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Impact of Earnings Retention on Firm's Growth: A study on the listed Companies of Dhaka Stock Exchange

Abstract

The firm's growth and its utilization of retained earnings are of pivotal interest to the firm's stakeholders. This paper empirically tests the relationship between earnings retention and firm's growth. The growth in the firm's assets is used as the dependent variable, while earnings retained on cash basis and accrual basis serve as independent variables. Control variables such as debt-to-asset ratio, return on equity, and net profit margin are included to isolate the true effect of the retained earnings variables by accounting for other factors that may influence firm's growth. The fisher unit root test is used to ensure that the studied variables are stationary. The Pedroni cointegration test is used to find the long-term stable relationship among variables. The fixed effect and random effect regression is conducted in addition to pooled OLS regression for the specified models. Hausman specification led to preference of FE/RE based on significance patterns. The results show that both cash-based and accrual-based retained earnings exert a statistically significant positive influence on firm's asset growth.

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1. Introduction

The pursuit of growth is the primary reason corporations exist. All stakeholders of the corporations are affected by the firm's growth. The internal management wants to maximize the growth of a firm, which in turn will create wealth for the owners of the corporations and ensure the sustainability of the firm.

There is no single yardstick for determining the growth of a firm. Different methods and mechanisms have been used and developed to determine the growth according to the needs of the study and perspective. Sales growth, earnings growth, market share growth, and capital base growth are a few of the many mechanisms used to calculate the growth of the firm. In 2005, Deloitte's study opines that a company's returns on equity and retention ratio are both factors in its long-term growth.

For the study in this paper, the change in the asset size of the firm over the period of study will be used as the measurement of the firm's growth. While the earnings retention will be calculated by deducting the distributed dividend from the earnings per share, and in case of the cash basis accounting method, the retention will be estimated by deducting the distributed dividend per share from the cash flow

generated from operations per share. The growth rate in asset size will be used as the dependent variable to determine the impact of earnings retention on firms' growth. The independent variables, on the other hand, will be calculated using both the accrual basis, where the distributed dividend per share is deducted from the earnings per share of the firms and the cash basis, where the distributed dividend per share is deducted from the net operating cash flow per share of the firm. In addition to this to ensure the effectiveness of the result the study included several control variables namely debt to asset, ROE, and net profit margin.

G. Gong et al. (2008) postulates earnings management is one of the most crucial tasks performed by the top management. They decide how the earnings will be distributed, including how much to reserve as a safety net for the firm, how much to retain, and of that retained amount, how much to reinvest. The well-balanced approach of the earnings management ensures the proper utilization and growth of the firm. The earnings are used as the primary yardstick for evaluating a firm's management performance. The management is utmost cautious in taking decisions regarding earnings management. Consequently, management ponders a great deal when making earnings management decisions, such as how much to distribute to shareholders, how much to retain, and how much of the retained earnings to reinvest and in which avenue.

Intuitively, the retention of earnings on either of the bases considered in this study should positively impact the growth of the asset. Because the retention of earnings is meant to be used by the corporation to yield more future returns to the investors than the return if the earnings were paid in the form of a dividend. Also, the management uses these retained earnings for investment purposes, as it is the cheapest form of finance available to the corporation. Any other form of financing, such as issuing new equity or borrowing money, incurs the firm a number of costs, such as registration costs, processing fees, and transaction costs, which are not incurred if the retained earnings are used to finance a new investment avenue. Therefore, internal management, whenever possible, would use the retained earnings to finance the investment.

This study will investigate how the listed firms on the Dhaka Stock Exchange perform in this regard. On what scale are the retained earnings contributing to the growth of the firm? Either cash basis retention or accrual basis retention or both which has a more significant impact on growth. Lastly, if there is no supporting evidence that the earning retention facilitates growth what might be the plausible causes, which dividend policy the firm should take in case of non-availability of investment avenues and is there any misconduct of the retained fund on part of the management.

