



The Financial Performance and Financial Leverage of Retail Listed Firms in South Africa

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Abstract: The study investigates the relationship between financial performance and dividend payout of Retail firms over eleven years from 2010 to 2020. The rationale behind this call is that a lot of research on the relationship between financial leverage and dividend payout originate from developed countries. It is on this background that this study tries to investigate the relationship between firm growth and dividend payout from a South African perspective. The quantitative research design was employed to investigate the influence of financial performance on financial leverage of Listed Retail firms using panel data analyses. Secondary data collection consists of annual financial reports of Retail firms for a period from 2010 to 2020 which consist of 170 observations. The empirical results show that financial performance is positively associated with a financial leverage of listed Retail firms, while other variables (financial leverage, firm growth) positively significant influence financial performance. Liquidity is positively but insignificantly influence financial performance while firm size is negatively insignificantly affect financial performance. The study is limited to the Retail sector only which means cannot generalise the overall findings to other sectors of the economy. These results might benefit researchers, managers and investors and provide a guideline to the relevant literature. . In South Africa, there is an insufficient amount of evidence on the relationship between financial leverage and financial performance. In South Africa, as a developing country, there is a need for more comparable studies investigating this phenomenon.

Keywords: Retail firms; financial performance; leverage

JEL Classification: G31; G35

1. Introduction

The study investigates the impact of the financial leverage of Retail firms on financial performance over ten years. Several empirical studies conducted in

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developed and developing countries, to date there is no universal agreement especially in developing countries like South Africa despite few empirical evidence studies conducted in South Africa. Financing decisions play an important role in sustaining financial performance globally (Rahman, Saima & Jahan, 2020). The retail sector play an important role in South Africa which contributes an estimated 14.4% Gross Demestic Product (GDP), create employment of an estimated 22% nationally and reflected 3.5 in the year 2012.

The financing decision play a significant role in competitive firm globally in order to sustain financial performace of retail sector in South Africa. The retail firms play a vital role to improve economic activity and growth. This widened the interest to conduct further research study in this field. The study is therefore analyses the relationship between dividend payout as the dependent variable and independent variables earnings growth (GRS), liquidity (LIQ), financial leverage (FL), dividend payout (DPO), and firm size (SZ).

Research objectives

- To determine the relationship between financial leverage and financial performance;
- To determine the extent of the relationship between financial leverage and financial performance;

Research questions

The following research questions will be answered at the end of the research are as follow:

- What is the relationship between financial performance and financial leverage?
- What is the extent of the relationship between financial performance and financial leverage?

1.1. Research Problem

The numerous factors influencing financial performance of firms and businesses among them financial liquidity and financial leverage is one of them depending on the industry or sector. Such factors might not affect the financial performance of some industries or sectors of the economy. The study is focused on the retail sector or industry in South Africa which was chosen based on its significance to promote economic growth. There are various models used to determine the factors influencing financial performance, however some studies are limited to developed countries (Samo & Murad, 2019). This creates contradictory results on the relationship between dividend payout and growth. Investors are facing challenging

decisions when investing in a company especially in the Retail sector. The previous studies conducted on the relationship between financial leverage and financial performance focused on different industries however, no universal agreement was reached.

1.2. The Benefits of the Study

The finding of the study informs the investors in South Africa when evaluating risk before investing which guide the investors on importance of financial leverage. It influences the managers and investors to make a decisive decision in their investments. It is also used to guide the managers to take a good decision on whether to pay a large or small dividend payout ratio from its earning. To enhance the guideline to financial managers on how the dividend payout influences the earnings growth. Most previous studies were focused on other sectors rather than retail sector where the findings of the factors influencing profitability cannot be generalized to other sectors.

1.3. Research Hypothesis

In light of the above-mention research objectives and related questions, the following hypothesis has been formulated:

H_1 : Financial performance has a positive relationship with the dividend payout;

H_2 : Financial performance has a negative relationship with the financial leverage;

H_3 : Financial performance has a positive relationship with the liquidity;

H_4 : Financial performance has a positive relationship with growth opportunities;

H_5 : Financial performance has a positive relationship with firm size.

