

CORPORATE SIZE AND FINANCIAL PERFORMANCE: EVIDENCE FROM QUOTED CONSUMER GOODS FIRMS IN NIGERIA

Grace Nkemjika Obi

Department of Finance, Faculty of Management Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria.

DOI: 10.5281/zenodo.14918033

Abstract

This study was undertaken to examine corporate size and the return on equity of quoted consumer goods manufacturing firms in Nigeria. The general purpose was to determine the effect of various measures of firms' size and on the return on equity of quoted consumer goods manufacturing firms. Secondary data obtained from 15 quoted consumer goods manufacturing firms covering the period 2013 – 2012. Return on equity was modeled as the function of total assets ratio, size of leverage, investment size and sales size. Panel data methodology was employed while the fixed effects model was used as estimation technique at 5% level of significance. Fixed effects, random effects and pooled estimates were tested while the Hausman test was used to determine the best fit. The study found that 62 percent variation on return on equity can be traced to firm size in this study; this implies that 38 percent can be traced to internal factors not captured in the model. The f- statistics and probability confirms that the model is significant and can predict the variation on the dependent variable. The Durbin Watson statistics proved that there is no presence of serial autocorrelation among the variables. Beta coefficient of the variables indicates that total assets ratio have negative and no significant effect on return on equity of the quoted firms while other variables in the model have positive and no significant effect on the dependent variable. From the findings, the study conclude that firm size have moderate effect on the return on equity of the quoted consumer goods manufacturing firms. The study recommends that management should ensure optimal size to enhance return on equity of the quoted firms.

Keywords Corporate Size, Return on Equity, Consumer Goods, Manufacturing Firms, Nigeria

INTRODUCTION

The traditional finance paradigm theory and teaching put the shareholders wealth maximization as the primary goal of corporate management. The shareholders wealth maximization as function of management is a critical function that requires tactical and strategic measures to achieve. Maximizing shareholders wealth is the primary responsibility of every profit making organization and constitutes the short and long-run management planning and operating strategies. It is a qualitative measure of input-output relationship of management and management efficiency in maximizing investors return on investment, return on assets, return on capital employed and earnings per share. In today's world, the size of a firm is crucial to its success due to the phenomenon of economies of scale. Modern corporate firms look to increase their size so as to get a competitive edge over their competitors by reducing production costs and increasing their market share. Bigger firms can manufacture items

at much lower costs than smaller firms can. Abdurahmanet *al.* (2003) argued that the nature of the relationship that exists between firm size and profitability is a key element in business success, which may shed some light on the factors that boost profits. Shaheen and Malik (2012) described firm size as the quantity and array of production capability and potential a firm possesses or the quantity and diversity of services a firm can concurrently make available to its clients. Firm size optimal firm size hypotheses postulate that firm size is strongly dependent on a number of considerations. Such factors include the market structure in which the firm operates, in other words whether it operates in a perfectly competitive market or an imperfectly competitive one (e.g. monopoly, oligopoly, or monopolistic competition). The major conclusion of the optimal firm size theory is that small companies grow faster than larger companies until they reach the minimum efficient scale point of production. Similarly, if firms have market power such as where there is imperfect competition), their optimal size may deviate from this optimal cost position, and if there are economies of scope, such deviations may be more noticeable. However, in this situation, a firm's ability to grow depends on its innovations, in other words, the limits to a firm's potential growth are largely determined by the demand for its unique product rather than by cost considerations. Cost considerations play a significant and crucial role in explaining the kind of relationships the firm has within and outside its operating environment. Babalola (2013) argued that the larger a firm is, the more the influence it has on its stakeholders and so large firms tend to outperform small firms. Return on equity is the amount of net income returned as a percentage of shareholders' equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. Return on equity tells what percentage of profit the company makes for every monetary unit of equity invested in the company. Return on equity doesn't specify how much cash will be returned to the shareholders, since that depends on the company's decision about dividend payments and on how much the stock price appreciates. However, it's a good indication of whether the company is even capable of generating a return that is worth whatever risk the investment may entail (Berman, Knight and Case, 2013). Return on equity is usually calculated by dividing net profit by average shareholders' equity. One of the areas where the influence of firm size has been most widely studied is in relation to corporate finance. Early research notably that of Scherer (1973) and Shepherd (1972), emphasized the importance of scale economies and other efficiencies in larger firms. On the other hand, the structure-conduct-performance paradigm highlights the importance of market concentration and conduct in explaining profitability. Theoretically, while there are a range of theoretical perspectives on the firm performance (and operations), some proponents argue that a firm is a complex entity with many dimensions that simultaneously interact to determine the nature, scope, behaviour and performance of a particular firm. Thus, how a particular firm acts and performs depends on the coordination and management of these elements. Some of the core theories in the literature that explain the growth of firms and their performance include the neoclassical theory, the managerial theory, the Penrose model and the theory of optimum firm size. These theories are reviewed briefly below (Sangosanya, 2011). The neoclassical theory postulates that a firm is an abstraction, a perfect form of business, whose existence is explained exclusively by the purely economic motive of generating profit, the neoclassical firm's objectives as thus principally profitmaximizing or cost-minimizing. However, according to neoclassical theory, a firm is a corporate entity operating in an exogenous environment

with many factors which lie beyond the firm's control. This by implication means that profit as a motivation for the firm's growth and the purpose of its existence is determined by external factors beyond the firm's control (Sangosanya, 2011, Bernadette and David, 2005). The dissatisfaction in the 1930s with the neoclassical theory's simple conception of the firm as a device which transforms atomistic inputs into marketable outputs gave rise to a number of alternative perspectives. One such perspective took a legal, economic view of the firm in order to discover key aspects of its internal structure. This in turn formed the basis of the managerial theory of the firm. The managerial theory stresses the complex nature of the modern firm. However, according to Baumol (1967), one of the major reasons why managers are hired is to increase sales or maximize revenue rather than for profit maximization. The managerial theory centres on the function of a manager as revenue maximization agent. The theory holds that firms should aim to increase their output and to capture the largest market share, which in turn will result in increased sales. Critics of the managerial theory argue that cost minimization and profit maximization should be a manager's principal function, while some argue that the managerial theory is simply a modernized version of the neoclassical theory. Firms are expected to increase profits from its capital base, but there has been decreasing trend over the years (Masira R., 2018). The decline in financial performance over the period under study can be attributed to the weak firm size. Firm size has been employed in manufacturing firms such as a profitability and asset tangibility, but it is not clear which of the characteristic can improve performance in terms of profitability. This is not well objected to maximize financial mix from market share price per share of the firm (Minfang 2010). This is done by debt and equity as the two major classes of liabilities with debt holders and equity holders to manage investors of the firms. The level of risk control in debt holders are expecting less control as they earn fixed rate of return and protected by contractual obligations with respect to their investment. A company should earn profits to survive and grow over a long period of time. Sufficient profits must be earned to sustain the operations of the business and to be able to obtain funds from investors for expansion and growth (Pandey, 2011). Firm size has remained a major area of investigation in corporate finance. Coase (2019) is credited for the seminal work in this area. He raised questions on what determines firm boundaries and how these boundaries affect allocation of resources. What determines firm size has remained a major question under investigation by the researchers. Different theories of firm explain the reasons behind the existence of a firm. You (2017) surveyed diverse literature on the theories of firm size (determinants and distribution) and classified the literature into four streams including technological approach or the conventional microeconomics approach, institutional approach commonly known as transactional economics approach, industrial organizational economics approach and dynamic modelling approach. Dang et al. (2018) investigated the impact of firm size on eight practices of empirical corporate finance which were financial performance, financial policy, corporate governance, dividend policy, compensation policy, investment policy, diversification and lastly mergers, acquisition and corporate control. They used data from Latin America and called for future research on the issue. Recently, Hashmi et al (2022) conducted research on the same issue using data from Shari'ah compliant firms. Obviously, for a discipline to be regarded as scientific there shall be sufficient evidence for a construct to become a well-established theory. Further, researchers argued that no study in finance using firm size as a variable has provided any justification for the use of any proxy/measure employed in that research. This

