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The Effect of Corporate Earnings Changes and Cycles on Share Price Valuation of Financial Firms Listed at the Nairobi Securities Exchange, Kenya

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Abstract:

This study sought to examine the effects of corporate earnings variability on the market share price valuation of listed financial firms in Kenya. Based on the study, this paper explores the influence of changes in corporate earnings and corporate earnings cycles on the share price valuation of financial firms listed at the NSE, Kenya. The study was guided by the efficient market hypothesis and supported by the following theories: Transaction Cost, Signaling Hypothesis and Capital Structure. The research employed descriptive research design with the target population being made of financial listed companies at the NSE. Since the target population was small, a census approach was used to derive the sample for the study and, due to the nature of the study variables, document analysis was used to collect data. Data was mined from organizational databases and reports before being entered into statistical software where it was analyzed through the use of descriptive and inferential statistics. Inferential statistics used included correlation regression and ANOVA. The regression analysis, F statistic, indicated that corporate earnings ($R^2 = 0.052$) explained the variations in share price, while earnings cycles did not. The findings showed that changes in corporate earnings significantly determined market share price values where an increase in corporate earnings would result in an increase in the share prices. On the contrary, corporate earnings cycles did not affect share prices of listed financial firms at the NSE. The research recommends further studies in different sectors to establish the effects of corporate earnings variability on share prices of the various sectors. The study is important to listed firms, investors, government and regulators and was delimited to financial listed firms in the NSE who have been listed for a period of over 10 years.

Keywords: *Effect, corporate earnings changes, cycles, share price valuation, financial firms, listed, nairobi securities exchange, NSE, Kenya*

1. Introduction

Stock markets perform a vital economic role by generating prices that signal efficient resource allocation and investment decisions. If stock prices are always near their fundamental (full information) values, then capital is correctly priced and, the information provides corporate managers with meaningful feedback (Durnev, Morck, Yeung & Zarowin, 2003). These two effects should lead to more economically efficient capital allocation, both between firms and within firms. Earnings reports are important to those people concerned about a firm's viability and profitability because they make firm-specific investments, such as customers and suppliers, bankers and workers (DeGeorge, Patel & Zeckhauser, 1999).

Corporate earnings cyclicity is the cyclical behaviour of equity prices over long periods of time. A time series analysis of corporate earnings exhibits this cyclical behaviour which is often experienced over prolonged periods of fast growth followed by periods of stagnation or contraction. In the same extent, equity earnings also exhibit a pronounced cyclical behaviour in tandem with corporate earnings (Taboga, 2011). Earnings price (E/P) ratio is a quick but effective gauge to under/over-valuation of the stock market. Anderson and Brooks (2006) observe that it is also a good predictor of excess returns on stocks. In recent years, its popularity has also grown among policy makers because it offers clear, simple and intuitive instruments that help understand asset valuations for the effective monitoring of financial system stability (Taboga, 2011).

Corporate earnings are seen as a major input into investors' valuation models, and thus they affect securities prices and managers' compensation and wealth (Panigirtzoglou & Scammell, 2002). The same earnings are also used by corporate boards and institutional investors to gauge enterprise performance and quality of management. Studies (Longstaff & Piazzesi, 2004; Lev, 2003) have shown that earnings highly correlate with stock prices and returns than cash flows from operations. Corporate earnings represent a small but highly volatile component of aggregate consumption; however, this volatility directly impacts the covariance between the pricing essence and the corporate cash flows and can significantly affect equilibrium stock values (Lev, 2003).

1.1. Corporate Earnings

Research findings from the use of regression analysis by Durnev *et al.* (2003) have shown that US firms and industries with lower market model R^2 statistics exhibit a higher association between current returns and future earnings, indicating more information about future earnings is in current stock returns. This finding supports Roll's first interpretation – higher firm-specific returns variation as a fraction of total variation signals more information-laden stock prices and, therefore, more efficient stock markets. In the medium to long term (1 to 10-year intervals), returns to equities appear to be explained overwhelmingly by the firm's cumulative earnings during the period; other plausible explanations such as dividends, cash flows or capital investments have marginal correlations close to zero. Even for short-term equity returns, earnings are an important explanatory factor (DeGeorge, Patel & Zeckhauser, 1999).