1.4. Conceptual Framework

This conceptual framework explain the influence of financial leverage and other independent variable on the financial performance of retail firms in South Africa listed on the Johannesburg Stock Exchange (JSE). The financial performance is measured by the return on asset which is net income divided by the total assets of a firm.

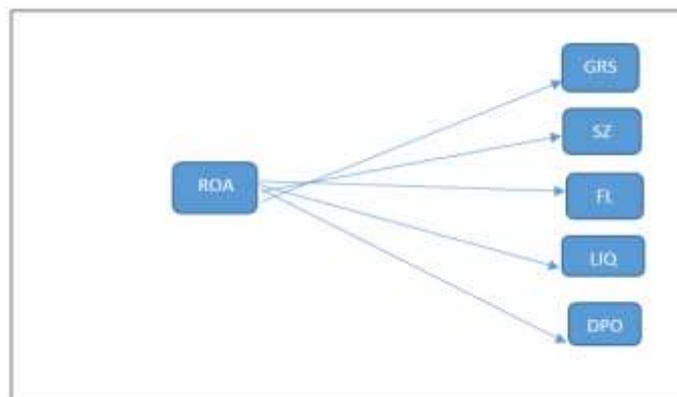


Figure 1. Conceptual framework

Source: own compilation

2. Literature Review

2.1. The Agency Theory

Based on this theory, there is a conflict of interest between managers and shareholders of a firm due to financial decisions. The main aim of this theory is to reduce costs arising from shareholders and firm's managers. The information should be transparent between both parties (Jensen & Meckling, 1976). In the agency cost theory, the use of debt in the capital structure augments the agency costs. The greater financial leverage reduces the agency cost and improves the financial performance by encouraging managers to act at the best interest of shareholders (Jensen & Meckling, 1976). The cost of borrowing for smaller firms is costly compared to the larger firms, meaning larger firms have higher financial performance due to less cost access to borrowings.

2.2. Trade-off Theory

The trade-off suggests that an increase in financial leverage increases the financial performance based on tax benefits. The theory predicts the positive relationship between financial leverage and financial performance (Kraus & Litzenberger, 1973). In addition to this, debt financing could be the most important part to enhance financial performance rather than equity form of financing. Based on the trade-off theory, it states that there is a positive relationship between financial performance and leverage.

2.3. Pecking order Theory

The pecking order theory is being applied to make use of debt financing rather than equity (Myers & Majluf, 1984). Debts is considered to be the most important factor that increases the firm's profitability due to tax returns. Based on trade off theory, financial leverage influences the financial performance whereas pecking order theory predict a positive relationship between financial performance and financial leverage (Abubakar, 2017). Firm needs to maintain its liquidity at high level to increase firm value and overcome the possibility of financial distress (Myers, 2001). Pecking order theory assumes that companies prefer internal financing in the form of retained earnings before debt financing/ financial leverage and equity when considering options for capital structure (Gangil & Nathani, 2018). Internal financing is perceived by investors as a signal that the company is performing optimally.

2.4. Signal Theory

The firms with good liquidity provide a positive signal to financial performance (Chun, Cudia, Papa, Tahilramani & Tan, 2020). This theory state that lower financial leverage gives signal to financial performance as investors view that a if a company has good liquidity, it will give them a positive signal to the firm's financial performance.

Table 2 Theoretical Framework

Dependent and independent variables			
Variables	Sources	Expected outcomes	Theory/concept
Dividend payout ratio (DPO)	Spence (1973)	+	Signaling theory
Financial leverage (FL)	Positive (Myers, 1984) negative (Jensen & Meckling, 1976; Myers, 1977).	+	Pecking order theory, Signal theory and Agency theory
Liquidity (LIQ)	Jensen and Meckling, 1976; Titman, 2015 Labhane & Das, 2015	+	Agency theory and current ratio
Firm Size (SZ)	Myers & Majiluf, 1984	+	Agency Cost Theory
Growth opportunities (GRO)	Myers & Majiluf, 1984; Spence (1973)	-	Pecking Order Theory; Signal theory

2.5. Profitability (Financial Performance)

Pecking order theory predict negative relationship between financial leverage (Sibindi, 2018). This findings are supported by Le & Phan, 2017; Dalci, 2018; Dey, Hossain & Rahman, 2018) among other studies on manufacturing industry: chemical. On country to signalling, trade off and packing order theories that predicts positive relationship that profitable firm has greater advantage to use debt to benefit from tax. The negative relationship was found by Ahmed, Salman and Shamsi (2015) and Karman, Rose, Ullah and Matilulah (2020). Therefore there is no universal agreement on the relationship between financial laverage and financial performance.