means that until now researchers have decided by their own will about selection of firm size measure without providing any logic. This point carries serious repercussions. It must be noted that all measures of firm size are theoretically different and capture different aspects of size. A researcher might use a proxy/measure while examining firm size in relation to any area of corporate finance which might be irrelevant or has no connection to that specific area. Previous researchers have noted this problem, e.g. while examining leverage in relation to size, EbelEzeoha(2016) argued that mixed results of past researchers on relationship between size and leverage does not mean that size simultaneously is positively and negatively related to leverage neither does it mean that all these findings are contextually wrong nor that size and leverage are uncorrelated. He noted that it is the difference in definitions of firm size employed by all the papers (employing different measures/proxies) which resulted in different results. Thus, examining sensitivity of different proxies of firm size in relation to practices of corporate finance is essential. From the above, this study examined the effect of corporate size on the return on equity of quoted consumer goods manufacturing firms.

LITERATURE REVIEW

Firm Size

The concept of firm size is mainly viewed from the perspective of sales volume, number of employees, capital base, assets or values add features. Normally, those using the technological theory based on economy of scale derived from capital inputs would use only sales figures or assets for measurement purposes. It has been found that sales and assets are not particularly appropriate methods of measurement for size; the main issue would be how agency transactions and the range of costs impact the profits. Costs are normally related to the fundamental way the organization is controlled by a hierarchy more than just the value of physical assets. The size of a firm is an important factor for its investment decisions (Svensson & Thoren, 2015). The size of the company has been one of the most commonly used factors in previous studies and various studies argue that the size of a firm is one of the factors that have the largest influence on dividend policy (Hellstrom & Inagambaev, 2012). The idea that firm size and dividend policy are positively correlated is generally accepted by many of our previous studies (Lee, 1995), Denis & Osobov (2007), Ho (2003), Kuwari (2009), Olantundun (2000), Aivazian and Booth (2003), Eriotis (2005), Malkawi (2007), Holder et al. (1998). Lee (1995) and Ayman (2015) emphasized positive relations between a firm's size and dividend payout, as many studies claim that firms with larger size are more mature and less risky, thus can afford to pay out more dividend comparing to small firms. However, Muhammad et al (2011) found that size is insignificant regarding a firm's dividend policy. We hypothesize a positive relation between a firm's size and its return on equity. As supported by Life-Cycle Theory (DeAngelo & DeAngelo, 2006), young and high growth firms tend to pay less dividend while mature firms with stable cash flows pay higher dividend. The mature firms are believed to have larger size, thus pay higher dividend. Larger sized firms are also seen as the ones with more cash flow and the managers are having more power, thus paying out more dividend are considered to be a method to reduce agency costs, which is in support of Agency Theory (Jensen & Meckling, 1976; Jensen, 1986. Firm size is among determinant factors of firm performance and particularly shows the profitability of business (Oyelade, 2019; Isik et al., 2017). In the context of international integration, emergence and vast influence of large enterprises-multinational corporations (MNCs) have proved the important

role of scale in firm performance and business environment (Babalola, 2013). New economic geography theory and studies show the relationship between the economic growth and the growth of firm size. On the one hand, the economic growth of a country or an area will be based largely on the scale-up of existing institutions (Bhayani, 2010). Otherwise, regarding the economy of scale, enterprises can produce more efficiently, reduce costs, apply technology to production easily, negotiate with suppliers easily, increase competitiveness, and access to capital easily, etc. (Voulgaris&Lemonakis, 2014; Fiegenbaum&Karnani, 1991; Lee, 2009).

Leverage

A mixed result is also found on a financial leverage impact of a firm on its firm size payment. Franklin and Muthusamy (2010) emphasized that leverage is a crucial factor which influence the firm size behaviours of a firm. A negative relation was observed between a firm's leverage and its firm size payment by Rozeff (1982); Kuwari (2009); Bradley et al. (1998); Aivazian& Booth (2003); Kumar (2003); Malkawi (2007) and Hellstrom&Inagambaev (2012), indicating that the more debt a firm has, the less it pays dividend. On the other hand, Myers and Bacon (2004), Olantundun (2000) and Rehman and Takumi (2012) observed a positive relation between leverage and firm size payout. Myers and Bacon (2004) argued that large and reputational corporations embrace high dividends to ensure a strong financial reputation that allows for easy access to external capital. Therefore, even with high growth and debt, dividends will be high. However, Omar (2009) and Ho (2003) claimed that financial leverage does not influence a firm's firm size policy. We hypothesize a negative relationship between financial leverage and dividend. According to the Agency Theory (Jensen and Meckling, 1976; Easterbrook, 1984), managers are risk averse and are reluctant to take on more debt. Higher levered firms have higher financial risks, thus managers tend to maintain cash flow in order to mitigate financial risks. As a result, firm size payout will decrease. This is in support of the free cash flow hypothesis (Jensen, 1986) as manager's use cash to pay back debt instead of dividend.

Investment Opportunities

Investment Opportunities are not studied as much as other factors regarding the determinants of firm size policy. Some previous hypothesis argued that investment policy and firm size policy have mutual influence. For instance, John & Lang (1991) and Lang &Litzenberger (1989) highlighted that changes in firm size reflect changes in managers' investment policy given their opportunity set. This can be explained by that firm size payments depend on a firm's business lifecycle and since young and high growth firms' focus more on investments, consequently they pay fewer dividends. Banerjee et al. (2002); Ahmed &Javid (2012); Amidu and Abor (2006) and Yoon & Starks (1995) all found a negative relation between investment opportunities and firm size policy, implying that firms with many investment opportunities pay less dividend. Though Souza and Saxena (1999) claimed that there is no relation between investment opportunities and firm size policy, Smith and Watts (1992) implied that firms with more assets in place and fewer growth opportunities have higher dividends. We hypothesize a negative relation between investment opportunities and dividends, which is consistent the Life-Cycle Theory (DeAngelo & DeAngelo, 2006). Young and high growth companies face more investment opportunities while stable and mature companies have less investment opportunities, young firms would thereby use excess cash to reinvest instead of paying out dividend.