A correlation analysis has shown that US firms' earnings highly correlate ($r = 0.60$, $p < 0.05$) with stock prices and returns than are cash flows because it reflects manager's estimates about future outcomes like obligations (pension expenses or product warranty) whereas cash flows have a backward orientation (Lev, 2003). A study by Lev (2003) on the NYSE shows that, although the correlation between the adjusted and the unadjusted ratios is high, there are periods when they provide substantially different indications. For instance, from 2006 to mid-2008 the adjusted ratio was substantially lower than the unadjusted one, as a consequence of the fact that earnings in the same period are estimated to be well above their permanent level. On the contrary, during 2009 the adjusted ratio was much higher than the unadjusted one because earnings fall below their long-run level (Lev, 2003).

Research findings by Durnev *et al.* (2003) have indicated that firm-specific stock price variability is positively correlated with both measures of stock price informativeness and are also consistent with recent work that links greater firm-specific returns variation to better functioning stock markets. Furthermore, differential firm size is negatively and significantly correlated with both differential future earnings response measures, indicating that firm size differences remain important within industries. Industry structure is intermittently significant, with a negative sign. Higher firm-specific stock returns may also reflect more informationally efficient stock prices in the United States. These findings are consistent with the view that greater firm-specific price variation is associated with more informative stock prices and ultimately attests to the role of stock prices as efficient signals for resource allocation, and thus to the functional efficiency of the stock market. Bondt and Thaler (1987) has found that systematic price reversals for stocks that experience extreme long-term gains or losses: past losers significantly outperform past winners, a fact that is consistent with the behavioral hypothesis of investor overreaction.

Durnev *et al.* (2003) posit that future earnings response measures positively correlate with relative firm-specific return variability in both the high and low return variability samples. Firm diversification negatively correlates with both future earnings response measures and with firm-specific returns variations. Differential firm size negatively and significantly correlated with both differential future earnings response measures, indicating that firm size differences remain important within industries. Industry structure is intermittently significant, with a negative sign (Durnev *et al.*, 2003).

1.2. Corporate Earnings Cycle

Corporate earnings and dividends have historically been more sensitive to economic shocks than has aggregate consumption and is seen to increase equity premium thus generating levels of equity volatility consistent with those experienced by the stock (Longstaff & Piazzesi, 2004). Firms and industries with lower market model R^2 statistics exhibit a higher association between current returns and future earnings, indicating more information about future earnings in current stock returns (Durnev *et al.*, 2003).

The estimates of the adjusted E/P ratio (the ratio between the permanent component of earnings and the stock price) are highly correlated with the unadjusted E/P ratio. However, there are periods when the two ratios provide substantially different indications and the difference is statistically significant. Before the 2008 financial crisis, earnings were much above their trend level and the unadjusted EP ratio which made stock prices look cheaper than suggested by the adjusted ratio. Therefore, it is not possible to tell whether or not these differences in earnings are statistically significant and thus the need for a statistical procedure that allows measuring the uncertainty related to the estimation of the permanent component of the share price (Taboga, 2011).

Corporate earnings are a highly volatile component of aggregate consumption, which directly impacts the covariance between the pricing structure and the corporate cash flows and can significantly affect equilibrium stock values. Therefore, the reason managers tend to artificially smooth dividends over time, such that managers often retain earnings within the firm during good periods and pay dividends out of capital during bad periods (Longstaff & Piazzesi, 2004). In the UK, empirical findings have shown that there is a significant negative relationship between the pay-out ratio of a firm and the volatility of its stock price and a negative relationship between dividend yield and the volatility of stock price (Hussainey, Oscar-Mgbame & Chijoke-Mgbame, 2011). The correlation coefficient ($r = -0.2583$) between price change and dividend yield, while that price volatility and dividend pay-out ($r = -0.2583$). A study by Longstaff and Piazzesi (2004) has found that corporate cash flows are highly sensitive to economic shocks which then magnifies volatility into equity premium. Specifically, when aggregate earnings and consumption growth are constrained to be equally sensitive to shocks, the equity premium is only 0.54%. This results in nearly a six-fold increase in the size of the equity premium.

