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THE PREDICTIVE ABILITY OF CORPORATE PROFITABILITY COMPONENTS AND FUTURE EARNINGS

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ABSTRACT: *Firms employing additional debt finance often do so with the expectations that future profits will more than compensate for the fixed cost of borrowing. Similarly additional investment of equity capital indicates management confidence that the future profitability of the firm will be greater than the fixed operating cost. Therefore the mapping of financing, investing and operating decisions to current earnings provides a more rounded view of likely future earnings. Following the decomposition of return on equity into financing, investing and operating leverages components by Agburuga & Ibanichuka (2016), we explore the ability of these components of corporate profitability to predict future earnings. We found that future earnings (FTE) was negatively related to financing leverage component (FLC) and investing leverage component (ILC) and positively related to operating leverage component (OLC). This study thus provides evidence consistent with the trade-off theory. The negative relation of FLC and ILC and positive relation of OLC respectively to future earnings is analogous to and systematically explains the negative and positive relations of accrual and cash flow components of earnings to future earnings and stock prices contrary to the Bernard & Stober (1989) finding that it is not systematic.*

KEYWORDS: Financing, investing and operating leverages components; accrual and cash flow components; return on equity

INTRODUCTION

There has been prior effort to link current profitability of the firm to market returns, [1]as well as for the forecasting of future profitability. The assumption is that current earnings are likely to influence future earnings based on the intuition that unless there are extenuating circumstances, a firm that earned a profit in one year will likely earn a profit in future years. Researchers therefore look for and identify elements within current operating performance that helps to inform about future earnings and ultimately future stock performance and equity valuation. To this end some studies decomposed shareholder profitability into return on operating profitability and return on financing profitability. For example, Nissim and Penman (2003) and Penman (2013) found these two elements to be useful in forecasting future profitability. Lim (2012) corroborates this and found that disaggregation of shareholder profitability into operating profitability and financial

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profitability had information content. However, Esplin, Hewith, Plumlee and Yohn (2010) found little or no additional benefit from decomposing shareholder profitability into operating and financing profitability components over using the aggregate profitability in forecasting future profitability.

We contend that the inconsistency in the observed usefulness or ability of current earnings to inform about future earnings is due largely to these efforts not fully accounting for the effect of financing, investing and operating decisions that largely mirror management plans and expectations of future profitability. Firms employing additional debt finance often do so with the expectations that future profits will more than compensate for the cost of borrowing. Similarly additional investment of equity capital indicates management confidence in the future profitability of the firm. Therefore the mapping of financing, investing and operating decisions to current earnings provides a more rounded view of likely future earnings.

Following the decomposition of return on equity into financing, investing and operating leverages components by Agburuga & Ibanichka (2016), the aim of this paper is to explore the ability of these components of corporate profitability to predict future earnings. The relationship between corporate profitability components and future earning is likely to be useful in forecasting stock returns and equity valuation.

Literature Review and Hypothesis Development

The future earning is the expected profit attributable to equity holders after interest and tax. Since it is the financing, investing and operating activities and decisions of the firm that lead to the aggregate corporate profitability, it therefore stands to reason that the profit they help to generate should be apportioned according to the contributions of the activities and decisions that helped to bring it about. Thus we have profit disaggregated into financing, investing and operating leverages components. The idea of linking the financing, investing and operating activities to earnings and ultimately to market returns is not entirely novel. Nekrasov & Shroff (2009) argued that since the value of the firm derives from earnings, it was logical that the risk that the firm is exposed to should be linked to the source of the value generating process inherent in the financing, investing and operating activities of the firm. They criticized the idea of using market returns to measure risk arguing that it is not clear which aspect of risk is being so measured. Rather than measure risk from accounting fundamental, in practice risk is measured by reference to market returns and the correlation of this risk with accounting beta and earnings becomes the justification that gives validity to the later. They, therefore, advocated for the development of a model for estimating the value of the firm based on accounting fundamentals.

The examination of the predictive ability of accruals and cash flow components of earnings was the object of the study by Sloan (1996). Current earning was decomposed into accruals and cash flow components both of which are believed to have information about future earnings. The intuition underlying the study is that earning attributed to cash flow component is likely to persist into the future than those attributed to accruals component. The study by Sloan is focused on the accrual and cash flow components of earnings but fail to show how various financing, investing and operating decisions determine these components. The persistence of cash flow components of earnings is assumed without taking cognizance of the state of investments in assets that generates those cash flows. Increase (decrease) in investment is likely to increase (decrease) the cash flow from operations and thereby have a greater (lesser) impact on future earnings. This

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limitation is mitigated in our current study.