Portfolio Theory of Investment

The portfolio theory is an investment approach in which the investor balances risk against expected return to maximize earnings from an entire portfolio. Portfolios are an effective way of increasing returns while decreasing risk in investment. For this reason, portfolio selection strategies have received quite some attention in financial literature. The modern portfolio theory introduces approximate 'mean-variance' analysis to simplify the portfolio selection problem. Markowitz (1959) attempted to quantify risk and quantitatively demonstrate why and how portfolio diversification works to reduce risk for investors. The 'risk' of a portfolio is quantified as a standard deviation of return from period to period, and the portfolio selection problem is reduced to computing an efficient' portfolio, that is, one that minimizes the risk for a fixed level of return in a single period. According to the portfolio theory, the larger the expected return the better the investment, and the smaller the standard deviation of the return the more attractive the investment. Furthermore, the theory shows that we can reduce the standard deviation of the return or risk by combining anticovariant securities. However, each asset class generally has different levels of return and risk and also behaves uniquely so that one asset may be increasing in value as another is decreasing or at least not increasing as much, and vice versa. This theory, however, has a shortcoming; it cannot allow both more and less risk adverse investors to find their optimal portfolio, a problem surmounted by the capital asset pricing model (CAPM) (Sharpe, 1964).

Liquidity Preference Theory

Liquidity preference theory was first advanced by Keynes (1936). He stated that the interests are determined by the demand and supply of money balances. The theory assumes that people's demand for money is not for transactions purpose but as a precaution and for speculative purposes, whereby, the transaction demand and precautionary demand for money increase with income, while the speculative demand is inversely related to interest rates because of the forgone interest. He further stated that investors will always prefer short term securities to long term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping. It is based on the observation that, all else being equal, people prefer to hold on to cash and that they will demand a premium for investing in non-liquid assets such as bonds, stocks, and real estate. The theory also suggests that the premium demanded for parting with cash increases as the term for getting the cash back increases. According to Auerbach (1988), stated that the rate in the increase of the premium slows down with the increase in the period for getting the cash back. In financial terms, this theory is expressed as "forward rates should exceed the future spot rates. The expectation, therefore, is that forward exchange rates should offer a premium over expected future spot exchange rates since those who are risk-averse demand a premium for securities with longer-term maturities.

Empirical Review

Waqas, Imran, Hafis and Jawad (2013) empirically evaluated the factors that significantly affect the firm's performance in textile and food sector of Pakistan. The researchers used panel data set from the period of 2005 to 2010. One-way fixed effect model was used due to the presence of cross-sectional fixed effect in the regression results. The researchers concluded that the firm's performance in the case of textile sector is significantly affected by short term leverage, size, risk, tax and non-debt tax shield while taking long term leverage as first independent

variable, the leverage becomes insignificant along with tax factor. In food sector, long term leverage, size, risk, tangibility and non-debt tax shield are factors significantly affecting the firm's financial performance. The findings of Zeitun and Tian (2007) indicated that leverage, risk and tangibility have significant and negative relationship with the firm's performance while firm's size and tax have positive and significant relationship with firm's performance. They used leverage, growth, size, tax, risk and tangibility as independent variable to see their effect on firm's performance. Yana (2010) examined the determinants of firm performance of New Zealand listed companies over the period of twelve years from 1996-2007 during which one recession occurred. Performance proxies such as Return on Assets (ROA), Economic profit (EP) and Tobin's Q in relation to the firm characteristics were used to determine the firm performance. The regression model encompasses eight key factors found to have the most impact on the operating performance of the companies in other markets. The empirical investigation of the factors that affect firm performance confirmed that long term leverage, size, risk, tangibility and non-debt tax shield were the factors that significantly affect the firm's financial performance. The study was conducted in the food sector of Pakistan for the period of six years from 2005-2010 and fixed effect regression estimation was used to analyze the panel data. Maina and Ismail (2014) found a negative and significant relationship between size and financial performance of the listed firms in Nairobi proxied by ROA, ROE and Tobin's Q. economies of scale and enjoy higher negotiation power over their clients and suppliers (Serrasqueiro and Nunes, 2008). A major study done by Crum in 1939 for all United States industries formed the basis for much of the later research done in this field (Velnampy and Nimalathasan, 2010). One of the early themes in the empirical study of this relationship is the economies of scale. Chen and Hambrick (1995) and Mintzberg (1979) provide a summary and overview of the importance of firm size in the determination of financial performance. Velnampy and Nimalathasan (2010) empirically investigated the impact of firm size on profitability of banks in Srilanka for the period of ten years. Correlation analysis shows that, there is a positive relationship between firm size and profitability in Commercial Bank of Ceylon Ltd, but there is no relationship between firm size and profitability in Bank of Ceylon. Chandrapala and Guneratne (2012) examined the ownership concentration and financial performance of listed Srilanka companies. Both pooled and ordinary least square regressions were used to analyze the data obtained from the financial statement. While ROA was used as the performance measure, they found no significant relationship between ownership concentration and financial performance of companies on the Colombia stock exchange. On the hand the study indicates that firm size, quick ratio and ratio of inventory to total asset have significant positive impact on the ROA but debt ratio is negatively related to the financial performance company characteristics on working capital management. They sampled out 83 firms listed in the Tehran stock Exchange for the period of ten years correlation and regression were used in analyzing the data. The result indicated that profitability, operating cash flow, company size, sale growth and debt ratio affect the company's working capital management. The relationship between ROA and firm's size is positive but not significant. However, the relationship between ROE and the size of firm is positive and significant, thus firm's size is an important determinant of firm's financial performance (Gleason, Mathur and Mathur, 2000 and Zeitun and Tian 2007). Waqas, Imran, Hafiz and Jawad (2013) assessed the factors significantly affecting the firm's performance in the textile and food sector of Pakistan. The researcher used panel

