



The Capital Structure Theory as It Relates to The Food Sector. A Developing Economy's Evidence

Collin Chikwira^{1*}

¹University of Johannesburg, School of Public Mngt, Governance & Public Policy, College of Business and Economics, South Africa, email: collincolchi1913@gmail.com

*Correspondence author: Chikwira Collin

Abstract: The study's objective was to investigate the capital structure theory in the food industry, focusing on manufacturing companies listed in Zimbabwe. By looking at these companies' capital structures, we aimed to pinpoint the factors influencing capital structure decisions in the food industry and provide managerial implications for businesses operating in this market. From 2017 to 2022, the study used Panel data from the financial statements of manufacturing companies listed on the Zimbabwe Stock Exchange and Victoria Falls Stock Exchange. The findings demonstrate the importance of business value and capital structure despite their negative relationships. For a variety of stakeholders, the study has value implications. This study offers managers in the food business insights into the variables influencing firms' capital structures, empowering them to make educated decisions about their financing options. The study can also be used by investors in this industry to assess the capital structure of businesses they are considering investing in, which will ultimately help them make more educated choices. Additionally, policymakers can use the study's findings to create policies that support the expansion and development of Zimbabwe's food business, thereby boosting that nation's economy.

Keywords: Capital Structure, Firm Value, Debt, Equity

INTRODUCTION

Capital structure according to Mazanec (2023), refers to the mix of debt and equity financing a corporation uses. Choosing the best capital structure for a growing company is a critical choice that will affect the firm's financial performance and worth over the long run. Many researchers have been curious about how capital structure affects corporate value (Abrar & Javaid, 2016; Aggarwal & Padhan, 2017; Hirdinis, 2019; Homapour et al., 2022; Mazanec, 2023). The key players in a company are curious about how the organisation's capital structure might affect the value of their investment. This study examines how capital structure impacts a company's value using information from manufacturing companies listed on the Zimbabwe Stock Exchange (ZSE). The manufacturing industry in Zimbabwe has not

been exempt from the country's recent economic hardships, which have been severe. Thus, it is crucial for businesses in this industry to comprehend how capital structure affects company value because doing so will help them decide how to finance their operations best.

Background Of The Study

The fundamental building blocks of every business' success are investment decisions. A single prosperous business's core decision is how to finance its assets. The business can fund its operations through the combination of debt and equity. Finance decisions impact the value and performance of the company, according to empirical evidence (Mazanec 2023a). So it is asserted that key company financial management issues include capital structure considerations. In light of this, the primary goal of corporate finance management is to maximise shareholder value through the development of sound business strategies, among which capital structure is the most important.

The capital structure is still one of the most crucial, extensively studied, fascinating, and contentious topics in financial decision-making. According to Nursetya and Hidayati (2020), launching a business necessitates addressing three capital-related crucial challenges in corporate finance. Making judgments on capital budgeting, capital structure, and working capital management are the key financial management decisions. These difficulties demonstrate how crucial money is to the success of any company.

A key decision that aims to maximise return to various stakeholders, capital structure affects an entity's risk, profitability, and market value. Because it is future-focused, Flannery and Hankins (2013) categorise the capital structure decision as a strategic choice for financial managers. The importance of capital structure extends beyond maximising shareholder returns to include direct impacts on the sustainability of the company and its capacity to meet external objectives. Awunyo-Vitor and Badu (2012), assert that businesses may choose to blend debt and equity. Financial management makes an effort to identify a combination that maximises the company's profitability and worth. However, while making decisions regarding the ideal capital structure, financial managers lack a clear manual to refer to (Dickson et al., 2013). This study looked into how capital structure affected the value of consumer products companies listed on the Zimbabwe Stock Exchange.

Moreover, understanding the importance of capital structure on firm value will enable manufacturing firms to make informed decisions about their financing decisions. Zimbabwean manufacturing firms have been facing significant financial challenges, including foreign currency shortages, high-interest rates, and limited access to financing. Therefore, knowing the right capital structure mix is vital to help these firms improve their financial performance and, ultimately, their value. Therefore, this study's significance will provide evidence of the link between capital structure and firm value in the Zimbabwean manufacturing sector, making it possible for manufacturing firms listed on the ZSE to make informed financing decisions.