Empirical results show that security mispricing is attributable to the persistence of lower earnings that is as a result of less reliable accruals by the management (Richardson, Sloan, Soliman & Tuna, 2005). In a sample of Nigeria, a study revealed that volatility in earnings is also reflected in the changes in equity prices, which indicates the nature of the relationship between dividend policies and variability of company earnings. The dividend yield showed a negative impact on share price risk, while dividend pay-out ratio indicated both negative influences and positive influences alternatively though all were at lower significant levels. This suggests that dividend yield is more important than pay-out ratio in influencing price volatility of ordinary shares (Okafor & Chijoke-Mgbame, 2011). Further evidence from Nigeria indicates that the share price correlates with dividend per share and earnings per share, however, dividend per share produces a greater positive effect on changes in the stock prices when compared to the earnings per share (Sulaiman & Migiroy, 2015).

1.3. Statement of the Problem

Equity valuations and, consequently, market share price is important for monetary policy makers. This is because the factors that drive equity/share price valuations may contain information about the future course of the economy. Moreover, a correction in equity prices may create shocks to which monetary policy may have to react, thus equity market correction may also have negative implications for financial stability. In the private sector, equity pricing aids in investments decisions. As such, these decisions are based on the equities being fairly valued while in the public sector, monetary policy makers are interested in the factors underlying equity valuations for the light they may shed on the future course of the economy (Panigirtzoglou & Scammell, 2002).

Equity valuations are also important for financial stability as equity overvaluation increases the risk of a sharp correction, with potentially negative implications for the financial system. Some other development triggers a fall in the equity market, which would be a shock to domestic demand through the effect on household wealth and the cost of capital (Panigirtzoglou & Scammell, 2002). Though equity valuation is determined largely by discounted dividends (Campbell, Polk & Vuolteenaho, 2010). However, studies by Lev (2003), DeGeorge, Patel and Zeckhauser (1999), Longstaff and Piazzesi (2004), Bikker and Hu (2012) and Taboga (2011) show that corporate earnings determine the market share price. However, the volatility in the earnings directly impacts on the covariance between the pricing essence and the corporate cash flows and significantly affects equilibrium stock prices (Lev, 2003).

Economic downturns lead to a decline in business sales and dwindling households' income and stock prices. This phenomenon occurs through the contemporaneous and the delayed GDP coefficient which holds a strong correlation between profit margins and the business cycle or, more particularly, real economic growth, presumably owing to demand effects. Therefore, Bikker and Hu (2012) affirm that when GDP growth is greater than 2%, profits turn out to be almost 2.5 times as high as when GDP growth is less than 2%. Bikker and Hu (2012) raise the issue of earnings variability in the banking industry in developed economies while Taboga (2011) affirm the presence of earnings variability in US listed firms. Longstaff and Piazzesi (2004) attribute changes in market share prices to changes in corporate earnings.

A number of studies have been conducted on share price valuation of listed firms in developing economies. These include the dividend pay-outs in listed firms in Ghana (Amidu & Abor, 2006), share price volatility in Lagos Securities Exchange (Okafor & Chijoke-Mgbame, 2011), share price volatility in Nigerian banking industry (Ajayi & Seyingbo, 2015), share market price of listed firms in Lagos Security Exchange (Ordu, Enekwe & Anyanwaokoro, 2014), share price valuation in Nairobi Security Exchange (Matoke & Marangu, 2014), share price volatility in Pakistan (Habib & Khan, 2012). The first sets of studies were done in developed economies and none empirically tested the corporate earnings – share price relationship. The second set of studies was done in the developing economies and majorly attributed the share price changes to dividend payments. There were shortcomings in their measurements and methodology in that a number of studies were done in a relatively short time. Therefore, the study sought to determine the effect of earnings and its associated variability in the share price in selected listed financial firms in the NSE, Kenya.

2. Materials and Methods

The study adopted a descriptive research design. The study targeted all financial firms listed at the NSE as at 31st January 2017. The firms were selected using census approach. The sample consisted of six insurance companies and ten banks listed at the NSE, Kenya. To collect data, the study used document analysis. The documents examined included written materials such as notices, communication and/or websites, reports, minutes, books and journals, correspondence (including emails), minutes of meetings, reports to shareholders, diaries, transcripts of speeches and administrative and public records as well as organizations' databases. The collected data was then coded and analyzed through the use of descriptive and inferential statistics. Since the data obtained was in the ratio scale, the researcher used measures of central tendencies such as means, standard deviation statistics and measures of dispersion such as skewness. The researcher then used correlation, regression, and ANOVA to analyse the data.