2. Literature Review

This topic has always been a space of interest to researchers and policymakers. For decades, there has been research in this area from various points of view. Dogago and Obara (2015) studied the dividend policy for large and emerging companies in Nigeria for a period of ten years to determine whether there is any optimized dividend policy that would appreciate the capital of the firm in a statistically significant manner. However, they found that there is no definitive or conclusive pattern in dividend policy that would

optimize and ensure the capital growth of the firm. They find that situational factors for the specific time and corporation would determine what the optimized dividend policy should be for that time.

Dahmash, F.N. (2023) this study examines how retained earnings influence firm market value using panel data from firms listed on the Amman Stock Exchange. Retained earnings per share and dividend per share are modeled against Tobin's Q to capture market-based firm valuation. The findings suggest that earnings retention plays a significant role in shaping firm value, though its effect varies across firms depending on their financial characteristics. The study provides a strong methodological framework that can be replicated for Dhaka Stock Exchange firms when assessing firm growth through market-based measures.

Carpenter and Petersen (2002) examined the role of internal finance in firm growth using firm-level data from developed economies, focusing particularly on high-growth and high-technology firms. The study finds that firms facing capital market imperfections depend heavily on internally generated funds, such as retained earnings, to finance investment and expansion. The results demonstrate that growth is strongly constrained by the availability of internal funds, thereby providing strong theoretical and empirical justification for the argument that earnings retention is a key driver of firm growth, especially where access to external finance is limited.

Aivazian, Booth, and Cleary (2003) this study analyzes dividend and earnings retention behavior in emerging market firms and compares it with that of U.S. firms. Using panel data from multiple countries, the authors show that institutional differences, such as financial system development and investor protection, significantly affect firms' retention and payout decisions. The findings suggest that emerging market firms tend to retain a larger portion of earnings to support growth due to higher external financing constraints, highlighting the importance of earnings retention as a growth-financing mechanism in developing capital markets.

Pinto et al. (2019) conduct a sectoral analysis of factors influencing dividend policy among Indian listed firms, with retained earnings serving as a key explanatory variable. The study shows that firms with strong growth opportunities and higher profitability tend to retain more earnings, particularly in capital-intensive sectors. Although the study primarily focuses on dividend decisions, its findings indirectly support the view that earnings retention is closely linked to future growth potential.

Ahrends et al. (2018) examine the relationship between financial slack, growth opportunities, and firm value within a corporate finance framework. The study finds that internally generated funds, including retained earnings, enhance firm value primarily when growth opportunities are strong, while excessive retention may reduce value in low-growth periods. This dynamic perspective highlights that the impact of earnings retention on firm growth is conditional on macroeconomic and firm-specific factors, underscoring the importance of incorporating time-varying effects in empirical growth models.

Ahmed (2019) investigates the relationship between dividend policy, retained earnings, and share price behavior of Bangladeshi listed firms. Using secondary data from annual reports, the study finds that retained

earnings have a noticeable impact on stock prices, indicating that investors respond to firms' reinvestment decisions. Although the paper does not directly measure firm growth, it establishes the importance of earnings retention in influencing market perceptions, which indirectly relates to long-term growth prospects of DSE-listed corporations.

Hossain & Rahman (2019) this research explores the determinants of dividend policy among Bangladeshi listed companies, with retained earnings treated as a central internal financing source. The authors use regression analysis to identify how profitability, leverage, and firm size affect dividend decisions. The study highlights that firms with higher growth opportunities tend to retain a larger portion of earnings, supporting the theoretical link between earnings retention and future growth.

Sultana & Islam (2021) this paper analyzes the effect of retained earnings and dividend policy on stock price volatility for firms listed on the Dhaka Stock Exchange. The authors find that higher earnings retention reduces stock price volatility, suggesting that retained earnings enhance firm stability. While growth is not measured directly, financial stability created through retained earnings is argued to support sustainable firm growth in the long run.