2.6. Dividend Payout

Signalling theory, predicts positive relashionship between financial performance and dividend payout. Several studies such as Kanakriyah, (2020); Amidu, (2007); Rehman, (2013), Abata-Ebire, Adebowale & Ojokuku (2018) confirm the positive relationship between financial performance and divided payout. Despite positive association between dividend payout and financial performance few studies found the negative relationship (Gill, Biger & Tibrewala , 2010) on manufacturing industry.

2.7. Financial Leverage

Trade off theory and packing oder theory predicts a positive relationship between financial performance leverage. (Myers, 1984) these theories are in line with findings of Chesang and Ayuma (2016); Nduka and Ucheahare (2016). The high leverage firms has an impact on agency cost that positively influence the financial performance. The inverse relashionship is found by Mwangi, Makau and Kosimbai (2014) and Onaolapo and Kajola (2014) which are not supported by trade off theory that firms enhance it's performance by using leverage (Sibindi & Makina, 2018). Based on trade off theory high profitable firms reduces costs associated with agency and increase financial leverage.

2.8. Liquidity

Based on liquidity theory state that firms with liquidity problems will not be able to settle short term obligations. The firms with limited cash flow may require more credit which may influence its financial performance favourably due to availability of money (Makori, 2017). Dogan (2013) and Bagchi, (2013) support the positive association. These liquidity theory predicts positive relationship with financial performance. It is worth metioning that firms without liquidity problems are less

likely to require credit, therefore, negatively affecting financial performance (Coban, 2014).

2.9. Firm Size

Based on the trade off theory shows that the larger size firms have lesser chances of bankruptcy. The small size firms have the greater chances of bankruptcy as a result of risk associated with its financial performance (Titman & Wessels 1988). Therefore trade off theory predicts a positive relationship between Firm Size and financial performance. The finding in line with this theory are Dahmash (2015); Samosir, (2018) a in contrary to this finding Kumar & Kaur (2016); Kartikasari & Merianti (2016) and Azhar & Ahmed (2019) found negative relationship between firm size and financial performance.

2.10. Firm Growth

The pecking order by Donaldson (1961) which later usually commented by Myers (1984) and Myers and Majluf (1984) predicts positive relationship between growth and financial performance. The previous studies which are in line with this theory are as follows Kouser, Bano, Azeem & Ul Hassan (2012) and Razaq & Akinlo (2017).

3. Empirical Literature Review

Financial leverage refers to decision by company management to borrow funds externally as part of capital structure (Raheel & Shah, 2015). Firms usually pay dividends to reward shareholders in the form of cash or non-cash format from the profits earned (Tamimi, Takhtaei & Malchi, 2014; Yusof & Ismail, 2016). The decision on whether a firm will distribute dividends to investors is the prerogative of managers. There is generally no mutual theory that explain dividend policy for companies (Akhalmeh & Ogunkuade, 2021). According to Sugiastuti, Dzulkirom and Rahayu (2018) leverage insignificantly affect the value of the firm negatively. However, evidence from Giang and Tuan (2016) study on food and drink firms listed in the Vietnamese stock market from 2010 to 2014, suggests that dividend payout policy positively impact the value of firms and profitability as investors tend to undervalue firms that prefer not to pay dividends.

A positive relationship was found between firm liquidity and profitability by Samo and Murad (2019). Their study focused on analysis of annual statements of the textile sector firms in Pakistan using pooled panel regression and descriptive statistics. The results by Chun, Cudia, Papa, Tahilramani and Tan (2020) also revealed that high

liquidity results in firms paying dividends compared to those companies with high debt ratio. This study was conducted amongst property sector firms listed in the Phillippine Stock Exchange analysing data from 2012 to 2016 utilising multiple regression model.