3. Results and Discussion

3.1. Effect of Changes in Corporate Earnings

The study sought to ascertain the effect of changes in corporate earnings on the share price valuation of companies listed at the NSE. The statistics, $F(1, 80) = 4.365$, $p < 0.04$, show that the corporate earnings explain the variations in share price with $R^2 = 0.052$ indicating that 5.2 percent of share price can be explained by the ROE. ROE as a measure of corporate earnings has a significant effect on share price valuation at the NSE, while NOPAT does not have any significant effect on the market share price of equity.

The findings showed that ROE positively and significantly determined the market share price values of the financial firms listed at the NSE. This result could be attributed to the underlying effect of the equity. In listed firms, the equity is listed in the financial market as the basis for pricing and thus the ROE can be seen to reflect returns as measured by the share price. This is supported by Wei and Zhang (2006) who indicate that the average ROE explains the upward trend in the average stock return volatility. The implications are that changes in ROE would determine the significant upward change in the stock prices.

The result showed that firms with low book to market ratio, efficient working capital management, low liquidity, more equity and fewer liabilities, and high retained earnings had better market performance as measured by the market share price. The results by Anwar (2016) show that it is only ROE that significantly influences stock return. A higher ROE shows that the firm can earn a higher return on shareholder's equity. A higher ROE also indicates a higher efficiency in spending money invested by a shareholder to earn profit growth.

Banks have on average over 20% ROE while insurance firms report ROE of less than 20%. The results also show that the ROE is also determined by the size of the institution. Large firms, namely Barclays, Jubilee Insurance, Standard Chartered and Equity Banks, had a

ROE of more than 20% while smaller firms NIC and HF group had lower levels of ROE. This shows that the movement of stock price is affected by many more factors other than firm's financial performance. From the findings of this research, 85.8 percent of the share price was explained by the study factors. This suggests that there is other information other than internal fundamental factors that also affect the movement of firm's stock price. In certain periods, the changes in stock price do not reflect the firm's financial performance (Wei & Zhang, 2006).

Based on the above findings, the study did not reject the alternate hypothesis, that there exists a relationship between changes in corporate earnings and share price valuation of financial listed firms at the NSE, Kenya. Earnings have a general significant positive effect on the market share price of an equity (Okafor & Chijoke-Mgbame, 2011). The findings indicate that large firms have higher earnings, the firm size had a significant negative relationship with price volatility, with larger the firm having a less volatile stock price (Hussainey, Oscar-Mgbame & Chijoke-Mgbame, 2011).

Although corporate earnings measures contain noise, their co-variation over time with the pricing aspects may more closely reflect that of the underlying cash flows. Further, corporate earnings represent a small but highly volatile component of aggregate consumption, which directly impacts the covariance between the pricing structure and the corporate cash flows and can significantly affect equilibrium stock values (Longstaff & Piazzesi, 2004).

3.2. Effect of Corporate Earnings Cycles

The study further sought to gauge the impact of corporate earnings cycles on the share price valuation of financial firms listed at the NSE. The statistic, $F(1, 81) = 0.140$, $p > 0.05$, showed that the earnings cycles did not explain the variations in share price. Since the F statistic is not significant, the whole model is not statistically significant in explaining any variations in share price.

The research findings showed that corporate earnings cycles did not affect the share price valuation of listed firms. This meant that the corporate earnings cycles, as indicated by the GDP, do not determine the market share price of listed financial firms at the NSE. Contrary to this finding, Wei and Zhang (2006) indicate that macro-economic conditions, political situation, government industrial policy, and technical aspects within firms are factors other than financial performance that can affect the changes in stock price.

From the above findings, the study rejected the alternate hypothesis, that corporate earnings cycles have an effect on share price valuation of the listed financial firms at the NSE, Kenya. Earnings variability as measured by GDP growth does not have a significant effect on share price valuation at the NSE. The findings indicate that their earnings cycles as measured by GDP growth do not have a significant direct effect on the share price. Past research findings by Bikker and Hu (2012) have shown GDP growth has an indirect effect on the share price indicating a co-relationship exist between profits and business cycle.