As we already stated, the retained earnings, as a low-cost funding for financing future projects and works, should yield a significant positive return to the company. Al-Debi'e and Al-Rai (2012) found in their study that listed firms in the Amman Stock Exchange grow significantly in their asset size if they mobilize the internal funds in the form of retained earnings to finance their investments.

Counterintuitive results were also observed many times in different studies that the retained earnings do not yield growth. Baumol et al. (1970) found in their study that the retained earnings contribution to the growth of the firm is less than the contribution made by the external financing. The author postulates the question of whether managers use the retained fund ineffectively as it lacks accountability, and whether the management retains the earnings even if there is no investment avenue available. However, if any investment avenue is available at all, the return on investment is less than the average growth rate of the firm. This also raises issues about the ethics of the internal management in the utilization of funds.

Baumol et al. (1970) in their study found that the firm managers use the retained earnings to finance their projects and investments, as it incurs the lowest cost to the firm. The managers would not use any external financing to finance any project unless the expected rate of return is higher than the cost of raising the funds. This study constitutes the basis for examining the impact of the use of internal financing on the growth of the firm.

The capital market on aggregate reacts to the information available at hand according to the efficient hypothesis theory, and this is going to be reflected by the change in the expected return of holding the stock. Therefore, the dividend policy taken by the management ultimately impacts the holding return of the stock. Griffin (1976) suggested that the combined impact was observed in the expected return due to the earnings per share, dividend per share, and forecasted earnings per share, which are statistically significant. The dividend policy, particularly a decrease

in dividends, communicates unique information to the market participants and shareholders. Also, the study found that the market reacts to unambiguous and clear information in a more homogenous and exponential manner than it reacts to ambiguous and perplexing information.

Oscar (1953) explained in his study that the large listed corporations whose earnings were retained rather than distributed would positively impact the share price in the long run, but the distributed dividend would immediately appreciate the price. Here, the notion would work even better if the firms that were retaining the earnings were in the growing stage of the business.

Arnott and Asness (2003) suggest that the research does not empirically conclude the intuitive expectation that present retained earnings would ultimately result in an increase in future earnings of the firms.

Denis and Osobov (2008) found that firms whose equity is comprised primarily of retention of earnings and have profitable business are more prone to providing more dividends to their shareholders.

Carpenter and Peterson (2001) showed that the output generated by the firm in the form of growth in assets outweighs the input provided to the firm in the form of internal financing.

Zhou and Rulan (2006) postulate that when the growth of the firm is measured using earnings growth, the high dividend-paying firm tends to experience more growth in future earnings. Gardner et. al (2011) showed in their study that firms can optimize their sales growth using the internally retained funds.

Largely, the studied literatures underscores that earnings retention is a critical determinant of firm growth, particularly in emerging markets, thereby justifying a focused empirical investigation within the context of the Dhaka Stock Exchange.

3. Methodology

The study adopts a quantitative panel-data–based empirical approach and evaluates the effect of retained earnings on firm growth using secondary financial data.

3.1 Nature and Sources of the Study

In this study, secondary data of growth in total assets, retained earnings on a cash basis and retained earnings on an accrual basis have been used for a total of thirty companies listed in six different sectors in the Dhaka Stock Exchange, namely bank, pharmaceuticals, food & allied, fuel & power, IT, and textile. The research is analytical, explanatory, and quantitative in nature. Secondary data were extracted from published annual reports, financial statements, stock exchange archives and corporate disclosures of selected listed companies from Dhaka Stock Exchange (DSE) for a period of ten years (2015–2024). In this study, Growth in Asset (GA) is used as the dependent variable, retained earnings measured in two forms—Retained Earnings on Accrual Basis (REAB) and Retained Earnings on Cash Basis (RECB)—are considered as the key independent variables. Debt to Asset Ratio, Return on Equity (ROE), and Net Profit Margin (NPM) are considered control variables to minimize extraneous effects.

3.2 Population & Sample Size

The population of the study is all listed corporations of the Dhaka Stock Exchange (DSE). The sample of the study only

included six sectors and thirty companies, of which five companies were selected from each sector for the purpose of the study. The selected sectors represent a significant portion of the total market capitalization of the DSE. The total market capitalization of the selected companies in each sector represents a significant portion of the total market capitalization of the respective sector.