Several studies also found a negative relationship between financial leverage and dividend payout. In their study of 92 manufacturing firms listed in the Tehran Stock Exchange from 2005 to 2011, Tamimi, Takhtaei and Malchi, (2014) found a negative relationship between financial leverage ratio and level of dividend payout. A study by Yusof and Ismail (2016) determined the factors that influenced dividend policy of 147 publicly listed companies in Malaysia. Data was analysed with fixed and random effects and pooled least squares models. The findings showed that positive relationship exist between dividend policy and earnings, firm size and investment, however, debt and large shareholders have a significant negative impact.

Sugiasuti, Dzulkirom and Rahayu (2018) found that leverage has a significant negative affect on dividend policy and insignificant negative effect towards firm value; based on the study in the 15 banks listed in Indonesian Stock Exchange in a study that used Partial Least Square data analysis methodology. Jaara, Alashhab and Jaara (2018) investigated the determinants of dividend policy by sampling non-financial companies in Jordan for a period from 2005 to 2016, using panel data analysis. The authors found that high leverage negatively showed a decrease in dividend pay-out. Similar to Jaara, Alashhab and Jaara (2018) study, evidence by Basri (2019) revealed that financial leverage and institutional ownership negatively impact dividend policy from annual data analysed by multiple regressions of government owned companies listed in Indonesian Stock Exchange.

Samo and Murad (2019) investigation showed a negative impact of financial leverage on firm's performance. Simirlarly, a study conducted by Kanakriyah (2020) in 92 industrial and service sector firms listed on the Amman stock exchange analysed data from 2015 to 2019 revealed that financial leverage negatively affected return on assests and that dividend pay-out has a significantly positive affect on the firm's financial performance. Padmini and Ratnadi (2020) investigated the effect of dividend policy, free cash flow and financial leverage on earnings management in 157 manufacturing firms in Indonesia for data collected in 2017 to 2018. Their findings showed a negative relationship to both free cash flow and dividend payout to earnings management. The results further showed no effect of financial leverage on earnings management (Padmini & Ratnadi, 2020). Inconsistent to previously mentioned studies, Akhalumeh and Ogunkuade (2021) study utilising pooled data regression method from annual financial statements of non-financial listed firms in the Nigerian Stock Exchange dated from 2012-2018, reported that financial leverage significantly affect both firm size and dividend pay-out positively. In the study of financial statements from 2002 to 2016 manufacturing firms listed in China, the

results showed a both positive and negative effect of leverage on profitability, with mediating factors including tax shield, agency issues, financial distress and cost of bankruptcy (Dalci, 2018).

Ahmed, Awais and Kashif (2018) found a positive relationship between financial leverage and financial performance. In their study for a period 2005 to 2014 of Karachi Stock Exchange 100 index listed securities. The results showed that financial leverage, interest cover, growth in sales influences financial performance. However the dividend payout has not been used in the study which is limited to these three independent variables namely capital structure, interest cover, leverage. The current study will use more than three independent variables and panel data analysis of 17 retail firms listed on the JSE.

4. Research Methodology

The positivism, quantitative and deductive research methods were adopted based on the nature of the study. The population of the study consist of retail firms listed on the JSE in the year 2010-2020 period. Non-probability, specifically in the form of purposive sampling was used with 17 retail firms selected for this study. Secondary data was collected in the form of a published financial reports from Iress. This topic is based upon the deductive approach in which the theory-testing technique must be used. The study uses the panel data which consist of Retail firms listed on the JSE. The sampling technique is purposive sampling based on the number of firms listed on the JSE. The hypothesis testing includes both random effect, fixed effect and pooled effect which recommended by the Hausman test.

The random regression analysis recommended by Hausman test indicate that there is a positive relationship between earnings growth (GRS), financial leverage (FL) with dividend payout ratio and negative relationship between Liquidity (LIQ) and firm size (SZ) with dividend payout ratio (DPO).