One of the main economic generators in Zimbabwe is the manufacturing industry. Zimbabwe is renowned for its wide variety of domestically produced goods, including textiles, chemicals, pharmaceuticals, and a range of food and drink items. Zimbabwe's abundant natural resources and competent labour force are beneficial to the country's manufacturing industry. The food and beverage industry ranks among the biggest in the manufacturing sector in Zimbabwe. Numerous local businesses manufacture a wide range of goods, including maize meal, sugar, cooking oil, and soft beverages. The textile sector is booming, with numerous businesses creating high-quality apparel for domestic and international markets.

Despite difficulties brought on by the COVID-19 outbreak, Zimbabwe's manufacturing industry continues to be a key component of the nation's economy. The industry is positioned

for continued growth and success in the upcoming years because of the government's ongoing backing and the development of new technology. According to the World Bank Group (2023), value addition and beneficiation operations in the industrial, mining, and agricultural sectors supported 3,7% growth in the manufacturing sector in 2023. Zimbabwe's manufacturing sector has one of the largest sectoral contributions among African nations, according to the World Bank Group (2023), and it is the main contributor to the GDP. Statistics show petrochemicals had a 14 percent market share, followed by food, iron ore, steel, and metal manufacturing at 26 per cent.

This is a result of its diverse industrial base, abundant primary raw material sources, and favourable climatic conditions for agriculture. Despite operating difficulties, 40 per cent of manufacturers boosted their investments from 38 per cent from 2021 to 2022, according to (Xinhua, 2023). The manufacturing sector received an injection of 101 million US dollars during the same time period. The same poll found that few manufacturing companies decreased technology, while 47% of them enhanced it. In terms of capacity utilisation, it increased to 56.1% in 2022 from 52.21% in the prior year. Manufacturing absorbs a significant portion of employment, accounting for 40.2% of firm growth and 16.88% of job reductions (World Bank Group, 2023).

A company's market performance is impacted by financial decisions that affect dividends paid to shareholders and the cost of capital (Pandey, 2007). According to Aquino (2010), there is a direct correlation between high levels of debt in the capital structure and greater firm performance. According to Hart (1982), companies with heavy equity financing have less motivation to be more efficient than companies with high debt financing, and as a result, high debt ratio in the capital structure leads to superior performance. Debt financing will increase the firm's expenses and have a negative impact on performance because Zimbabwe has a high cost of capital.

Focusing on the manufacturing industry represented on the ZSE, this study aims to fill a gap in the literature. For Zimbabwe's economy to expand, the manufacturing sector is crucial. Manufacturing companies listed on the ZSE can enhance their financial performance and value by comprehending the effect of capital structure on firm value. Previous research on capital structure and firm value in Zimbabwe has tended to concentrate on the tourism industry and how adaptable it is to hyperinflation (Mawanza & Mugumisi, 2013; Mbulawa, 2020), leaving the manufacturing sector out.

A crucial issue in accounting and finance is how capital structure affects firm value. It refers to the combination of various financing options, such as debt and equity, that a company uses to fund its operations. The study's findings are especially pertinent given Zimbabwe's economic difficulties and the need for businesses to efficiently manage their financial resources because they used manufacturing firms in Zimbabwe for analysis. The research explains how capital structure choices impact manufacturing companies' productivity and market value in developing nations. The study offers insightful information about how manufacturing companies in Zimbabwe can optimise their capital structure to improve their performance and value.

The study also calculates the firm's market value using stock market data, such as stock prices and market capitalization, to add to the body of existing literature. By examining the moderating effect of industry-specific factors on the relationship, the research advances knowledge of how to decide best what optimal capital structures can be used in a volatile situation in corporate finance. While earlier research has mainly focused on the general relationship between capital structure and firm value, research is still needed to explore how industry-specific factors like firm size, growth, profitability, and risk may influence this relationship in the manufacturing sector. This is to say, the impact of capital structure on firm value in manufacturing firms listed on the Zimbabwe Stock Exchange (ZSE).

LITERATURE REVIEW

The capital structure of a corporation is the combination of debt and equity financing it uses to finance its activities (Mazanec, 2023). Scholars have conducted a great deal of research in finance and accounting on the effect of capital structure on firm value in an effort to establish the ideal ratio of debt and equity financing for businesses across a range of industries.