There has also been an effort to establish how the activities of the firm translate to profitability. One of the frameworks for linking the activities of the firm to the resulting profitability is through the DuPont Analysis. It shows how assets translate to sales through the operation of asset turnover ratio and how sales activity translates to corporate profitability through the operation of the profit margin. A combination of profit margin and asset turnover has been used variously to estimate expected profit (Nissim & Penman, 2001; Soliman, 2008; Amir, Kama & Livnat, 2011). They did not, however, show the relative impact of each component on current earnings. Li, Nissim & Penman (2014) have also used these two measures to estimate operating risk which is estimated as the variability of operating profit on variability of sales. They did not address the volatility of sales which addresses the broader issue of business risk. The former is associated more with operating efficiency while the later is associated more with the efficiency of investments in assets. They also did not account for the role of the third element of the original Du Pont model which is the equity multiplier.

The advanced DuPont Analysis was used by Burns, Sale & Stephan (2008) to separate how financing and operating decisions impact the composition of return on equity. They derived the return on net operating assets as a measure of operating profitability that reflect the impact of operating decisions and the return on net financial assets as a measure of financial profitability that reflects the impact of financing decisions. They did not show how investing decisions impact on profitability.

There appears to be a consensus on the measurement of financing leverage as the ratio of debt to equity although different studies have used different specifications of this measure. On operating leverage, there appears to be no consensus of what the appropriate measure might be. While some have associated it with the ratio of fixed cost to variable cost, others have used a measure of the change in profit as a percentage of changes in sales. One wonders why one concept should be variously described unless there are inherent contradictions. In fact, Novy-Marx (2007) declared that operating leverage is not observable as according to him it depends not on actual activities of the firm but rather on the present value of future revenues and costs thereby opening another dimension on the operating leverage discourse. Without a precise understanding of what operating leverage describes, its measurement is fraught with challenges of both internal and external validity.

We contend that the imprecision in the description of operating leverage is due to the combination of both investing leverage and operating leverage in what is described as the degree of operating leverage. This fact seems rather obvious since the investing aspect of the three core activities of the firm namely financing, investing and operating activities of the firm has not been distinctly shown to contribute to the profitability of the firm in prior studies. Despite their best effort, prior studies that sought to relate accounting measures of profitability with market return appear to have failed to distinctly show how return on equity derives from the financing, investing and operating activities of the firm. They also seem to have failed to clearly and distinctly isolate and show how the financing, investing and operating decisions impact on profitability and how these in turn impact on future returns.

Managers are employed to act for and on behalf of the firm and their primary aim being to increase returns to shareholders. In doing this they are confronted with challenges and constraints from the

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operating, regulatory, technical and professional, social and macroeconomic environment. Their best effort in managing the dynamics of both the internal and external business environment is reflected in the financing, investing and operating decisions they make either in reaction to or in anticipation of these challenges and constraints. Financing, investing and operating policies are the only strategic tools for the management of the firm, therefore, an examination of how these are deployed is critical to an understanding of how the challenges and constraints that managers are confronted with are resolved.

Therefore, it is trite to say that how managers combine the financing, investing and operating leverages must depend on certain basic characteristics of the firm. Some firms operate with high leverage; others operate with high margin, while others operate with high turnover. The operating strategy will affect the financing and investing strategy. For example, banks and other financial institutions which operate with high leverage might likely have a lower investment in long-term assets, while relying on high turnover to generate revenue to pay their debt servicing costs. Firms such as those in high-end luxury products may, however, have a high investment in long-term assets while operating with low leverage and might rely on high margin and or low turnover to generate revenue to pay their operating fixed costs due to the high investment in fixed assets. Other firms such as those in retail may rely on high turnover but low margin and low investment in long-term assets and or high leverage. This high level of turnover is apt to generate relatively higher variable cost from operating activities. Thus the financing, investing and operating strategies of firms are likely to be different depending on the business environment and characteristics of the firm.