Table 3. Operationalisation

Table 1: Operationalisation of the variables	
ROA (profitability)	Net profit / Total Assets
DPO	Dividend per share/Earning per share
LIQ (current ration)	Current Liabilities / Current Assets
FL (Financial leverage)	Liabilities/Equity
SZ (firm size)	Log total assets
GRS (sales growth)	(previous sales-current sales)/current sales

Empirical Model

To examine the impact of firm size (SZ), financial leverage (FL), Dividend payout (DPO) Current ratio (LQ), sales growth (GRS) and profitability (ROA) on the

financial performance of Retail firms listed on the JSE this study used panel regression analysis based on the following regression model:

The approach is being adopted whose general form of panel regression equation is stated as:

$$Y_{i,t} = \alpha_i + \beta X_{i,t} + \epsilon_{i,t} \quad (1)$$

In equation (1), subscripts i and t respectively represents the cross-sectional and time series dimension of the data, while α and β also connotes constant and regression coefficients respectively. As $Y_{i,t}$ represents the dependent variable, $X_{i,t}$ represents the set of exogenous variables of firm I time t , and e measures the error term. The specific panel regression equation used for the study is as follows:

Model

$$ROA_{i,t} = \beta_0 + \beta_1 DPO_{i,t} + \beta_2 FL_{i,t} + \beta_3 LIQ_{i,t} + \beta_4 SZ_{i,t} + \beta_5 GRS_{i,t}$$

5. Findings and Discussion

Table 4. Descriptive Statistics

	ROA	DPO	FL	LIQ	SZ	GRS
Mean	0.0902	0.4995	2.1073	0.8535	6.7379	0.1242
Median	0.0831	0.5556	1.3009	0.7687	6.8685	0.0818
Maximum	0.3312	2.1450	7.3690	9.4090	7.9176	9.8638
Minimum	-0.9556	-1.2869	0.1063	0.1357	4.8748	-0.8950
Std. Dev.	0.1154	0.2973	1.6088	0.8967	0.6714	0.7237
Observations	187	187	187	187	187	187

Source: Eviews

Descriptive statistics for the period 2010 to 2020 of the variable used in the study are shown in the table above. The return on asset (ROA) on average shows 0.09 on financial performance or profitability. Standard deviation from an average of 0.1154. The maximum level of 0.3312 and the minimum is -0.9556. The minimum negative value shows negative financial performance during the study period. The dividend payout ratio (DPO) has a mean of 0,4995. the maximum of 2.14 and the minimum of - 1.2869. This shows that on average dividend payout variable ranges between - 1,2869 and 2.14 is 0,4995. The average level of financial leverage (FL) has a mean of mean 2,1073. The minimum financial leverage is 0.1063, whereas the maximum financial leverage is 7.3690. it indicates the standard deviation of 1.6088 and a range of 1.3009. The Liquidity has a mean of 0.853544. The minimum liquidity is 0.1357, whereas the maximum is 9.409046 with a standard deviation of 0.8967. The mean firm size is 6.7379, whereas the minimum firm size (SZ) is 4.8748, and the maximum is 7.9176. As the standard deviation for the data provided above table is 0.6714. The

mean growth opportunity is 0.1242, whereas the minimum growth opportunities are -0.8950, and the maximum is 9.8638. Moreover, all standard deviation values are below the means values reflecting a small coefficient of variation. The range of variation between maximum and minimum is also reasonable.

Table 5. Correlation matrix

Correlation	ROA	DPO	FL	LIQ	SZ	GRS
ROA	1.000000					
DPO	0.268716	1.000000				
FL	0.191522	-0.093377	1.000000			
LIQ	-0.139487	0.014740	-0.555816	1.000000		
SZ	0.223068	0.504343	-0.305671	-0.055489	1.000000	
GRS	0.274736	0.265928	0.004031	-0.255121	0.299086	1.000000

This table represents the correlation between all the variables included in the study. Based on the correlation matrix, shows a negative relationship between liquidity to return on asset, whereas there is a positive relationship between, dividend payout (DPO), financial leverage (FL), Firm size (SZ) and growth opportunities (GRS) with financial performance (ROA).

Diagnostic Test

It is commonly important to perform a normality test before considering the regression analysis. The normality test was run to ensure that the data is distributed normal, however, data was found not normally distributed therefore the outliers were removed to normalize data as recommended as the number of observations is greater than 100 (Gujarati, 2009).