Using purposive sampling, thirty companies from six different industries were selected considering data availability and operational continuity during the study period. Ten years of data for each corporation produced a strongly balanced panel dataset of 300 firm-year observations.

4. Variable Analysis

Below is descriptive interpretation and mathematical expression of each variable studied in this paper.

4.1 Growth in Total Assets (GA)

In capital-intensive markets like DSE-listed industries, asset growth serves as a reliable proxy for firm growth. Growth in asset indicates how rapidly a firm's total asset base expands over time. Higher GA values imply capital expansion, investment in new projects and stronger business scalability. The total assets of a firm would reflect the size of the firm at a point in time.

The growth in assets would be by how many percentage points the asset has increased over the period of time, respectively, compared to the preceding year. Using this variable as the dependent variable makes sense as all endeavours of any corporation are to maximize the wealth for its shareholders, and the wealth maximization would happen only if there is growth in the assets of the firm.

$$GA = \frac{Total\ Asset_{t,i} - Total\ Asset_{t-1,i}}{Total\ Asset_{t-1,i}} \dots\dots (I)$$

The descriptive statistics shows GA mean value of 0.1079, implying companies on average experienced annual growth of 10.79%, though with high variation (Max = 87.57%, Min = -47.36%). Such dispersion signals different financial strategies and reinvestment intensities across firms.

4.2 Retained Earnings on a Cash Basis (RECB)

In the case of independent variables, one of the variables is retained earnings on a cash basis, where the dividend distributed per share is deducted from the net operating cash flow per share to determine how much operational cash flow per share is retained by the firm.

Unlike accrual earnings, cash-based retained earnings (RECB) emphasize liquidity retention. Firms with strong cash reserves may easily finance expansion without external borrowing.

$$RECB_{t,i} = NOCFPS_{t,i} - DPS_{t,i} \dots\dots (II)$$

Mean RECB was recorded at 9.34, with substantial deviation (SD = 28.89), indicating some companies accumulate cash aggressively while others rely more on external funding. Theoretically, higher RECB is expected to stimulate asset growth.

4.3 Retained Earnings on an Accrual Basis (REAB)

In case of the other independent variable, retained earnings on an accrual basis per share, where the dividend distributed per share is deducted from the earnings per share to determine how much earnings

per share is retained by the firm. REAB reflects the retained profit of a firm after dividend distribution. Firms that channel earnings back into operations rather than paying out dividends tend to generate sustainable long-term growth.

$$REAB_{t,i} = EPS_{t,i} - DPS_{t,i} \ldots\ldots (III)$$

Average REAB stands at 5.686, with large dispersion (SD = 14.89), showing variations in corporate dividend policies and earnings capabilities. Higher REAB signals management confidence in internal project returns.

4.4 Debt to Asset (DA)

Debt to Asset ratio reflects the financial leverage of the firm. It shows the proportion of total assets financed through debt. A higher ratio indicates greater dependence on external financing, which may influence growth positively or negatively depending on financial structure.

$$DA_{t,i} = \frac{Total\ Debt_{t,i}}{Total\ Asset_{t,i}} \ldots\ldots (IV)$$

The sample mean 0.4979 indicates nearly 50% debt-financed assets. While excessive leverage increases risk, moderate debt often enhances growth through tax shields and financing capacity. This dual nature makes DA an important control variable.

4.5 Return on Equity (ROE)

ROE measures the profitability earned per unit of shareholders' equity. It demonstrates managerial efficiency in generating returns. Firms with high ROE are expected to sustain growth and capacity to accumulate retained profits.

$$ROE_{t,i} = \frac{Net\ Income_{t,i}}{Shareholders' Equity_{t,i}} \ldots\ldots (V)$$

The mean 0.1706 suggests moderate profitability among sampled firms. Although ROE theoretically supports growth, insufficient reinvestment and payout policies may weaken direct contribution to asset expansion.