data set created from the financial statement of the listed firms for the period from 2005-2010 and one way fixed effect estimation regression analysis applied on the data. The dependent variable was profitability while the independent variables were leverage, growth, firm size, risk, tax, tangibility, liquidity and non-debt tax shield. Their result indicates that the firm's performance is significantly affected by short term leverage, size, risk, tax and non-debt tax shield. The design for this study is ex-post facto research design, which was used to test hypotheses about the cause-and-effect or correlational relationship between firm size and financial performance. The study was carried out based on panel data analysis, where the annual report and accounts of consumer goods companies listed on the floor of Nigerian Stock Exchange and the Fact book were used in extracting the relevant data. According to Yana (2010), firm size, leverage, tangibility, firm specific risk, corporate governance, growth and cash holding significantly impact on the financial performance of listed companies in New Zealand over the period of ten years 1996-2007. ROA, economic profit (EP) and Tobin's Q were used as financial performance proxies. Treacy (1980) examined profitability patterns and firm size in a study of 1458 companies in 54 industries over 10 years, in order to confirm the previous results produced by Bowman (1980) which indicated that the level and variance of return on stockholders' equity tend to correlate negatively within industries. The results revealed that there is a strong significant negative correlation between firm size and variance of return on equity (ROE), and a moderate significant correlation between firm size and average level of ROE. However, the evidence does not support the hypothesis that firm size is the major intervening variable between level and variance of return on Stockholders' equity. Vithessonthi and Tongurai (2011) examined whether firm size affects the relationship between leverage and operating performance during the global financial crisis of 2007–2009, using information corresponding to 170,013 firms in Thailand, most of which were private. The estimation of the panel regressions was carried out using fixed and random effects models. The results indicated that leverage has a negative effect on performance across firm-size subsamples; the year-by-year cross-sectional regression results revealed that the effect of leverage on performance is positive for small firms but negative for large firms. Their findings show that about 75% of Thai firms in their sample appear to have managed to get through the global financial crisis on the basis that they do not have to simultaneously deleverage and liquidate their assets. Akinlo (2012) investigated the long-run relationship and causality between firm size and profitability in 66 firms in Nigeria for the period 1999-2007, using the panel cointegration method. The results showed that there is long run steady-state relationship between firm size and profitability, while the short run causal relationship revealed that there is bidirectional relationship between firm size and profitability. The author asserted that firm size Granger causes profitability and profitability Granger causes firm size. Pervan and Višin (2012) evaluated the impact of firm size on profitability using data from 2,050 Croatian firms for the period 2002-2010. They used a fixed effects panel data model. The results showed that size has a significant (but weak) positive influence on firm profitability. They also showed that the asset turnover ratio and the debt ratio also have a statistically significantly influence on firms' performance, while the current ratio did not prove to be an important explanatory variable of firms' profitability. Halil and Hasan (2012) carried out their study of the effect of firm size on profitability with evidence from 143 Turkish manufacturing companies for the period 2005-2011. Profitability was measured by ROA, while total assets and total sales were used as proxies for firm size

after controlling for liquidity, leverage and the ratio of inventories to total assets. According to the results, firm size, both in terms of total assets and in terms of total sales, has a positive impact on the profitability of Turkish manufacturing companies, while the control variables showed a negative relationship with the ratio of total liabilities to total assets and profitability. Kouseret *al.* (2012) carried out an in-depth evaluation of the relationships between firm size, growth, and profitability of 700 non-financial companies listed on the Karachi stock exchange, Pakistan, for the period 2001-2010. Panel data analysis was applied, using size (natural log of total assets), and growth (sustainable growth rate for firm) as independent variables and profitability (ROA) as the dependent variable. The results revealed that profitability has a significant positive relationship with the growth of the firm, while size has a significant negative impact on profitability. Monteiro (2013) aimed to contribute to a better understanding of the impact of firm size on export performance in Portuguese firms, from different industries. She explicitly controlled for sectorial factors that could potentially influence the relationship under analysis and found that, using the same sample of companies but varying the proxies used to measure firm size, even while the proxy for export performance remained fixed, resulted in opposite signs for the effect of the determining variable on export performance. Dogan (2013) investigated the effect of firm size on profitability for 200 companies active on the Istanbul Stock Exchange (ISE) between the years 2008 and 2011. ROA was used as a proxy for firm profitability while total assets, total sales and number of employees were used as proxies for firm size. Multiple regression and correlation methods were used in the analyses. The results of the analyses showed a positive relation between firm size and profitability. The control variables such as age of the firms and leverage rate showed a negative relation with ROA, while liquidity ratio and ROA displayed a positive relation. Akinyomi and Olagunju (2013) used panel data analysis to estimate the effect of firm size on the profitability of firms belonging to the Nigerian manufacturing sector for the period 2005-2012. ROA was used as a proxy for profitability while size was proxied by the log of total assets and the log of turnover. Inventory, liquidity and leverage were used as control variables. The results of the study showed that firm size, in terms of total assets and in terms of total sales, has a positive significant effect on the profitability of Nigerian manufacturing companies. As for the control variables, inventory has a negative relationship with profitability, while in the case of liquidity and leverage the relationship is negative. Babalola (2013) examined the effect of firm size on the profitability of 60 manufacturing companies listed on the Nigerian Stock Exchange for the period 2000-2009. The panel data model estimated showed that firm size, both in terms of total assets and in terms of total sales, has a positive relationship with the profitability of manufacturing companies in Nigeria. Dahmash (2015) examined the effect of firm size on the profitability of 1538 firms listed on the Amman Security Exchange, Jordan, for the period 2005-2011. Panel data analysis (pooled estimator) was used for the main sample of the study and the subsamples corresponding to the economic sectors considered. The results indicated a highly significant positive relationship between firm size and profitability for the three main sectors of the sample. The highest significant coefficient value was for the industrial firms, followed by the services sector firms, and lastly, the financial firms. The results of the detailed industry analysis for entire subsectors were similar, with the highest values for food and beverages firms, commercial and educational services firms, and insurance firms. The results showed that the effect of total assets on firm size is insignificant for the firms in the banking sector, diversified

financial firms and real estate firms. Danaei and Abdi (2015) evaluated the relationship between different measures of company growth and the sustainability of the capital structure for 101 companies listed on the Tehran Stock Exchange during the period 2006-2011. The results showed an inverse and significant relationship between firms' profitability and the change in their debt ratio. Similarly, the results revealed that there is a direct and significant relationship between firm size and the change in their debt ratio, and also that there is an inverse and significant relationship between a company's growth opportunities and changes in their retained earnings ratio. Kartikasari and Merianti (2016) analysed the effect of leverage and the size of a company on its profitability using 100 qualified manufacturing companies listed on the Indonesia Stock Exchange in the period 2009-2014. To that end, they used panel data regression analysis, with the most suitable panel data regression model being the fixed effects model. Leverage was measured by the debt-to-equity ratio, while firm size was measured by total assets and total sales, and profitability by ROA. The study revealed that the debt ratio has a significant positive effect on profitability while total assets have a significant negative impact. Total sales; however, does not have a statistically significant effect on the profitability of the companies. Kumar and Kaur (2016) studied the relationship between size and profitability in the Indian automobile industry from 1998 to 2014. To analyse this relationship, they employed a linear regression model over the years 1998 to 2014, as well as corresponding cross-sectional analysis. The study yielded mixed results; time-series analysis showed a positive relationship but cross-section analysis indicated that there is no relationship between firm size and profitability.

METHODOLOGY

This study uses quasi experimental research design approach for the data analysis. This approach combines theoretical consideration (a prior criterion) with the empirical observation and extract maximum information from the available data. It enables us therefore to observe the effects of explanatory variables on the dependent variables. This study focuses on Nigerian quoted consumer goods manufacturing firms. The chosen time period is 2014 to 2023, in total 10 years. This is because we want to investigate a recent time period. With the starting year of 2014, the impact from the recent Nigerian economic recession can be mitigated. The above the sample size of the study is the existing 15 quoted consumer goods manufacturing firms. The reason for the sample size is for easy source and reliability of required data from the annual reports submitted to the exchange. The study used multiple regression defined as an equation with one dependent variable and more than one independent variables, the technique used in this study is the Ordinary Least Square (OLS) estimation technique. The test instruments in the OLS are the T-statistics and F-test which were used to test the significance of variables and the overall significance of the regression respectively. Other test instruments also employed were the Durbin Watson test which was used to test the presence or absence of auto correlation between and among the explanatory variables and the adjusted R square used to test the percentage variation of the dependent and the independent variables.