Ho_1: Financing, investing and operating leverage components of corporate profitability does not have significant impact on future earnings.

There are two basic types of leverage namely the financial leverage and operating leverage. While financial leverage describes the use of debt to boost returns to shareholders, operating leverage on the hand describes the use of fixed cost (installed capacity of the firm) to boost returns to shareholders. While the financial leverage addresses the mix of debt and equity (capital structure), operating leverage looks at the mix of fixed and variable cost (cost structure) as a strategy of maximizing returns to shareholders.

The degree of operating leverage increases the business risk of the firm. Higher levels of the degree of operating leverage increase the claims on the firm's cash flow and therefore increases the sensitivity to volatility in the business cycle since the fixed cost cannot easily be canceled during low business cycles. Hence the degree of operating leverage increases the risk to equity holders (Dogan, 2015). However the degree of operating leverage has the potential for boosting returns as the increased level of investment in fixed cost (installed capacity) increases the productive capacity (output) of the firm particularly in growth markets, and has the potential of increasing profitability. Also increased fixed cost investment may also result in reduced variable cost and thereby adding more margin to the bottom line. As noted by Kiymaz and Hodgin (2003), if investment in higher levels of fixed cost leads to a reduction in variable cost, it invariably leads to increased future profitability systematically over time. However, we separate the fixed cost and variable cost components of the degree of operating leverage into investing leverage and operating leverage respectively. Therefore we expect that investing leverage component will be negatively related to future earnings and operating leverage components of profitability should be positively

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related to future earnings.

Furthermore, firms in manufacturing and high capital-intensive industries have investments that require huge fixed cost outlays that may not immediately translate to reduced variable cost and so the benefits of the investment in fixed cost may be delayed and even as future earnings is negatively impacted. We therefore expect that the investing component of profitability will be higher but will be negatively related to future earnings. Additionally, both financial leverage and investing leverage arises from fixed cost obligations including debt servicing cost and operating fixed costs. Since fixed costs are not as responsive as variable cost to changes in earnings, we expect differences in the direction of their persistence. Therefore, financing and investing leverage components is expected to relate negatively and operating leverage component is expected to relate positively to future earnings. We hypothesize that:

Ho_2: Future earning is neither a negative function of financing and investing leverage component nor a positive function of operating leverage component of corporate profitability.

Data

The data for the study was manually collected from the published annual reports and accounts of sample firms as well as from the Nigerian Stock Exchange *Fact Book*. The cross-sectional and time series (panel) data was collected from annual reports of the forty (40) sample firms covering the period 2004 to 2015, a twelve year period for which complete data was available comprising 480 firm years and 12,000 observations. The number of firms reduced to 25 after those with incomplete data and those with consistent losses were removed from the sample thereby reducing the data to 300 firm years.

Measurement of Variables

In this study, corporate profitability comprises financing, investing and operating leverage components and roughly reflects the contribution to return on equity by the asset structure and the capital structure in the balance sheet. Following Agburuga & Ibanichuka (2016), the variables are measured as follows:-

Future Earnings (*FTE*)

Future earning is the net profit after interest and tax one year from the balance sheet date.

Financing Leverage Component (*FLC*)

Financing leverage component of return on equity is the ratio of return on asset that is attributed to financial leverage. It is calculated as the equation, $(\frac{D}{E})^* (\frac{P}{A})$. The first aspect $(\frac{D}{E})$ is the ratio of debt to equity which clearly is the ratio of financial leverage and the second part $(\frac{P}{A})$ is the return on assets.

Investing Leverage Component (*ILC*)

The investing leverage component of return on equity is the proportion of return on assets that is due to the capacity of investments in fixed assets to generate income. It is calculated with the equation, $\frac{Pf}{A}$, where *Pf* is the Net Profit after Interest and Tax multiplied by the ratio of fixed (non-current) assets to total assets (*A*). This is similar to the investing accruals used by Richardson, Sloan, Soliman & Tuna (2005) to predict future earnings and future stock returns, comprising changes in non-current operating assets (liabilities). They found that investing accruals are more

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persistent than operating (working capital) accruals in predicting future earnings and future stock returns.