4.6 Net Profit Margin (NPM)

NPM measures operating efficiency and profitability after accounting for all expenses. Higher margins imply better operational performance which may contribute to higher internal financing capability.

$$NPM_{t,i} = \frac{Net\ Income_{t,i}}{Sales_{t,i}}\ X\ 100 \ldots\ldots (VI)$$

Mean 0.2137 shows companies retain on average 21% of sales after expenses. Despite profitability potential, its influence on growth depends on reinvestment rather than net earnings alone, which is later reflected in regression outcomes.

5. Data Analytical Tools

The data were processed using descriptive analysis, unit root tests, cointegration tests and panel regression models. Fisher-ADF tests confirmed stationarity while Pedroni cointegration validated long-run relationships. To estimate effects, three models were run: Pooled OLS, Fixed Effect (FE), Random Effect (RE). Hausman specification led to preference of FE/RE based on significance patterns. These methods ensure robust inference.

6. Descriptive Statistics

The descriptive statistics for the studied variables growth are given below:

Table 1: Descriptive Statistics of all Variables

Variable	Observation	Mean	Std. Dev.	Min	Max
GA	300	0.1079	0.1331	-0.4736	0.8757
RECB	300	9.3426	28.8947	-97.30	175.24
REAB	300	5.6861	14.8958	-105.75	126.23
DA	300	0.4979	0.2828	0.0081	0.9788
ROE	300	0.1706	0.2306	-0.5067	1.91
NPM	300	0.2137	0.3175	-0.2951	2.0053

Source: Author's Calculation

The descriptive statistics show that firms experienced an average asset growth of 10.79%, indicating a generally positive expansion trend. However, the wide range of GA values reveals that some firms grew rapidly while others faced decline. Similarly, RECB and REAB display high variability, with respect to retained earnings, the mean for RECB is 9.34 and REAB is 5.68 combined with large standard deviations that is 28.89 and 14.89 respectively it reflects diverse profit distribution and reinvestment behaviors among companies.

The average Debt-to-Asset ratio of 0.49 implies balanced use of debt financing. Profitability indicators such as mean ROE of 0.17 and mean Net Profit Margin (NPM) of 0.21 vary widely, showing inconsistent financial performance across firms. Overall, the dataset provide a meaningful foundation for further econometric estimation and justify exploring whether retained earnings, rather than profit alone, drive long-term growth.

7. Hypothesis of the Study

Based on the research objective and theoretical foundation, the following hypotheses are developed:

H1: Retained Earnings (Cash Basis – RECB) have a significant positive impact on firm's growth. H2: Retained Earnings (Accrual Basis – REAB) have a significant positive impact on firm's growth.

These two hypotheses are formulated to empirically test whether internally retained funds drive asset expansion in listed corporations. Since retained earnings reflect a firm's reinvestment capacity, it is expected that firms preserving a higher portion of their earnings generate more growth compared to those that distribute most profits as dividends. Testing these hypotheses allows us to determine whether retained earnings directly contribute to firm expansion within the Dhaka Stock Exchange context.

The focus on RECB and REAB highlights earnings retention as the core interest of this study, as internal financing is considered cheaper, sustainable, and less risky than external borrowing. Prior literature such as Myers & Majluf (1984) supports the premise that firms prefer internal funds first for growth. Therefore, verifying H1

and H2 through panel regression provides empirical evidence on whether retained earnings influence long-term growth performance in developing markets.

8. Model Specification

To examine the effect of earnings retention on firm growth, two separate econometric models are constructed—one for retained earnings measured on cash basis (RECB) and another for accrual basis (REAB). Both models include control variables (Debt-to-Asset, ROE, and Net Profit Margin) to isolate the effect of retained earnings on growth.

Model A: Cash-Based Retention Model

Model A evaluates the relationship between firm growth (GA) and cash-based retained earnings (RECB). The coefficient measures how much growth changes with a unit increase in retained earnings kept in cash form. Control variables are included to ensure results are not biased by leverage or profitability differences. The term captures firm-specific effects that vary across companies but remain constant over time, while represents random error.