Panel Regression Model

Our dataset embodies information in variables and different firms, which is in line with panel data that is often employed in the situation where the data comprise both time series and cross-sectional elements (Brooks 2014). Thus panel data regression is deployed. Where:

$$ROE = f(TAR, LRR, IVR, SR) \quad [1]$$

$$ROE = \beta_0 + \beta_1 TAR + \beta_2 LRR + \beta_3 IVR + \beta_4 SR + \mu \quad (2)$$

Where:

ROE = Return on equity

TAR = Total assets ratio

LRR = Leverage ratio

IVR = Investment ratio

SR = Sales ratio

Pooled Regression

According to Brooks (2014) we start by testing pooled regression by using ordinary least squares (OLS) first as it is the simplest to do with panel data. This involves estimating a single equation on all the data together, assuming that the average values of the variables and the relationships between them are constant over time and across all of the cross-sectional units in the sample. This will lead to assumptions of no heterogeneity and no time-specificity, thus the disadvantage - the information is lost in time dimension and cross-section dimension.

Redundant Fixed Effect Test

We use redundant fixed effect test, also called likelihood ratio test, to test whether the data can simply be pooled and estimated using a standard ordinary least squares regression model or affixed effects panel regression approach can be employed (Brooks 2014), the study use exercise redundant fixed effect test by E-views, with the null hypothesis that a pooled sample can be employed.

Fixed Effects Model vs. Random Effects Model

Fixed effects models allow the intercept in the regression model to differ cross-sectionally but not over time, while all of the slope estimates are fixed both cross-sectionally and over time (Brooks, 2014). With time-fixed effects models, the average value of $y(i,t)$ is assumed to change over time but not cross-sectionally, hence the intercepts would be allowed to vary over time but be the same across entities at each given point in time (Brooks, 2014). Although fixed effects model is easy to apply, there are drawbacks. Gujarati (2004) argues that when introducing many dummy variables, the degrees of freedom would decrease. Problems with many variables can also cause the possibility of multicollinearity to increase. With both entity-fixed effects and time-fixed effects, a model would contain both cross-sectional and time dummies (Brooks, 2014).

Hausman Test

Since random effects model is invalid when heterogeneity exist, meaning that error term is correlated with explanatory variables, Hausman test is often used to test whether a variable can be treated as exogenous or whether that variable needs a separate structural equation. Hausman test refers to a test for whether a random

Research Article

effects approach to panel regression is valid or whether a fixed effects model is necessary (Brooks, 2014). We exercise Hausman test by E-views, with the null hypothesis that random effects model can be applied.

Final Regression Model

As discussed above, both redundant fixed effects model and Hausman test reveal that fixed effects model is more appropriate, therefore fixed effects model will be employed in our panel regression. Since our regression model concerns more about the determinants of the dividend policy, which are measured by cross-sectional entities, we apply fixed effects on both time period and cross-section dimensions. Though this adds in more dummies, the model generates reasonable and accurate estimates for the cross-sectional entities. Another concern for our model is the heteroskedasticity problem revealed by the BPG test. To correct this, white cross-section will be employed, leading to a robust cross-section heteroskedasticity. As a conclusion, the final model is with fixed effects on both period and cross-section dimensions with white cross section correction.

ANALYSIS AND DISCUSSION OF FINDINGS

Table 1: Test of Fixed and Random Effect Models

Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.870971	6	0.0049

Source: Computed from E-View windows 9.0

In testing the validity of the models, the fixed effects on the cross section Redundant Fixed Effect- Likelihood Ratio, the P- value is 0.000 indicating that the effects are significant. Select the random effect and perform the Correlated Random Effects- Hausman test, testing the random effects model against the fixed effects model. The null hypothesis in that case is that both tests are consistent estimators and the random effects model is efficient. Under the alternative hypothesis, only the fixed effect is consistent. Since the p- value is 0.000, the null hypothesis is rejected and, therefore, the fixed effects model is to be preferred.

Regression Analysis Presentation

Table 2: Presentation of Level Series Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TAR	-0.040325	0.099674	-0.404570	0.6864
LRR	0.033053	0.304706	0.108474	0.9138
IVR	0.283189	0.306900	0.922742	0.3577
SR	0.054943	0.061699	0.890499	0.3747
C	46.87597	8.592678	5.455339	0.0000

Effects Specification

S.D. Rho

Research Article

Cross-section random			0.0000000.0000
Idiosyncratic random			9.2041091.0000
Weighted Statistics			
R-squared	0.620689	Mean dependent var	45.94667
Adjusted R-squared	0.420401	S.D. dependent var	8.809533
S.E. of regression	8.898939	Sum squared resid	11324.33
F-statistic	3.503513	Durbin-Watson stat	2.215294
Prob(F-statistic)	0.004926		
Unweighted Statistics			
R-squared	0.020689	Mean dependent var	45.94667
<u>Sum squared resid</u>	<u>11324.33</u>	<u>Durbin-Watson stat</u>	<u>2.215294</u>

Source: Computed from E-View windows 9.0

The results in model one found that 62 percent variation on return on equity can be traced to firm size in this study; this implies that 38 percent can be traced to internal factors not captured in the model. The f- statistics and probability confirms that the model is significant and can predict the variation on the dependent variable. The Durbin Watson statistics proved that there is no presence of serial autocorrelation among the variables. Beta coefficient of the variables indicates that total assets ratio have negative and no significant effect on return on equity of the quoted firms while other variables in the model have positive and no significant effect on the dependent variable.

Correlation Matrix

Table 2: Presentation of Correlation Matrix

Covariance

ROE	77.09049				
	1.000000				
TAR	1.837124	95.03877			
	0.021463	1.000000			
LRR	4.326636	41.64273	46.40918		
	0.072335	0.627028	1.000000		
IVR	5.874183	42.84021	48.63956	60.26776	
	0.086180	0.566055	0.919698	1.000000	
SR	11.41171	47.81677	43.15183	53.55902	205.0120

0.090774

0.342563

0.442392

0.481837

1.000000

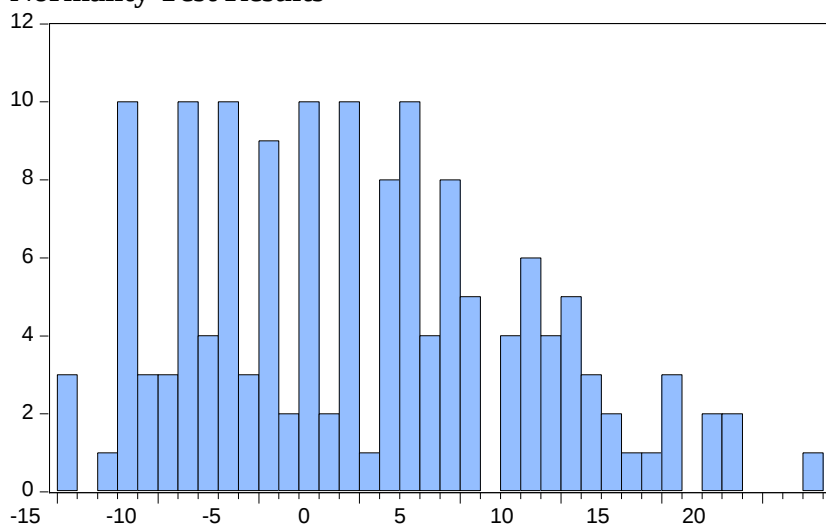
LRRIVRSRCorrelation ROE TAR

Source: Computed from E

- View windows 9.0

As noted in Brooks (2008) regression is more flexible and more powerful than correlation and permits making causal inferences regarding the relationship between variables. In order to show the casual relationships among dependent variable firm size and independent variables regression analysis were conducted in this study. Accordingly, test results for the classical linear regression model (CLRM) assumptions and the regression results are presented and discussed in the following sub sections.

