).

While a number of empirical studies on the value relevance of financial statements, have addressed traditional accounting information of earnings, book value, such items as the value relevance of derivative transactions in the financial statements have not been given attention. Empirical research studies involving firm value relevance in relation to financial derivatives in developing countries like Nigeria, is relatively scarce. More so, most studies that examine value relevance of firms in relation to derivatives in developed countries have documented mixed, inconclusive and quite conflicting findings. While there is a extensive literature as to why corporate firms use derivatives, there is a dearth of empirical research into the motivation for banks and other financial institutions to use derivatives in developing countries like Nigeria. An indebt understanding as to the workability of financial derivatives is very important so as to give light to how and why banks employ them in its operations. Against this back drop, the study seeks to examine value relevance of accounting derivatives in listed Nigerian commercial banks.

This study adopted stock price regression model introduced by Ohlson (1995), and often employed in value relevance studies after detailed empirical test validation (Barth et al., 2001; Gordon, 2001; Mechelli & Cimini, 2014). This paper using the Ohlson (1995) model establishes the value relevance of financial derivative instrument, using share prices as dependent variables and the explanatory variables of earnings, book values and derivative assets and liabilities and the variable of firm size as a control variable. The remainder of the paper is organized as follows: In section II we provide appropriate conceptual clarifications and prior literature on value relevance of accounting derivatives. Section III reviews an appropriate framework for the study. This will be followed by section IV which provides a discussion of research method with the analysis of results. We end with a conclusion and proffer some recommendations.

2. Literature Review

The 19th century accounting system was shaped by industrial capitalism, while the end of the twentieth century was considerably dominated by the expansion of financial claims. Both financial and operating assets involve varying processes in creating value. The value of operating assets is shaped through a firm's operations, whereas, for financial assets the returns and risks are subject to larger risks caused by changes in the market environment and determined by market expectations and macroeconomic trends. Recently fair valuation of certain financial instruments is fast becoming a leading trend, but no particular theory have been able to recognize and measure the value and returns of financial assets – which are entirely different from tangible assets such as plant, property and equipment – and how to present them accurately in the balance sheet and income statement. For these reasons, valuation and income recognition of financial assets need not be approached by an extension of the traditional accounting framework and concepts; hence it requires a different framework in order to provide useful information on the underlying economic activity. With this kind of framework, the effectiveness of corporate governance, efficiency of capital markets, and the level transparency and faithfulness of financial transaction will rise. Ishikawa, (2005)

The frame work of the International Financial Reporting Standards (IFRS) has it that, useful financial information relies on relevance and faithful representation. The quality of usefulness is complete if it is comparable, verifiable, timely and understandable. According to IFRS Framework 2010, the dual factors of relevance and faithful representation are the basic qualitative characteristics in financial reporting.

Landsman (2007) reveals that disclosed and recognized fair values are powerful information for investors, but the height of in formativeness is influenced by the amount of measurement error and by the source of the estimates – i.e. from management or external appraisers. In practice, fair value is well defined when an active market for the asset or liability exist, in this scenario, it becomes difficult to separate an asset or liability's fair value from its value-in-use to the business entity. For example, the estimated fair value of a non-traded swap instrument to a bank depends on the existing assets and liabilities on the bank's balance sheet Landsman, (2007).

Blakespoor et al. (2013) prove that the fair values of banks' investment securities, loans, and derivatives are

informative for their historical cost equivalents in explaining share prices. Their findings demonstrate that the relationship between credit risk and leverage becomes stronger as the number of financial instruments measured at fair value increases, and fair values are most highly associated with credit risk determinations.

The study, carried out by Ayzer & Cema (2013) reveal that both book values and earnings are statistically significantly value relevant in deciding stock prices in the Turkish Stock Markets. Both variables of book values and earnings were shown to be individually significantly value relevant, but the book values had higher explanatory power than earnings. In a related study Halonen, Parlovic & Pearson (2013) employ a simplified Ohlson's (1995) model, to investigate value relevance and noted that during the period of analysis, value relevance of book values had increased but the value relevance of earnings had decreased.