According to Modigliani and Miller (1958), a company's worth is unrelated to its financing, therefore its owners have no choice in terms of the capital structure. A corporation has an ideal or desired leverage ratio, according to Myers and Majluf (1984) static trade-off hypothesis theory from 1984. The capital mix shifts when a firm uses different debt-to-equity ratios to boost its value. Business value rises when debt levels become closer to the ideal level, indicating a relationship between firm value and tax advantage. As the corporation takes on more debt, more after-tax cash flows become accessible, resulting in tax benefits. According to the pecking order principle, businesses favour internal funding over private financing and reserve equity financing for last resort use. Profitable firms want to have their own resources; when they are not enough to continue operations, a business may or may not look for outside funding. If they opt to get funding from outside sources, they must make prudent decisions. The pecking order idea prioritises internally generated funds as a result.

Numerous studies have looked at the connection between capital structure and business value in emerging nations like Zimbabwe. Mawanza and Mugumisi (2013) discovered a negative correlation between capital structure and firm value in the tourist sector in their analysis of companies registered on the Zimbabwe Stock Exchange, indicating that companies with greater debt levels typically had lower market values. Similar results were discovered by , (Magomo, 2020; Mbulawa, 2020) for Zimbabwean enterprises during the dollarization and hyperinflation, indicating that debt financing can have a favourable effect on firm value.

In their 2017 study, Aggarwal and Padhan (2017) used Indian-listed companies from 2001 to 2015 to analyse the hotel sector. In order to evaluate how capital structure affects company quality, the study used panel data methodologies. The findings revealed a strong correlation between business value and quality, liquidity, size, and economic growth. The MM irrelevance hypothesis does not apply to the Indian hospitality sector, hence the authors urge hotel owners to reevaluate their capital arrangements in order to enhance firm quality and market performance. Hirdinis (2019) looked into the capital structure of the mining industry and how it affected firm value. The listed IDX company confirmed that firm size had a detrimental impact on firm value whereas capital structure showed a significant favourable link with firm worth. Contrarily, profitability had little effect on the valuation of the company.

Luu (2021) examined the value of chemical businesses listed in Vietnam, the impact of capital structure, and other factors. 23 listed companies' financial statements from 2012 to 2019 were examined for the study. They employed OLS, FEM, and REM regression models together with quantitative research techniques with the intention of solving the shortcomings of the model. The study finds an inverse relationship between firm value and capital structure, however the value of the firms was lower for those with higher asset turnover, larger businesses, and more established operations. According to the study, chemical industry companies with greater debt ratios are less valuable.

Ghana-listed companies were used by Dodoo et al. (2023) to study the growing economy. Generalized methods of the moment (GMM) and conventional least squares were employed to analyse data from 15 non-financial organisations in the study (OLSs). Results showed that, in the emerging economy, the capital structure had a detrimental effect on corporate performance as measured by return on assets (ROA). The capital structure had no appreciable impact on the firm value, as shown by the usage of return on equity. According to

the study, the capital structure in Ghana has little to no bearing on the financial performance of listed non-financial enterprises. The manufacturing sector is therefore used in the current study to evaluate the rising economy.

Mazanec (2023) used 3828 small and medium-sized businesses in the region of central Europe to analyse the capital structure and firm value of the transport sector. Five financial variables were employed in the study to estimate the debt ratio using multiple linear regression. The findings in the transportation industry indicate that businesses favour the pecking order idea. Increases in tangibility, return on assets, and current ratio were shown to reduce the debt ratio, which is a measure of the capital structure and suggests that the enterprises were more invested in equity than debt.

According to the research, the capital structure and business value are related in a nuanced and situation-specific manner. While some research has indicated a positive relationship between capital structure and firm value, other research has found no relationship or even a negative relationship. In the context of industrial enterprises in Zimbabwe, debt financing appears to be able to raise a company's worth. However, different factors may play a distinct role in capital structure decisions and how they effect business value depending on the specific sector and firm characteristics.