Normality Test Results



Series:	Standardized	
Residuals		
Sample	2008	2017
Observations	150	
Mean	1.24e-14	
Median	-0.577859	Maximum
22.10303	Minimum	-
14.57786	Std.	Dev.
8.223561		
Skewness	0.368114	
Kurtosis	2.421845	
Jarque-Bera	5.476842	
Probability	0.064672	

In this study, the normality of the data was checked with the popular Bera-Jarque test statistic (Brooks 2008). According to Bera-Jarque test statistic, normally distributed data is not skewed and has a coefficient kurtosis of 3. As shown in figure 1, the coefficient kurtosis (2.42) of the data in this particular study was very much closer to 3, and the Bera-Jarque statistic had a P-value of 0.064672 implying that there was no evidence for the presence of abnormality in the data. Thus, the null hypothesis that the data is normally distributed should not be rejected since the p-value was considerably in excess of 0.05 and the coefficient of kurtosis very much closer to 3.

Discussions of Findings

The purpose of this study was to examine the effect of firm size on the return on equity of 15 quoted consumer goods manufacturing firms. The estimated regression model found that 42 percent variation in return on equity of the quoted consumer goods manufacturing firms can be explained by variation in firms' size indicators as formulated in the regression model. the model found that asset ratio have negative but no significant effect on the return on assets of the quoted firms such that the variable reduced return on equity of the firms by 0.04

percent, the negative effect of the variable contradict our expectations and not in line with theories such as the agency theory. The negative effect of the variable could be traced to undue expansion with increase in operating cost; it could also be traced to other factors within the business environment. However, the study found that leverage size, investment size and sales size have positive and no significant effect on the return on equity of the quoted consumer goods manufacturing firms, the positive effect of the variables confirm our expectations and in line with theories such as the agency theory. The no significant effect of the variables could also be traced to factors within the business environment within the time scope of this study. Empirically, the finding of the study is in line with the findings of Waqas, Imran, Hafis and Jawad (2013) that the firm's performance in the case of textile sector is significantly affected by short term leverage, size, risk, tax and non-debt tax shield while taking long term leverage as first independent variable, the leverage becomes insignificant along with tax factor. In food sector, long term leverage, size, risk, tangibility and non-debt tax shield are factors significantly affecting the firm's financial performance. The findings of Zeitun and Tian (2007) that leverage, risk and tangibility have significant and negative relationship with the firm's performance while firm's size and tax have positive and significant relationship with firm's performance, the findings of Yana (2010) that affect firm performance confirmed that long term leverage, size, risk, tangibility and non-debt tax shield were the factors that significantly affect the firm's financial performance. Maina and Ismail (2014) found a negative and significant relationship between size and financial performance of the listed firms in Nairobi proxied by ROA, ROE and Tobin's Q. economies of scale and enjoy higher negotiation power over their clients and suppliers (Serrasqueiro and Nunes, 2008), the findings of Velnampy and Nimalathasan (2010) there is a positive relationship between firm size and profitability in Commercial Bank of Ceylon Ltd, but there is no relationship between firm size and profitability in Bank of Ceylon, the findings of Chandrapala and Guneratne (2012) that firm size, quick ratio and ratio of inventory to total asset have significant positive impact on the ROA but debt ratio is negatively related to the financial performance company characteristics on working capital management and the findings of Waqas, Imran, Hafiz and Jawad (2013) that the firm's performance is significantly affected by short term leverage, size, risk, tax and non-debt tax shield.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study looked at the effect of firm size on the return on equity of quoted consumer goods manufacturing firms in Nigeria. The study found that 62 percent variation on return on equity can be traced to firm size in this study; this implies that 38 percent can be traced to internal factors not captured in the model. Further findings indicated that the f- statistics and probability confirms that the model is significant and can predict the variation on the dependent variable. The Durbin Watson statistics proved that there is no presence of serial autocorrelation among the variables. Beta coefficient of the variables indicates that total assets ratio have negative and no significant effect on return on equity of the quoted firms while other variables in the model have positive and no significant effect on the dependent variable. From the findings, the probability value of 0.6864 is greater than 0.05, the researcher conclude that there is no significant relationship between assets size and the return on equity of quoted consumer goods manufacturing firms in Nigeria. The probability value of 0.9138 is greater than 0.05,

the researcher conclude that there is no significant relationship between size of leverage and the return on equity of quoted consumer goods manufacturing firms in Nigeria. From the findings, The probability value of 0.3577 is greater than 0.05, the researcher conclude that there is no significant relationship between investment size and the return on equity of quoted consumer goods manufacturing firms in Nigeria. The probability value of 0.3747 is greater than 0.05, the researcher conclude that there is no significant relationship between sales ratio and the return on equity of quoted consumer goods manufacturing firms in Nigeria.

Recommendations

- i. The study recommends that the consumer goods manufacturing companies should expand and diversify with the aim of achieving an optimum size, so as to enjoy economies of scale which will ultimately result in higher level of financial performance.
- ii. There is need for the consumer goods manufacturing firms not expands beyond the optimum size diseconomies of scale will set in and this can result to a decline in the financial performance of the firm
- iii. The manufacturing firms should place emphasis on growing their asset portfolios as this enhances their financial performance. Additionally, they should pursue measures that sustain good financial performance since the inertia of past performances impacted their contemporaneous financial performance.
- iv. Following the outcome of the study, it is hereby recommended that companies should have moderate size as this will enable members to effectively monitor the management, take informed decisions; reduce agency cost of monitoring and invariably leading to better financial performance.