Following Ball & Brown (1968) value relevance research study is the use of price or return data to identify value drivers that impact prices or returns on the market value of stocks. Researchers throughout history of empirical investigation have a common understanding that value relevance research empirically investigates the usefulness of accounting information to stock investors (Collins et.al, 1997; Barth, Beaver, & Landsman, 1998; Chen, Chen, & Su, 2001; Gjerde et al., 2005; Francis & Schipper, 1999;).

Pereia & Thrikawala (2010) reveals that earnings per share, earnings yield and return on equity have not declined in value relevance. Glezakos, Mylonakis, & Kafouros (2012) sampled 38 listed companies in the Athens Stock Market for the period 1996-2008. They examined the link between profit per share and book-value and shares value and concluded that the EPS and book-value significantly influence on the share price.

Habib & Elhamaney (2009) examine the value relevance of accounting information in Egyptian equity market. A positive correlation between cash flow and equity market values in Egypt was evident. The study of Dahmash, Durand & Watson (2009) presents clear evidence that identifiable intangible assets, including the intangible assets of goodwill, are value relevant but not reliable.

Bhat (2008) examine the variance contribution of fair value gains and losses relative to net income in driving stock returns by employing uses variance decomposition analysis. The study finds that fair value gains and losses are statistically significant in explaining the volatility of unexpected returns and observed that relative importance of fair value gains and losses to net income is a direct function of disclosure.

In the empirical study of Ng, Gul & Mensah (2007) their finding show that value relevance of earnings per share for all three sub-periods in which the sample of observations was partitioned is statistically significantly different. The study analyses the effect of value relevance on accounting earnings. Furthermore, Berk & DeMarzo (2007) emphasized that book value of equity do not accurately assess the actual value of the firm's equity. They highlighted that market value of a stock dose not dependent on the historical cost of a firm's assets. The study claims that market value of stocks is dependent on what investors expect the underlying assets to produce in the future.

In examining the value relevance of accounting earnings and components in the Tunisia Stock Exchange, Ayed & Abaoub (2006) employed a data sample set of 262 firm-years; over the period 1997 to 2004. Empirical evidence portray that the variable of operating income before taxes, special items and income taxes are value relevant for firm valuation but cash flow from operation and accruals were seen not to be value relevant.

Following the empirical study of Ahmed et al., (2006) their findings provide supporting evidence that the fair values of cumulative financial instruments are value relevant and the fair value gains and losses are positively associated with contemporary stock prices. The extant evidence indicates that fair value information of investment securities and loans are value relevant.

Aboody & Lev (1998) examined the value relevance of intangible assets in the case of software capitalization. Empirical revelation indicates that intangible assets are significantly associated with capital market variables and future earnings. They further conclude that software capitalization summarizes information relevant to investors.

The study of Nelson (1996) provides evidence that fair value disclosures have no incremental power relative to book value, with the exception of investment securities, but Venkatachalam (1996) finds that banks' derivative fair value disclosures are value-relevant. Both studies corroborated Barth (1994) which investigated how disclosed fair value estimates of banks' investment securities, and securities gains and losses are reflected in share prices. Findings reveal that fair value estimates of investment securities provide significant explanatory power beyond that provided by historical costs.

Theoretical Framework

The study adopts the Ohlson (1995) valuation model due to its relevance and wide popularity. The Ohlson Model is hinged on the fundamental analysis principles of which are a combination of the discounted cash flow approaches, and the book value of assets methods. The model employs book value of assets, abnormal earnings and other information to determine the value of a firm. It expressed the market value of a firm as a linear function of its book value, abnormal earnings together with another information dynamics variable. Ohlson model was described under the following assumptions:

(a) *The Present Value Relation Assumption*: This implies that the market value of the firm's equity equals

to the present value of its expected future dividends discounted at the risk-free interest rate, and this assumption was based on the original classic dividend discount model.