Table 6. Hausman Test Results

17 retail firms on No: observation 187	Cross-section Chi-square statistics	Decision
	14.772184	Fixed effect model
Hypothesis testing	H_0 : Random effect is appropriate H_1 : Fixed effect model is appropriate	

*, ** and *** indicates significance at 10%, 5% and 1% respectively.

Source: Author's regression results

Based on the Hausman test shows that the fixed effect model is appropriate, therefore the panel regression result is based on the fixed-effect model. This test shows a chi-square of 14.7722 p-values of 0.0114 as a result the null hypothesis is rejected that the Random effect model is appropriate.

Table 7. Regression Analysis and Hypothesis

Independent variables	Expected hypothesis	Actual results	Level of significant
DPO	+	+	Fail to reject the null)
FL	-	+	1% fail to reject the null)
LIQ	+	+	Reject the null)
SZ	+	-	Reject the null
GRS	+	+	5% (fail reject the null)

Source: own compilation

Table 8. Regression Analysis Results

Dependent variable: ROA				
	Fixed effect model	Pooled effect robust	Random effect model robust	GLM robust
DPO	0.0036 (0.1403)	0.0573* (1.8474)	0.0181 (0.7300)	0.0573* (1.8474)
FL	0.0523*** (6.5096)	0.0226*** (3.5363)	0.0424*** (5.9180)	0.0226*** (3.5363)
LIQ	0.0087 (0.8243)	0.0123 (1.0954)	0.0136 (1.3241)	0.0123 (1.0954)
SZ	-0.0264 (-0.9056)	0.03296** (2.2053)	0.0190 (0.8917)	0.032957** (2.2053)
GRS	0.12058** (-0.0006)	0.1418*** (2.7354)	0.1202*** (2.8863)	0.1418*** (2.7354)
_cons	0.14104 (0.7006)	-0.22749 (-2.1943)	-0.2275 (-1.0410)	-0.2275 (-2.1943)
N	187	187	187	187
R-squared	0.5935	0.1846	0.1969	
Durbin Watson (DW)	1.4443	0.7022	1.179	
F-stat	11.471	8.1957	8.876	
Prob> F-stats	0.000	0.0000	0.000	
Hausman Test	0.0114			
Prob> chi2	14.7722			
t statistics in parentheses				
* p<0.10	" ** p<0.05"	"*** p<0.01"		

Source: own compilation

The findings from the table above show a positive relationship between financial leverage and financial performance with a high level of significance of 1%. The

dividend payout (DPO), liquidity (LIQ) influences financial performance (ROA) by 0.0036 and 0.0087 respectively but not significance. Financial leverage (FL) and growth opportunities (GRS) shows a positive association with financial performance by 0.0523 and 0.12058 respectively with a high level of significance of 1% and 5% respectively. The firm size (SZ) shows a negative relationship with financial performance by -0.0264. A decrease in firm size decreases the financial performance of retail firm. The R squared is 59% which shows that the overall data included in the model is greater than 50% that is defendable.

Financial leverage is negatively influenced by financial performance based on the published studies by (Fatemian & Hooshyarzadeh, 2016; Tariq, 2015), however the findings presented on table 7 revealed a positive influence between financial leverage and performance. The possible reason for positive relationship could be the fact that most retail firms uses of financial leverage (debt) to finance part of their operations which increases their financial performance, these is in line with the trade off theory. Firm size presented in table 7 shows a negative relationship with financial performance. This indicate that retails firms listed on the Johannesburg stock exchange are well established, therefore there is a negative influence on the financial performance. These finding is in line with the findings by Azhar and Ahmad (2019).

6. Conclusions

The general finding suggest a positive relationship between financial leverage and financial performance of listed retail firms on the Johannesburg Stock Exchange. The research study was based only on retail firms listed on the Johanneburg stock exchange with limited data. Therefore, future studies can get conclusive finding by enlarging the data to other vital sectors of the economy in South Africa. Based on the literature review most studies were focused mainly in developed economies hence limited studies conducted in emerging economies. Additionally many comparable studies can be conducted to compare other industries or sectors of the economy to find universal agreement.

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