4. Conclusion and Recommendations

The findings indicated that corporate earnings significantly determine the share price of firms listed at the NSE. This indicates that earnings determine the share price such that increase in earnings would significantly lead to an increase in the market share price. The earnings cycle does not determine the share price of the listed financial firms in the NSE. The findings further showed that business cycles do not correlate with the share price valuation at the listed financial firms in the NSE. Therefore, changes in the GDP do not affect the valuation of share prices of the financial listed firms at the NSE.

Based on the study findings, it is clear that there are other significant factors that influence the market share price of listed firms in Kenya. Furthermore, internal firm factors such as the return on sales, equity and other measures of profitability have profound effects; therefore, individual investors wishing to trade in the NSE must first consider these factors. Besides firm internal factors, an investor should consider external factors such as the business cycles or the economic growth since they determine the rate of profitability of the firm.

5. References

- i. Ajayi, M. A., & Seyingbo, O. A. (2015). Dividend policy and share price volatility in the Nigerian banking industry. *Fountain University Journal of Management and Social Sciences*, 4(1).
- ii. Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance*, 7(2), 136-145.
- iii. Anderson, K., & Brooks, C. (2006). The Long-Term Price-Earnings Ratio. *Journal of Business Finance & Accounting*, 33(7-8), 1063-1086.
- iv. Anwar, M. (2016). Impact of Firms' Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London, UK). *Global Journal of Management and Business Research: D Accounting and Auditing*, 16(1).
- v. Bikker, J. A., & Hu, H. (2012). Cyclical patterns in profits, provisioning, and lending of banks and procyclicality of the new Basel capital requirements. *PSL Quarterly Review*, 55(221).
- vi. Bondt, W. F., & Thaler, R. H. (1987). Further evidence on investor overreaction and stock market seasonality. *The Journal of Finance*, 42(3), 557-581.
- vii. Campbell, John Y., Christopher Polk, and Tuomo Vuolteenaho (2010). Growth or glamor? Fundamentals and systematic risk in stock returns. *Review of Financial Studies*, 23(1), 305- 344.
- viii. Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. *The Journal of Business*, 72(1), 1-33.
- ix. Durnev, A., Morck, R., Yeung, B., & Zarowin, P. (2003). Does greater firm-specific return variation mean more or less informed stock pricing? *Journal of Accounting Research*, 797-836.

- x. Habib, Z. I. K., & Khan, M. A. (2012). Dividend Policy and Share Price Volatility: Evidence from Pakistan. *Global Journal of Management and Business Research*, 12(5).
- xi. Hussainey, K., Oscar Mgbame, C., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *The Journal of Risk Finance*, 12(1), 57-68.
- xii. Lev, B. (2003). Corporate earnings: Facts and fiction. *Journal of economic perspectives*, 27-50.
- xiii. Longstaff, F. A., & Piazzesi, M. (2004). Corporate earnings and the equity premium. *Journal of Financial Economics*, 74(3), 401-421.
- xiv. Matoke, J., & Marangu, W. N. (2014) Impact of Dividend Payments on Share Values in Companies Listed on the Nairobi Securities Exchange in Kenya. *European Journal of Business and Management*, 6(17), 126-130.
- xv. Okafor, C. A., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility in Nigeria. *Jorind*, 9(1), 202-210.
- xvi. Ordu, M. M., Enekwe, C. I., & Anyanwaokoro, M. (2014) Effect of Dividend Payment on the Market Price of Shares: A Study of Quoted Firms in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 5(4) PP 49-62.
- xvii. Panigirtzoglou, N., & Scammell, R. (2002). Analysts' earnings forecasts and equity valuations. *Bank of England Quarterly Bulletin*, Spring.
- xviii. Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2005). Accrual reliability, earnings persistence, and stock prices. *Journal of accounting and economics*, 39(3), 437-485.
- xix. Sulaiman, L. A., & Migiyo, S. O. (2015). Effect of dividend decision on stock price changes: further Nigerian evidence. *Investment Management and Financial Innovations*, 12(1), 330-337.
- xx. Taboga, M. (2011). Under-/Over-Valuation of the Stock Market and Cyclically Adjusted Earnings. *International Finance*, 14(1), 135-164.
- xxi. Wei, S. X., & Zhang, C. (2006). Why Did Individual Stocks Become More Volatile? *Journal of Business*, 79, 259-292.