(b) **The assumption of Clean Surplus Relation**: This follows that all changes in the book value of equity are reported either as accounting earnings or dividends. Accordingly, the relationship between book value of equity, earnings, and dividends can be expressed as follows:

Where $b_t = book$ value of equity at date t; $\chi_t = earnings$ for period t; $d_t = dividends$ paid at date t. According to Ohlson, book value of equity at date t-1 multiplied by the risk free rate is considered as the normal earnings of the firm. Then the earnings for the period t minus the normal earnings can be defined as abnormal earnings.

$$\chi_t^a = \chi_t - rb_t \tag{2}$$

Where χ^a_t = abnormal earnings for period t

(c) **The Assumption of Linear Information Dynamics**: This assumption is the most controversial assumption which imposed a time-series structure on the abnormal earnings (that is, the relationship between the current and the next period's abnormal earnings) as linear and stationary. Ohlson defines this abnormal relation as the difference between accounting earnings and normal earnings. Here, normal earnings are the net book value of equity multiplied by the risk free rate. The linear information dynamic (models) which assumes a time-series structure on the abnormal earnings are as follows:

$$\chi_{t+1}^{a} = \omega_{11}\chi_{t}^{a} + \nu_{t} + \varepsilon_{1t+1}'$$
(3)
(4)

Where $v_{t+1} = \gamma v_t + \varepsilon'_{2t+1}$ χ^a_t : Abnormal earnings of year t ($\chi^a_t = \chi_t - rb_t$)

 v_t : Other information variable at time t

 ω_{11} : Persistence of abnormal earnings ($0 < \omega_{11} < 1$)

 $\hat{\epsilon}_{1t}, \hat{\epsilon}_{2t}$: Error terms.

Furthermore, Ohlson (1995) show that with the standard assumptions underlying the dividend discount model together with the above mentioned Equations (1) and (2), the model equation can be written as follows: $P_t = bv_t + \alpha_1 \chi^a_t + \alpha_2 V_t$ (5)

Where:

 P_t = the market value of the firm's share equity for the fiscal vear-end t.

 bv_t = the book value of the firm's share equity at the end the fiscal year-end t,

 χ^{a}_{t} = the abnormal earning per firm's share during the year t, (defined as above),

 V_t = other non-accounting value relevant information for the fiscal year-end t,

 α_1 , α_2 , = coefficients taking values that are a function of the linear information dynamics models and the risk free rate for the firms.

3. Methodology

3.1 Sample Selection and Data Collection

This study basically seeks to investigate the value relevance of accounting derivatives in Nigerian listed money deposit banks. The population of this study consists of 19 listed Nigerian money deposit banks, but sampled only 14 Nigerian listed money deposit banks due to availability of relevant data. A period of 5 years (2012-2016) is being considered; hence all the data collected from the 14 listed money deposit banks will be analyzed within this period. The resulting data was finally compiled by Machame Ratios.

3.2 Model Specification and Variable Definition

The model used in this study is a follow up of the empirical research by Barth, Beaver & landsman (1996): The mathematical formation of the employed model is stated below:

Firm value relevance = f (value relevance of accounting derivatives).....(1)

The stochastic representation follows as:

 $SPR_{it} = \beta_0 + \beta_1 D\dot{A}_{it} + \beta_2 DL\dot{i}_{it} + \beta_3 EPS_{it} + \beta_4 BVPS_{it} + \beta_5 SIZE_{it} + \varepsilon_{it}....(2)$ Where:

 $\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are the coefficients of the parameters due for estimation.

SPR = Share Price, proxy for value relevance DA is Derivative Assets DL Derivative Liabilities EPS = Earnings per Share BVPS = Book Value per Share SIZE = Size of the Firm ε = Stochastic error term, β_o = slope/intercept i = cross-section and t = time period,

Variable Definition and Measurements

Variables	Apriori	Туре	Source	Scale
Value relevance		Dependent	Annual	Measures with the share price of the listed banks
			Report	as at 31 st December annually
Derivative assets	Positive	Independent	Annual	Measures as derivative assets divided by total
			Report	assets
Firm size	Positive	Independent	Annual	The natural logarithm of total assets of the
			Report	companies.
Derivative	Positive	Independent	Annual	Measures as derivative liability divided by total
liabilities			Report	assets
Book value per	Positive	Independent	Annual	Value of equity divided by outstanding shares.
share			Report	
Earnings per	Positive	Independent	Annual	Profit after tax divided by outstanding shares
share			Report	

Source: Researcher's Compilation 2017

4. Empirical Results

Descriptive Statistics

The Table below shows the descriptive statistics of the listed banks that make up the sample of study.