Operating Leverage Component (*OLC*)

The operating leverage component of corporate profitability is the proportion of the profit due to the operating efficiency of equity-financed working capital. It is the proportion of return on asset that is attributed to working capital and calculated as, $\frac{Pwc}{A}$, where *Pwc* is the Net Profit after Interest and Tax multiplied by the ratio of working capital (net-current) assets to total assets (*A*). Note that the aspect dealing with the capacity of debt-financed working capital to generate income has already been accounted for under financing leverage. Sloan (1996) found that firms with higher operating accruals tend to have lower future earnings and future stock returns. Thus the operating accrual is a decreasing function of future earnings and future stock returns. The use of working capital as the basis for computation of profit attributed to operating leverage finds empirical support in Nissim and Penman (2003) who posits that *"Operating liability leverage arises from operating activities such as trading with business suppliers, customers, and employees in the product and labor markets"* (Cited by Lim, 2012 p 4)

METHODOLOGY

The Ordinary least squares (OLS) multiple regression models was constructed with future earnings as the dependent variable and the financing, investing and operating leverage components of return on equity as independent variables. To capture the actual positive relationship between the dependent and independent variables it was necessary to introduce control variables that have a negatively related to (Kothari, 2001 and Brailsford, Oliver & Pua, 1999). We used the natural logarithm of the book to price ratio and the natural logarithm of the market value as control variable. These are two out of the three variables used by Fama & French (1993) as risk factors and which has been used in similar studies as control variables (Soliman, 2008). We also follow prior studies that included a measure of aggregate profitability and change in aggregate profitability (return on equity) to control for the effect of components of corporate profitability (Fairfield & Yohn, 2001). Without such inclusion, it will be difficult to determine whether the variation in the dependent variable is the result of changes in corporate profitability components or whether they are from the aggregate component(Soliman, 2008). We, therefore, introduce return on equity (*ROE*) and change in return on equity (ΔROE) as instrumental or treatment variables and tested the regression model of the form:-

Regression Model:

$$FTE_{it+1} = \beta_o + \beta_1 FLC_{it} + \beta_2 ILC_{it} + \beta_3 OLC_{it} + \beta_4 ROE_{it} + \beta_5 \Delta ROE_{it} + \beta_6 LBM_{it} + \beta_7 LBV_{it} + \varepsilon_{it}$$

The initial test of the pooled *OLS* regression model above revealed some cross-sectional correlations in residuals with the *Durbin-Watson* Test Statistic of 0.380109. To error was corrected by introducing both the lagged dependent and independent variables as additional independent variables. Test result of the adjusted *OLS* regression model is presented in Table 1.1 and test for cross-sectional serial correlation using the *Breusch-Godfrey* Serial Correlation Test is presented in Table 1.2. Tests were carried out with *EViews Version 9.0* Data Analysis application.

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RESULT AND DISCUSSION

Result of the Test of Financing, Investing and Operating Leverage components and Future Earnings

The test result of the adjusted pooled *OLS* regression equation of financing, investing and operating leverage components of corporate profitability and future earnings with additional independent variables of lagged dependent and independent variables is presented in Table 1.1 below. It shows that the regression equation has a strong explanatory power as the coefficient of determination is high thus posting a coefficient of determination (*R*-Squared) of 89.3% up from the 45.7% in the original *OLS* regression estimate (unreported). And even when adjusted for the number of variables in the model, an adjusted *R*-square of 88.9% was returned. The Significance *F* statistic of 182.2929 also confirms the overall robustness of the regression model with a *p*-value of far less than 0.05. I, therefore, reject the null hypothesis (Ho_1) that financing, investing and operating leverage components of corporate profitability components does not have significant impact on future earnings.

Table 1.1: Result of the Main Pooled *OLS* Regression Equation of Financing, Investing and Operating Leverage Components of Corporate profitability and Future Earnings with additional Independent variables of Lagged Dependent and Independent Variables

Dependent Variable: FTE
Method: Least Squares
Date: 09/06/16 Time: 07:36
Sample (adjusted): 2 299
Included observations: 250 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3875894.	2692106.	-1.439726	0.1513
FTE(-1)	0.989240	0.031959	30.95312	0.0000
FLC	-7943.710	30889.61	-0.257164	0.7973
FLC(-1)	13731.93	30737.31	0.446751	0.6555
ILC	-520461.7	1172291.	-0.443970	0.6575
ILC(-1)	611152.2	1088014.	0.561713	0.5748
OLC	617616.1	1513404.	0.408097	0.6836
OLC(-1)	983737.9	1466844.	0.670649	0.5031
ROE	-187616.2	177510.9	-1.056928	0.2916
ΔROE	-25617.64	125895.9	-0.203483	0.8389
LBM	-37948.90	154195.9	-0.246108	0.8058
LMV	170537.3	148661.9	1.147149	0.2525