Model B: Accrual-Based Retention Model

Model B focuses on accrual-based retained earnings (REAB) to assess how profit reinvested after dividend distribution impacts firm growth. Here, β_1 estimates the sensitivity of growth to retained earnings recorded in accrual basis. The same control variables are used for consistency and comparability with Model A. This equation identifies whether reported retained profit—rather than cash retention—acts as a long-term driver of growth. The inclusion of μ_i and ε_{it} helps account for unobserved heterogeneity and stochastic variation across firms and years.

9. Analysis and Findings

9.1 Fisher Unit Root Test (ADF Stationarity Test)

Variable	Inverse Chi-Sq.	Z-Statistic	p-Value
GA	292.60	−9.15	0.000
RECB	173.48	−5.10	0.000
REAB	92.96	−2.31	0.004
Debt-to-Asset	146.09	−1.61	0.000
ROE	237.55	−9.41	0.000
Net Profit Margin	215.96	−8.44	0.000

H_0: All panels contain unit roots
H1: At least one panel is stationary

Source: Author's Calculation

To ensure the effectiveness of the regression of the panel data, it has to be ensured that the variables of the panel data are stationary. For this purpose, the variables were tested for a Fisher-type unit root to ensure all the variables are stationary. The results strongly reject the null hypothesis of unit root for all variables at 1% significance level.

This ensures that the dataset is suitable for regression. Stationary variables help

derive unbiased parameter estimates and improve predictive reliability of panel models.

9.2 Pedroni Test for Cointegration

In this study, the Pedroni Cointegration Test is conducted to observe whether there exists a significant long-term equilibrium relationship between the dependent variable and the independent variables.

The Pedroni Cointegration Test is conducted as the study used heterogeneous panel data set. The data set incorporates thirty companies across six sectors that have different financial, regulatory and business model structures, making the data heterogeneous in nature.

Table 3: Pedroni Panel Cointegration Test

Test	Statistic	p-Value
Modified Phillips–Perron (t)	8.0689	0.0000
Phillips–Perron (t)	–7.4628	0.0000
Augmented Dickey–Fuller (ADF t)**	–6.6682	0.0000

H0: No cointegration
H1: All panels are cointegrated

Source: Author's Calculation

The Pedroni test results clearly show that all three test statistics—Modified Phillips–Perron, Phillips–Perron, and Augmented Dickey–Fuller—are highly significant at the 1% level (p = 0.0000). Since each statistic rejects the null hypothesis of no cointegration, the findings confirm the existence of a long-run equilibrium relationship among the variables: growth in assets (GA), retained earnings (RECB & REAB), leverage (Debt-to-Asset), ROE, and net profit margin. This indicates that although the variables may fluctuate in the short run, they move together over time toward a stable long-run path.

The presence of cointegration implies that retained earnings and other financial indicators share a stable long-term association with firm growth. This strengthens the use of panel regression models in the study, as cointegration eliminates concerns about spurious regressions and ensures that the estimated relationships reflect meaningful economic connections.

9.3 Result Analysis of Model A

Table 4: Fixed Effect Regression (Model-A) – RECB as Independent Variable

Variable	Coefficient	Std. Error	t-Stat	p-Value
RECB	0.0012968***	0.0002638	4.92	0.000
Debt-to-Asset	0.3603415***	0.0917804	3.93	0.000
ROE	0.0185464	0.0720581	0.26	0.797
Net Profit Margin	−0.033879	0.0982447	−0.34	0.730

Constant	−0.0834821*	0.0463723	−1.80	0.073
Significance: ***1%; **5%; *10% Number of observation = 300 F Value=9.91		R-squared: Within = 0.1297 Between = 0.0738 Overall = 0.0505		

Source: Author's Calculation

The fixed-effect estimation indicates that cash-based retained earnings (RECB) have a strong positive influence on asset growth with high significance at 1%. This implies that companies that conserve cash internally tend to reinvest more efficiently, leading to increased asset accumulation. Debt-to-Asset is also significant and positive, suggesting firms effectively utilize leverage to finance growth projects. However, ROE and NPM remain statistically insignificant, meaning short-term profitability does not automatically lead to growth unless earnings are retained.