Table 2: Descriptive Statistics						
	SPF	EPS	BVPS	DAR	DLR	FSIZE
Mean	7.93	1.29		0.23		
			9.36		0.11	9.11
Median		0.90		0.00		
	4.90		9.09		0.00	9.07
Maximum	28.68	4.67	22.44	4.48		
					1.41	9.68
Minimum		-2.99		0.00		
	0.50		0.11		0.00	8.39
Normality (P-value)		0.00		0.00		
• • • •	0.00		0.00		0.00	0.00
Observations						
	56	69	69	69	69	69

The mean value of share price (proxy for firm value relevance) of the sampled listed banks is 7.93, while its median value is 4.90. The maximum value of share price is 28.68 while the minimum value is 0.50. This indicate that all the banks used in this study offer their stocks for sale at a certain price that is higher than 0.50. The mean value for earnings per share (EPS) is 1.29 while its median value is 0.90. This suggest that banks with EPS more than or equal to 1.29 on the average are more profitable than banks with EPS less than 1.29. The maximum value of earnings per share is 4.67 while its minimum value is -2.99 which implies that some banks were observed to be far more profitable in terms of average EPS value while other banks encountered losses.

The mean book value per share (BVPS) is 9.36 while its median value is 9.09 revealing that banks with BVPS of 9.36 and above has high number of assets as compared to its liabilities. The maximum value of BVPS is 22.44 while its minimum value is 0.11 connoting that some banks held very high assets than its liabilities. The descriptive statistics showed that on the average the value of derivative assets (DAR) is 0.23 while its median value is 0.00. Based on the result obtained from the statistics, the mean value of derivative liabilities (DRL) is 0.11 while its median value is 0.00. Firm size (FSIZE) revealed a mean value of 9.11 and the median value of 9.07 implying that banks with firm size of 9.11 and above on the average are considered to have to be big banks or larger players. The Normality p-value of less than 5% shows that all the variables where normally distributed and may be harnessed for regression analysis without any transformation.

4.1 Correlation Analysis

Table 3 below reveals the direction of association of the variables of study.

	SPF	EPS	BVPS	DAR	DRL	FSIZE
SPF	1.00					
EPS	0.74	1.00				
BVPS	0.49	0.61	1.00			
DAR	0.02	0.23	0.17	1.00		
DLR	0.02	0.10	-0.02	0.09	1.00	
FSIZE	0.39	0.63	0.82	0.19	0.01	1.00

The above results show that there exist a positive and strong association between share price and earnings per share (SPF/EPS=0.74). This positive association supports the idea that increased share price is strongly associated with increased earnings per share. There exists a positive but relatively high association between share price and book value per share (SPF/BVPS=0.49). In the case of share price and derivative assets, the association between share price and derivative BVPS=0.02). The correlation matrix table above show a positive but very weak association between share price and derivative liabilities (SPF/DLR=0.02). The variable of Share price and firm size revealed a positive but relatively high association (SPF/FSIZE=0.39). But the association between earnings per share and book value per share (EPS/BVPS=0.61) is strong and positive.

Presentation of Panel Regression Results

Table 4: Panel regression result (All banks)

VARIABLES	OLS
С	-75.72(0.03)
DAR	-2.87(0.07)
DLR	-1.62(0.63)
EPS	5.25(0.0)***
BVPS	0.48(0.06)
FSIZE	8.59(0.03)*
R-Squared	0.62
F-Statistic	16.74(0.00)***
VIF Test	2.15
Heteroscedasticity	0.001(0.94)
Observation	69

Author (2017), Note: * is 5% level of significance. Values in () are the P-values

In the table above, we observed from the OLS panel regression that the adjusted R-squared value is 0.62. This reveals that about 62% of the systematic variations in the dependent variable in the paneled banks over the period of interest are jointly explained by the independent variables. This implies that the dependent variable of stock price in Nigeria cannot be completely explained by all the variables employed in this study. The unexplained part of the dependent variable can be attributed to exclusion of very important independent variables that can explain the dependent variable but are outside the scope of this study. The F-statistic value of 16.74 and its associated P-value of 0.000 shows that the OLS regression model on the overall is statistically significant at 1% level, this means that the regression model is valid and can be used for statistical inference. The table above also shows a mean VIF value of 2.15 which is less than the benchmark value of 10, this indicates the absence of multicolinearity, and this means no independent variable was dropped from the model. Also from the table above, it can be observed that the OLS results had no heteroscedasticity problem [0.01(0.94)], this means that the variations between the dependent variables are homosedastic.