R-squared	0.893903	Mean dependent var	4470950.
Adjusted R-squared	0.888999	S.D. dependent var	7683079.
S.E. of regression	2559758.	Akaike info criterion	32.39553
Sum squared resid	1.56E+15	Schwarz criterion	32.56456
Log likelihood	-4037.442	Hannan-Quinn criter.	32.46356
F-statistic	182.2929	Durbin-Watson stat	2.209086
Prob(F-statistic)	0.000000		

Source: Authors' Computation using *Eviews version 9.0*

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Furthermore, the test result shows that both *FLC* and *ILC* are negatively related with *FTE* and further show that *OLC* is positively related with *FTE*. This result confirms our a priori expectation and it is consistent with and an extension of prior studies that have found financial leverage to be a negative function of profitability (Mendell, Sydor & Mishra 2006; Nguyen & Neelakantan, 2006). For example Lim (2012) found that the operating aspect of shareholder profitability is a better driver of expected returns than financing aspect. It also corroborates the finding by Nissim & Penman (2003) that the effect of financing profitability on future profitability is less persistent than the effect of operating profitability. We therefore reject the null hypothesis (Ho_2) that Future earning is neither a negative function of financing and investing leverage component nor a positive function of operating leverage component of corporate profitability.

Test of the Serial Correlation of the Residuals of the Adjusted Pooled Regression Estimates of the Corporate Profitability Components and *FTE*

Ho: There is no significant serial correlation in the residuals of the adjusted pooled regression estimates of the changes in corporate profitability components and *FTE*.

To test the null hypothesis that there is no serial correlation in the result in Table 4.10 above, we carried out the *Breusch-Godfrey* LM Serial Correlation Test. The result of the test is presented in Table 1.2 below. The result shows that both the *F*-statistic and Chi-squared statistic were not significant with *p*-values of 0.228 and 0.216 respectively. I, therefore, accept the null hypothesis that there is no significant serial correlation in the residuals of the adjusted pooled regression estimates of the changes in corporate profitability components and *FTE*. Therefore the adjusted pooled *OLS* regression may, therefore, be relied upon to give a more reliable estimate of the relationship between corporate profitability components and *FTE*. Based on this, it can be concluded that *FLC* and *ILC* are negative functions while *OLC* is a positive function of *FTE* as reported in Table 1.2 below:

Table 1.2: Result of *Breusch-Godfrey* Test of First Order Serial Correlation in the Adjusted Pooled *OLS* Regression Estimates of Corporate profitability components and Future earnings

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.461517	Prob. F(1,237)	0.2279
Obs*R-squared	1.532236	Prob. Chi-Square(1)	0.2158

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 09/08/16 Time: 20:45
Sample: 2 299
Included observations: 250
Presample and interior missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.

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C	520513.5	2723745.	0.191102	0.8486
FTE(-1)	0.016837	0.034834	0.483353	0.6293
FLC	-368.6459	30861.21	-0.011945	0.9905
FLC(-1)	801.2221	30714.70	0.026086	0.9792
ILC	184248.4	1181031.	0.156006	0.8762
ILC(-1)	-207408.9	1100417.	-0.188482	0.8507
OLC	191628.2	1520226.	0.126052	0.8998
OLC(-1)	-237280.8	1478510.	-0.160486	0.8726
ROE	-1109.030	177341.4	-0.006254	0.9950
Δ*ROE*	-2811.420	125795.6	-0.022349	0.9822
LBM	-13941.39	154477.7	-0.090249	0.9282
LMV	-28887.98	150428.0	-0.192039	0.8479
RESID(-1)	-0.094203	0.077923	-1.208932	0.2279

R-squared	0.006129	Mean dependent var	-1.77E-09
Adjusted R-squared	-0.044194	S.D. dependent var	2502578.
S.E. of regression	2557279.	Akaike info criterion	32.39739
Sum squared resid	1.55E+15	Schwarz criterion	32.58050
Log likelihood	-4036.673	Hannan-Quinn criter.	32.47108
F-statistic	0.121793	Durbin-Watson stat	2.037845
Prob(F-statistic)	0.999875		