REFERENCES

- Abeywardhana S., (2017) Sectoral Diversification and the Banks' Return and Risk: Evidence from Chinese Listed Commercial banks", *Procedia computer science*, 18 (3), 1737-1746.
- Agarwal, N.C., (1981) Determinants of executive compensation. *IndRelat J Econ Soc* 20(1):36– 45
- Agyei, S.K, & Marfo-Yiadom, E. (2011) Dividend policy and bank performance in Ghana. *Int J Econ Finance*, 3(4), 202=232.
- Anderson, T.R, & Warkov, S. (1961). Organizational size and functional complexity: a study of administration in hospitals. *Am Sociol Rev* 26(1):23–28?
- Baker KH, Saadi S, Dutta S, Gandhi D (2007) the perception of dividends by Canadian managers: new survey evidence. *Int J Manag Finance* 3(1):70–91
- Barber AE, Wesson MJ, Roberson QM, Taylor MS (1999) a tale of two job markets: Organizational size and its effects on hiring practices and job search behavior. *Person Psychol* 52(4):841–868

- Barney J (1991) Firm resources and sustained competitive advantage. *J Manag* 17(1):99–120
- Beatty RP, Zajac EJ (1990) Top management incentives, monitoring, and risk-bearing: a study of Executive compensation, ownership, and board structure in initial public offerings. In: *Academy of management proceedings*, vol 1990, no 1. Academy of Management, pp 7–11
- Bellizzi JA (1981) Organizational size and buying influences. *Ind Mark Manag* 10(1):17–21
- Bolarinwa ST, Obembe OB (2019) Firm size-profitability nexus: an empirical evidence from Nigerian listed financial firms. *Glob Bus Rev* 20(5):1109–1121
- Brealey F., (2012). *The rising incidence of non-performing loans and the nexus of economic performance in Nigeria: An investigation*. *European Journal of Accounting Auditing and Finance Research*, 2(5), 87–96.
- Carroll GR, Mayer KU (1986) Job-shift patterns in the Federal Republic of Germany: the effects of social class, industrial sector, and organizational size. *Am Sociol Rev* 51(3):323–341?
- Chatterjee S, Eyigungor B (2019) the firm size and leverage relationship and its implications for entry and concentration in a low interest rate world. Working paper
- Chhibber, P.K. & Majumdar, K.K. (1999). Foreign ownership and profitability: Property rights, control and the performance of firms in Indian Industry. *Journal of Law and Economics*, 42, 209–238.
- Coase, R. H. (1937). The nature of the firm. *Economica* 4(16):386–405
- Coleman S, Cohn R (1999) Small firm use of leverage: a comparison of men and women-owned firms. In: *Conference proceedings, United States Association for small business and entrepreneurship*, San Diego, January, pp 14–17
- Coles J, Daniel N, Naveen L (2006) Managerial incentives and risk-taking. *J Financ Econ* 79:431–468
- Cooley TF, Quadrini V (2001) Financial markets and firm dynamics. *Am Econ Rev* 91(5):1286–1310

Daily CM, Dalton DR, Cannella AA (2003) Corporate governance: decades of dialogue and data. *AcadManag Rev* 28(3):371–382

Damanpour F (1992) Organizational size and innovation. *Organ Stud* 13(3):375–402

Dang C, Li ZF, Yang C (2018) Measuring firm size in empirical corporate finance. *J Bank Finance* 86:159–176

Danso, F., (2014). Do specialization benefits outweigh concentration risks in credit portfolios of German banks? Discussion paper [10/2010] *Dt. Bundesbank, Press and Public Relations Division*.

Daunfeldt SO, Hartwig F (2014) what determines the use of capital budgeting methods? Evidence from Swedish listed companies. *J Finance Econ* 2(4):101–112

Deshpande R, Farley JU, Webster FE Jr (1993) corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. *J Mark* 57(1):23–37

Determinants, *Kuwait Chapter of Arabian Journal of Business and Management Review*, 2, (6): 82-96.

EbelEzeoha A (2008) Firm size and corporate financial-leverage choice in a developing economy: evidence from Nigeria. *J Risk Finance* 9(4):351–364

Eriotis N (2011) the effect of distributed earnings and size of the firm to its dividend policy: some Greek data. *Int Bus Econ Res J (IBER)* 4(1):67–74

Ezeoha AE (2008) the impact of major firm characteristics in the financial leverage of Quoted Companies in Nigeria. Ph.D Thesis, Department of Banking and Finance University of Nigeria Enugu Campus

Fama EF, Jensen MC (1983) Separation of ownership and control. *J Law Econ* 26(2):301–325

Forés B, Camisón C (2016) Does incremental and radical innovation performance depend on different types of knowledge accumulation capabilities and organizational size? *J Bus Res* 69(2):831–848

Frank MZ, Goyal VK (2003) Testing the pecking order theory of capital structure. *J Financ Econ* 67(2):217–248

Frank MZ, Goyal VK (2009) Capital structure decisions: which factors are reliably important? *FinanManag* 38(1):1–37

Gabaix X, Landier A (2008) Why has CEO pay increased so much? *Q J Econ* 123:49–100

Galagan P (1997) Strategic planning is back. *Train Dev* 51(4):32–37

Gathogo, T., & Ragui, M. (2014). Determinants of firm size of default among farmers in Ghana, *Journal of Development and Agricultural Economics*, 4(13): 339-345.

Geiger SW, Cashen LH (2007) Organizational size and CEO compensation: the moderating effect of diversification in downscoping organizations. *J Manag Issues* 19(2):233–252

Gleason, K. Mathur, L. K. & Mathur, I. (2000). The interrelationship between culture, capital structure and performance: Evidence from European Retailers. *Journal of Business Research*, 50, pp 185- 191.

Gordon G, Becker S (1964) Organizational size and managerial succession: a re-examination. *Am J Sociol* 70(2):215–222?

Graham JR, Harvey CR (2001) the theory and practice of corporate finance: evidence from the field. *J Financ Econ* 60(2):187–243

Graham JR, Li S, Qiu J (2012) Managerial attributes and executive compensation. *Rev Financ Stud* 25(1):144–186

Hammoudeh S, Sari R, Uzunkaya M, Liu T (2012) The dynamics of BRICS's country risk ratings and domestic stock markets, U.S. stock market and oil price. *Math Comput Simul* (**in press**)

Harris M, Raviv A (1991) the theory of capital structure. *J Finance* 46(1):297–355

Hartwig F (2012) four papers on top management's capital budgeting and accounting choices in practice

Hashem, Javad & Fatemah (2012). Impact of company characteristics on working capital management. *Journal of Applied Finance and Banking*, 2(1), PP124-131.

Hashmi SD, Gulzar S, Khan MJ, Akhtar M (2018) Sensitivity of firm size measures to practices

Of corporate finance: evidence from Sharī‘ah compliant firms. *J Islam Bus Manag* 8(2):538–558

Haveman HA (1993) Organizational size and change: diversification in the savings and loan industry after deregulation. *AdmSci Q* 38(1):20–50

Jensen MC, Meckling WH (1976) Theory of the firm: managerial behavior, agency costs and ownership structure. *J Financ Econ* 3(4):305–360

Jooma Y., & Gwatidzo, (2013) an empirical study of firm size efficiency of banking industry in Taiwan. *Web Journal of Chinese Management Review*, 15(1), 1-16.

Kuntluru, S. (2008). Financial performance of foreign and domestic owned companies in India. *Journal of Asia-Pacific Business*, 9, 28-54.

Kurshev A, Strebulaev IA (2007) Firm size and capital structure. In: AFA 2008 New Orleans meetings paper

Kurshev A, Strebulaev IA (2015) Firm size and capital structure. *Q J Finance* 5(03):155–188

Laforet S (2013) Organizational innovation outcomes in SMEs: effects of age, size, and sector. *J World Bus* 48(4):490–502

Lambert RA, Larcker DF, Weigelt K (1993) the structure of organizational incentives. *AdmSci Q* 38(3):438–461

Lee G, Xia W (2006) Organizational size and IT innovation adoption: a meta-analysis. *InfManag* 43(8):975–985

Leng, A. C. (2004). The impact of corporate governance practices on firms' financial performance:

Evidence from Malaysian companies. *ASEAN Economic Bulletin*, 21, 308-18.