These results align with Pecking Order Theory (Myers & Majluf, 1984) which suggests firms prioritize internal financing. Similar studies such as Uwuigbe et al. (2016) found retained earnings to be a major internal growth driver, especially in emerging markets where external funds are costly.

Table 5: Random Effect Regression (Model-A) – RECB as Independent Variable

Variable	Coefficient	Std. Error	z-Stat	p-Value
RECB	0.00124***	0.0002585	4.80	0.000
Debt-to-Asset	0.0648871**	0.0325688	1.99	0.046
ROE	0.0424492	0.0727979	0.58	0.560
Net Profit Margin	−0.0973106	0.0974174	−1.00	0.318
Constant	0.0643696***	0.0186273	3.46	0.001
Significance: ***1%; **5%; *10% Number of observation = 300 Chi^2 = 30.29		R-squared: Within = 0.0967 Between = 0.1046 Overall = 0.0920		

Source: Author's Calculation

RECB remains significant in Random Effect estimation as well, confirming robustness across estimation types. The coefficient size implies that even marginal increases in retained cash lead to asset expansion. The Debt-to-Asset ratio also remains statistically significant supporting leverage-based growth. The insignificance of ROE and NPM further supports the notion that profit conversion to growth only occurs when retained. The result aligns with Olatunji & Adegboyega (2019) who found internal financing significantly boosts firm expansion capacity.

9.4 Result Analysis of Model B

Table 6: Fixed Effect Regression (Model-B) – REAB as Independent Variable

Variable	Coefficient	Std. Error	t-Stat	p-Value
REAB	0.0028067***	0.0005917	4.74	0.000
Debt-to-Asset	0.386598***	0.0922659	4.19	0.000
ROE	0.0032686	0.0721178	0.05	0.964
Net Profit Margin	−0.1117593	0.1004823	−1.11	0.267
Constant	−0.1003294**	0.0468739	−2.14	0.033
Significance: ***1%; **5%; *10% Number of observation = 300 F Value= 9.47		R-squared: Within = 0.1247 Between = 0.0965 Overall = 0.0530		

Source: Author's Calculation

Accrual-based retained earnings (REAB) also show a significant positive effect on asset growth at the 1% level, indicating that reinvested profits reported under equity contribute toward long-run expansion. Debt continues to positively drive growth under this model as well. As with Model-A, profitability indicators (ROE & NPM) remain insignificant.

Table 7: Random Effect Regression (Model-B) – REAB as Independent Variable

Variable	Coefficient	Std. Error	z-Stat	p-Value
REAB	0.0024985***	0.0005284	4.73	0.000
Debt-to-Asset	0.0796942**	0.0316095	2.52	0.012
ROE	0.0295724	0.0728657	0.41	0.685
Net Profit Margin	−0.1691652*	0.0998689	−1.69	0.090
Constant	0.0544448***	0.0183912	2.96	0.003
Significance: ***1%; **5%; *10% Number of observation = 300 Chi2 = 29.63		R-squared: Within = 0.0903 Between = 0.1645 Overall = 0.0935		

Source: Author's Calculation

Accrual retained earnings remain highly significant similar to cash earnings. This indicates strong reliability that both retained earnings indicators foster firm growth. NPM becomes marginally significant (10%) but negative, hinting that firms which spend more on operational improvements may temporarily reduce asset growth.