Source: Authors' Computation using *Eviews version 9.0*

The operation of the trade-off theory in the relationship between corporate profitability components and future earnings was confirmed when *FLC* was found to be negatively related with *FTE* and *OLC* was found to be positively related with *FTE* indicating that there is a trade-off between *FLC* and *OLC.*

There is evidence of the operating leverage hypothesis advanced by Lev (1974) that states that variable cost levers profit much the same way as debt servicing. Variable cost is associated with operating leverage just the same way that debt servicing cost is related with financial leverage. Variable cost arises from the operating activities and gives rise to operating risk. It clearly relates with operating leverage. Mandelker & Rhee (1984) provided empirical support for the operation of the trade-off between financial leverage and operating leverage. They found that the correlation coefficient between the degree of operating leverage and the degree of financial leverage were negative suggesting that an increase in one leads to a decrease in the other and vice versa. Thus where financial leverage is positively related to profitability, then operating leverage is expected to be negatively related to profitability. However, Financial leverage has been found to be negatively related to profitability (Rajan & Zingales, 1995; Arowshegbe & Idialu, 2013). The negative relation of financial leverage with profitability is corroborated by the evidence in this study that *FLC,* is negatively related to future earnings (*FTE*), While the expected positive relations of operating leverage with profitability is confirmed by the positive relations of *OLC* with *FTE* suggesting that *OLC* levers future earnings.

Furthermore, Mandelker & Rhee (1984) found that an increase in financial leverage through an incremental change in the capital structure increases the financial risk. They argued that

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management's response to this is usually to reduce the operating (business) risk through an adjustment to the assets structure by ensuring that additional investment reduces fixed cost. According to this hypothesis, an increase in financial leverage and the attendant risk gives rise to a reduction of business risk through a reduction of investment in fixed cost and this cost is associated with investing leverage. Thus even as financial leverage is related with profitability negatively, it is expected that an increase in financial leverage should lead to a reduction in investing leverage and hence a negative relationship with profitability. This study finds evidence in support of this hypothesis. From Table 1.1, *FLC* and *ILC* were found to relate with *FTE* negatively. The contribution to knowledge is in successfully demonstrating the operation of the trade-off theory with the relation of corporate profitability components with future earnings.

CONCLUSION

The financing, investing and operating leverage components of return on equity have shown properties that are consistent with theory and prior findings in the literature. Prior studies have found that the accrual and cash flow components of earnings are negatively and positively related respectively to future earnings and stock returns(Soliman, 2008). This current study found that while *FLC* and *OLC* is negatively and positively related with *FTE* respectively. It further shows that *ILC* is negatively related to *FTE*. This study contributes to knowledge by identifying corporate profitability components that show more directly that the negative relation of accrual component of earnings to future earnings and stock returns found in the prior study is analogous to the *FLC* and *ILC* and that the cash flow component of earnings is analogous to the *OLC.* The negative relation of *FLC* and *ILC* and positive relation of *OLC* respectively to future earnings and stock returns thus systematically explains the negative and positive relations of accrual and cash flow components of earnings to stock prices contrary to the Bernard & Stober(1989) finding that it is not systematic.

RECOMMENDATION AND FUTURE RESEARCH

Managers should be trained on the ramifications and impact of their financing, investing and operating decisions on profitability. And particularly they should be aware that the aim of profitability can best be served if additional investments help to reduce variable cost. Future research should explore the link between corporate profitability components and stock returns.

References

Agburuga, U. T., & Ibanichuka, E. A. (2016, October 25). Decomposition of Profitability into Financing, Investing and Operating Leverages Components and the Overstatement of Return on Net Operating Assets. https://ssrn.com/abstract=2859167

Amir, E., Kama, I., & Livnat, J. (2011). Conditional versus unconditional persistence of RNOA components: implications for valuation. *Review of Accounting Studies, 16*, 302-327.

Arowoshegbe, A. O., & Idialu, J. O. (2013, March). Capital Structure and Profitability of Quoted Companies in Nigeria. *International Journal of Business and Social Research, 3*(3).