Linck JS, Netter JM, Yang T (2008) the determinants of board structure. *J Financ Econ* 87:308– 328

Litch A (2002) Accountability and corporate governance. www.ssrn.com. Accessed Sept 2016 Madura J (2011) International financial management. Cengage Learning, Boston

- Maina, L. & Ismail, M. (2014). Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 209-223.
- MajaPervan, I., & Marijana D. (2017) The Influence of Age on FirmPerformance: Evidence from the Croatian Food Industry, university of Split, Faculty of Economics, Split, *Croatia IBIMA Publishing Journal of Eastern Europe Research in Business and Economics*, Vol. 2017(2017), Article ID 618681, 9 pages
- Makunyi (2011). Identification of the Long-Run and the Short-Run Structure: An Application to the ISLM Model. *Journal of Econometrics* **63**: 7-36
- Maladjian C, Khoury RE (2014) Determinants of the dividend policy: an empirical study on the Lebanese listed banks. *Int J Econ Finance* 6(4):240–256
- arkham SE, McKee GH (1991) Declining organizational size and increasing unemployment Rates: predicting employee absenteeism from within-and between-plant perspectives. *AcadManag J* 34(4):952–965
- Masira R., (2018). Assessing factors affecting the firm size of microfinance institutions: a case study of village credit institutions of Gianyar, Bali. *GadjahMada International Journal of Business*, 8(2), 247-273.
- Mburu (2015). The adjustment of stock prices to new information. *International Economic Review*, **10** (1):1-21.
- Mehmet Sinan (2015) firm size and firm performance of family owned companies Turkey, *IBM*, 3(4) 234-256
- Mehran H (1995) Executive compensation structure, ownership, and firm performance. *J Financ Econ* 38:163–184
- Micheni (2011). The Monetary and Fiscal Linkage between Stock Returns and Inflation,” *Journal of Finance*, 38: 1-33.
- Minfang E., (2010). Demand for collateral and foreign holdings of U.S. Assets. *Journal of Monetary Economics*, 48(2), 415-436.

- Moch MK, Morse EV (1977) Size, centralization and organizational adoption of innovations. *Am Sociol Rev* 42(5):716–725?
- Modigliani and Miller (1958), *Modigliani* Efficient capital market: A review of Theory and empirical work. *The Journal of Finance*, 25 (2).
- Moeller SB, Schlingemann FP, Stulz RM (2004) Firm size and the gains from acquisitions. *J Financ Econ* 73(2):201–228
- Mui YT, Mustapha M (2016) Determinants of dividend payout ratio: evidence from Malaysian public listed firms. *J Appl Environ BiolSci* 6:48–54
- Njeri M., (2016). Assessing financial literacy in 12 countries an OECD Pilot Exercise, Paris: OECD Financial Affairs Division
- Nor FM, Ariffi B (2006) Pyramidal ownership structure, capital structure and investment policy: A case of Malaysian listed firms. Unpublished dissertation, UniversitiKebangsaan Malaysia, Selangor, Malaysia
- Oner Hi, (OzkanHaykir 2015) *Determinants of financial growth by Ksh and Medium Enterprises among Commercial Banks in Kenya*: Master's Dissertation, University of Nairobi, Kenya, pp. 5-56.
- Owolabi, S. A. & Inyang, U. E. (2013) International pragmatic review and assessment of capital structure
- Pandey, I. M., (2011) “Capital Structure and the Company Characterstics: Evidence from an Emerging IIMA 10: 1-19.
- Pervan, M., & Višić, J. (2012). Influence of firm size on its business success. *Croat Oper Res Rev* 3(1):213–223
- Pradhan RP, Dasgupta P, Bele S (2013) Finance, development and economic growth in BRICS: a panel data analysis. *J Quant Econ* 11(1&2):308–322
- Purkayastha S, Manolova TS, Edelman LF (2012) Diversification and performance in developed and emerging market contexts: a review of the literature. *Int J Manag Rev* 14(1):18–38
- Rajan R, Zingales L (1995) what do we know about capital structure? Some evidence from international data. *J Finance* 50:1421–1460

- Raza SA, Karim MZA (2016) Do liquidity and financial leverage constrain the impact of firm size and dividend payouts on share price in emerging economy. *J Finance Econ Res* 1(2):73– 88
- Ross S (1977) the determination of financial structure: the incentive signaling approach. *Bell J Econ* 8:23–40
- Schminke M (2001) considering the business in business ethics: an exploratory study of the influence of organizational size and structure on individual ethical predispositions. *J Bus Ethics* 30(4):375–390
- Schwartz E, Van Tassel RC (1950) some suggested changes in the corporate tax structure. *J Finance* 5(4):410–420
- Serrasqueiro, Z. S. & Paulo M. N. (2008). Performance and size: Empirical evidence from Portuguese SMEs. *Small Business Economics* 31 (2), 195-217.
- Titman S, Wessels R (1988) the determinants of capital structure choice. *J Finance* 43(1):1–19
- Uwuigbe U, Jafaru J, Ajayi A (2012) Dividend policy and firm performance: a study of listed firms in Nigeria. *Account Manag Inf Syst* 11(3):442
- Velnampy, T. & Nimalathan, B. (2010). Firm size on profitability: A comparative study of commercial bank of Ceylon Ltd in Srilanka. *Global Journal of Management and Business Research* 10, 2, 96-103.
- Wagas, I. Imran, A., Hafis M.U. & Jawad, A. (2013). Empirical identification of determinants of firm's financial performance, *A Comparative Economic Research* 3, (1), 487-497
- Walker, D. (2001). *Exploring the human capital contribution to productivity, profitability and the market evaluation of the firm*. Retrieved from <http://www.lib.umi.com/dissertations>.
- Wickert C, Scherer AG, Spence LJ (2013) Implementing and communicating corporate social Responsibility: implications of firm size and organizational cost. University of Zurich, Institute of Business Administration, UZH business working paper (339)
- Wickert C, Scherer AG, Spence LJ (2016) Walking and talking corporate social responsibility: implications of firm size and organizational cost. *J Manag Stud* 53(7):1169–1196

Wilcox HD, Chang KC, Grover V (2001) Valuation of mergers and acquisitions in the telecommunications industry: a study on diversification and firm size. *InfManag* 38(7):459–471

Yana, S. (2010). *Factors that determine firm performance of new zeal companies*. A dissertation submitted to Auckland university of Technology in partial fulfillment of the requirements for the degree of master of P.C. Business (MBUS).

You, J.I. (1995). Small firms in economic theory. *Camb J Econ* 19(3):441–462

Zahid, B. Ali, AShahid, M & Muhammed, N. A (2013). Empirical investigation of the factors Affecting Firms performance; a study based on food sector of Pakistan Intral SAMANM *Journal of finance and Accounting* 1(2).

Zeitun, R & Tian, G.G (2007). Capital structure and corporate performance: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 1(4), 40-61