9.5 Hausman Specification Test

Table 8: Hausman Test Result for Model A (RECB Model)

Test Statistic	Chi-Square Value	p-Value	Decision Basis
Hausman Test (FE vs. RE)	9.64	0.0469	Reject H_o

Source: Author's Calculation

The Hausman test for Model A indicates a p-value of 0.0469, which is less than 0.05, meaning the null hypothesis (no systematic difference between FE and RE) is rejected. This suggests that the coefficients significantly differ across models, implying that the Fixed Effect Model is more suitable than the Random Effect Model for the RECB specification. Since FE controls for unobserved firm-specific characteristics that may correlate with retained earnings, it provides a more consistent and reliable estimate in Model A. Therefore, when analyzing cash-based retained earnings, the study should rely primarily on Fixed Effect estimation for interpretation.

Table 9: Hausman Test Result for Model B (REAB Model)

Test Statistic	Chi-Square Value	p-Value	Decision Basis
Hausman Test (FE vs. RE)	3.56	0.4695	Fail to Reject H_o

Source: Author's Calculation

In Model B, the Hausman test produces a p-value of 0.4695, well above the 0.05 threshold. Therefore, we fail to reject the null hypothesis, implying that there is no significant difference between the FE and RE coefficients. This result means that the Random Effect Model is the preferred and efficient estimator for REAB, as it assumes firm-specific effects are uncorrelated with the explanatory variables. Hence, for accrual-based retained earnings, the Random Effect model provides more efficient parameter estimation and should be used for inference and interpretation.

9.6 Pooled OLS Regression

Table 10: Pooled OLS (Model-A) – RECB Model

Variable	Coeff.	Std. Error	t-Stat	p-Value
RECB	0.0012369***	0.0002607	4.74	0.000
Debt-to-Asset	0.049574*	0.0264786	1.87	0.062
ROE	0.0466775	0.0749739	0.62	0.534
NPM	−0.1124066	0.0994218	−1.13	0.259
Constant	0.0720651***	0.0149544	4.82	0.000

Significance: ***1%; **5%; *10%
Number of observation = 300
F Value: 7.54
R-squared: 0.0928
Adj R-squared= 0.0805

Source: Author's Calculation

RECB shows positive and significant effect confirming internal cash retention enhances asset expansion. Debt impact is borderline significant (10%) supporting leverage-driven growth. ROE and NPM were insignificant reinforcing earlier model conclusions.

Table 11: Pooled OLS (Model-B) – REAB Model

Variable	Coeff.	Std. Error	t-Stat	p-Value
REAB	0.002439***	0.000509	4.79	0.000
Debt-to-Asset	0.0661734**	0.0261159	2.53	0.012
ROE	0.0338686	0.0747047	0.45	0.651
NPM	−0.1810709*	0.1015764	−1.78	0.076
Constant	0.0615515***	0.0151378	4.07	0.000

Significance: ***1%; **5%; *10%
Number of observation = 300
F Value=7.66
R-squared=0.0941
Adj R-squared=0.0818

Source: Author's Calculation

Accrual retained earnings again maintain strong significance indicating reinvested profits accelerate asset accumulation. Debt remains positively significant suggesting leverage enhances investment capacity. NPM becomes marginally significant negatively; implying expansion often requires resource consumption reducing short-term profits.

10. Conclusion

The study showed that there exists a positive and significant relationship between the earnings retained in any form either on a cash basis or on accrual basis and the growth of the firm's assets. This result coincides with the hypothesis that there should be a positive relationship between earnings retention and a firm's growth if the earnings are reinvested efficiently. The plausible reasons behind this might be the reason that in case of internal financing the firm incurs no interest rate cost while generating positive return that in the long run ensures the smooth growth of the firm.

The stakeholders in the stock market, therefore, must be aware about the reasons for which the earnings has been retained and are not distributed among the investors. The management in case of availability of projects with positive net present value should attempt to finance it with internal financing rather than external financing as it would ultimately maximize the wealth of the shareholders'. However, continuous earnings retention by the firm if not translated to expansion and growth of asset of the firm should raise concern among the stakeholders' and the reason for failing to grow should be assessed. Lastly, effective utilization of retained earnings is, therefore, essential for sustainable long-term value creation.

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The author declare no conflict of interest.

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