Following the regression analysis result above, it is observed that the independent variable of *Bank Derivative Assets (DAR) (OLS* =-2.87(0.07)) appears to have a negative and insignificant influence on share price statistically significant at 1% level. This result agrees with prior empirical results which show that bank asset derivatives is not a major driver of deposit money banks (Eccher et, 1996; Nissim 2003; Ahmed et al. 2006) Most specifically, the results did not tally with Venkatachalam (1996), Mozes (2002) and Graham et al. (2003)

Furthermore, the independent variable of Derivative Liabilities (DLR) (OLS = -1.62(0.63)) does not significantly impact on the value relevance of commercial banks during the period of analysis. This finding agrees with prior empirical results which show that bank derivative liabilities dose not significantly drive bank value or share prices. Notable among such studies are: (Eccher et, 1996; Nissim 2003; Ahmed et al, 2006) But on the other hand the results did not correspond with the findings of Venkatachalam (1996), Mozes (2002) and Graham et al. (2003)

The empirical finding provided in the table above provides strong evidence that the variable of Earnings per share is positive and significant in impacting on value relevance in the Nigerian banking sector. This conclusion

is reached as a result of the corresponding coefficient and significant level of the variable of Earnings per share (OLS = 5.25(0.00) ***). This finding supports the empirical result of Velnamby (2010) and Pushpa & Sumangala (2010)

From the result, findings reveal that the variable of book value per share does not significantly influence firms' value relevance neither at one nor five percent level of significance during the period of analysis. Book value per share (OLS = 0.48(0.06)) as an independent variable to banks share prices (SPF) appears to have a positive and insignificant influence on share price which disagrees with the findings of Glezakos, Mylonakis, & Kafouros (2012) who found a significant positive relationship between book value per share and value relevance employing data from the Athens stock market. In analyzing the relationship between the variable of firm size and firm value relevance, the empirical analysis reveals a significant positive relationship between firm size and value relevance of accounting derivatives in the Nigerian banking sector (*Firm Size OLS = 8.59(0.03)**) which suggest that as firm size increases the magnitude of value relevance also increases.

CONCLUSION

This study provides evidence for value relevance of accounting derivatives in Nigerian listed commercial banks for a sample of 14 money deposit banks; data w collected from the annual report of each sampled bank. The method of analysis is pooled regression analysis because the data has to do with a cross section of banks over a period of time. The study includes determining the influence of derivatives assets, derivative liabilities, and accounting derivatives as a whole in relations to share prices. The study stated the various types and purposes of derivatives, how they should be represented in the financial statement of banks and whether or not the presentations of derivatives as it relates to listed Nigerian banks, tends to determine whether the use of derivatives affect the banks, as well as to determine if the use of derivatives will increase the profitability of the bank in terms of its share price. The derivatives assets and derivatives liabilities were evaluated to ascertain whether they influence the financial statement of listed banks.

After a careful analysis, finding suggests that the variable of derivative assets and derivative liabilities do not have significant effect on the price value of stocks among Nigerian commercial banks during the period of analysis. The analysis also suggest that only the variables of accounting derivative of earnings per share (EPS) and firm characteristic of firm size (FSIZE) has a significant relationship with firm stock price.

RECOMMENDATION

Against the backdrop of these findings, the researcher carefully proffers the following recommendations:

- Investors and shareholders that are interested in the firms share price should pay less attention to accounting derivatives including: derivative liabilities, and derivative assets. Investors and shareholders should pay no close attention to them bearing on the fact that they do not affect the prices of stocks of the banks in concern.
- Also since the variable of book value per share reveals an insignificant effect on share prices of commercial banks in Nigeria under review, investors and shareholders may need to pay less attention on it in a case where the financial statement of the company is to be analyzed.
- The study recommends that key concern should be placed on the variable of firm size which implies that investors and shareholders should keep a watchful eye over what values are represented in the financial statements because they can significantly and positively affect the prices of shares of banks

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