Bernard, V., & Stober, T. (1989). The nature and amount of information reflected in cash flows and accruals. *The Accounting Review., 64* (October), 624-652.

Brailsford, T. J., Oliver, B. R., & Pua, S. L. (1999, September 16). *Theory and Evidence on the Relationship between Ownership Structure and Capital Structure*. doi:10.2139/ssrn.181888

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Burns, D. C., Sale, T. J., & Stephan, J. A. (2008, August 1st). A Better Way to Gauge Profitability. *Journal of Accountancy*. Retrieved December 10, 2015, from http://www.journalofaccountancy.com/Issues/2008/Aug/ABetterWaytoGaugeProfitability.htm

Dogan, F. (2015, July 30). NonCancellable Operating Leases and Operating Leverage. *European Financial Management*. doi:10.1111/eufm.12069

Esplin, A., Hewitt, M., Plumlee, M., & Yohn, M. (2010). *Esplin, A., M. Hewitt, M. PlumDisaggregating Operating and Financing Activities versus Disaggregating Unusual and/or Infrequent Income Items: Implications for Forecasts of Future Profitability.* Indiana: Indiana University.

Fairfield, P., & Yohn, T. (2001). Using asset turnover and profit margin to forecast changes in profitability. . *Review of Accounting Studies*(December), 371–385.

Fama, E., & French, K. (1993). Common risk factors in the returns of stocks and bonds. *Journal of Financial Economics, 33*, 3–56.

Kiymaz, H., & Hodgin, R. (2003). Enhancing Clarity and Completeness of Basic Financial Text Treatments on Operating Leverage. *Journal of Economics and Finance, 2*(1).

Kothari, S. (2001). Capital markets research in accounting. *Journal of Accounting and Economics, 31*, 105–231.

Lev, B. (1974). On the Association Between Operating Leverage and Risk. *Journal of Financial and Quantitative Analysis, 9*, 627-641.

Li, M., Nissim, D., & Penman, S. H. (2014, May). Profitability Decomposition and Operating Risk. 1-44. Retrieved from http://carlsonschool.umn.edu/file/13416/download?token=A4tP-JRS · PDF file

Lim, S. C. (2012, October 12). The Information Content of Disaggregated Accounting Profitability: Operating Activities Versus Financing Activities. *Review of Quantitative Finance and Accounting*. Retrieved from http://ssrn.com/abstract=2282080

Mandelker, G., & Rhee, S. (1984). The impact of the degrees of operating and financial leverage on systematic risk of common stock. *The Journal of Financial and Quantitative Analysis, 19*(1), 45-57.

Mendell, B. C., Sydor, T., & Mishra, N. (2006). Capital Structure in the United States Forest Products Industry: The Influence of Debt and Taxes. *Forest Science, 52*(5), 540-548.

Nekrasov, A., & Shroff, P. (2009). Fundamental-based risk measurement in valuation. *The Accounting Review, 84* (6), 1983-2011.

Nguyen, T. D., & Neelakantan, R. (2006). Capital Structure in Small and Medium-Sized Enterprises: The Case of Vietnam. *ASEAN Economic Bulletin, 23*(2), 192-211.

Nissim, D., & Penman, S. (2001b, October). *Financial Statement Analysis of Leverage and How It Informs About Profitability and Price-to-Book Ratios.* doi:10.2139/ssrn.292725

Nissim, D., & Penman, S. (2003). Financial Statement Analysis and How It Informs about Profitability and Book to Price Ratios. *The Review of Accounting Studies, 8*, 531-560.

Novy-Marx, R. (2007). *Operating Leverage.* University of Chicago and NBER. Chicago: University of Chicago.

Penman, S. H. (2013). *Financial Statement Analysis and Security Valuation* (5th ed.). New York: McGraw-Hill.

Rajan, R., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance,,, 50* (5), 1421-1460.

Richardson, S., Sloan, R., Soliman, M., & Tuna, I. (2005). Accrual reliability, earnings persistence and stock prices. *Richardson, S., R. Sloan, M. Soliman, and I. Tuna. 2Journal of Accounting and Economics, 39*, 437–485.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Sloan, R. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review*(July), 289–315.

Soliman, M. (2008). The Use of DuPont Analysis by Market Participants. *The Accounting Review*, *83*(3), 823-853.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)