RESEARCH METHODOLOGY

The financial statements of manufacturing companies listed on the Zimbabwe Stock Exchange and Victoria Falls Stock Exchange for the years 2017 through 2022 were utilised as panel data in the study. The firm was chosen based on the data's accessibility. Due to the distinct time series and cross-sectional dimension properties of the Panel data, it was chosen. Panel data is preferable to cross-section and time series data because it is more informative, has higher variability, more degrees of freedom, and lower co-linearity for a given sample size (Blundell & Bond, 1998). Panel data also explicitly take into account the variation in firm-specific traits, so reducing any bias that would arise from grouping firms. However, panel data have issues with heteroscedasticity and autocorrelation that are present in cross-sectional and time series data (Anderson & Hsiao, 1982). However, these issues are addressed by using the Fixed Effects Model (FEM) or Random Effects Model (REM) (Gujarati, 2009).

Data issues and variables

On the Zimbabwe stock exchange, the consumer goods firms' population was 12 listed under consumer goods. The study entirely relied on readily available secondary data. The published audited annual financial reports of the selected manufacturing firms were the source of data acquired through the ZSE database for all the variables in the research.

Dependent variables

For robustness, the study used two alternative, dependent variables as a proxy of firm value, that is

- a. Enterprise value (EV) is the most fundamental indicator of the worth of a company because it considers the values of debt and equity. (Dhankar & Boora, 1996). Chadha and Sharma (2016). Because it incorporates debt in its value calculation and provides the value of the enterprise's assets, it provides a more accurate valuation of the company. Compared to the market capitalization technique, it is more thorough.
- b. Market Capitalization (MCAP)- this proxy is debt exclusive and reflects how much the firm's market value is. It has been used in studies by, (Natsir & Yusbardini, 2020); Nursetya and Hidayati (2020), which relate that the firm value from the investors'

perspective is its market performance which is reviewed by the share price on the stock exchange. Therefore, the study used market capitalization to capture the firm's market value. The data was collected from the Zimbabwe Stock Exchange firm capitalization.

Independent variables

Profitability -Returns generated by an enterprise on the total funds deployed in the business and calculated as a ratio of profit after tax net of the prior period and extraordinary transactions over an average of beginning and total year-end assets. Natsir and Yusbardini (2020) firms can increase profitability through the sources of finances they use, either internal or external. Thus, the study used profitability as a control variable to capture the effect of sources' finances on firms' profitability. The expected sign is positive between firm value and profitability.

Because **size** affects a company's worth, businesses with enormous assets typically make more money and amass more riches. The firm's size is thus determined in the current study as a logarithm of the firm's total assets, which refers to the sum of all current and non-current assets(Aquino, 2010). The expected relationship is positive to capital structure.

Capital structure –(CS) Suzulia and Saluy (2020) The capital structure is the ratio of firm debt to the value of its capital proxied by the debt-to-equity ratio reflected in the firm's balance sheet as of the date. Various studies used to market and book value over equity and concluded mixed results to firm value; therefore, the current study used debt to equity ratio. Suzulia and Saluy (2020) also praise the importance of using debt to equity ratio as a measure of capital structure. Therefore thus, it is hypothesised that capital structure and firm value had a positive significance.

$$\text{capital structure} = \frac{\text{total debt}}{\text{total equity}}$$

Liquidity (LIQ), Liquidity, according to Aggarwal and Padhan (2017), is the cash that is available for the future after taking into account the debt owed for the current period. Without outside funding, a company may finance its investments with its liquid assets, which would have an impact on performance. The current ratio, which is determined by dividing current liabilities by current assets, serves as a proxy for liquidity. Using regression analysis, Ceballos-Mina and Santiago-Ayala (2019) discovered a favourable correlation between a firm's success as shown by its current ratio and its liquidity. The correlation is predicted to be statistically significant and positive.

$$\text{LIQUIDITY (liq)} = \frac{\text{current assets}}{\text{current liabilities}}$$

Growth -Theoretical, pecking order, and trade-off theories contend that the relationship between a firm's leverage and growth can be both positive and negative (Froot & Stein, 1998; Natsir & Yusbardini, 2020). According to the pecking order principle, growth possibilities will be preferred above debt. More agency conflicts from growth prospects are predicted under the trade-off theory. Since growth opportunities have an impact on the firm's capital structure, we anticipate a strong correlation between firm value and growth. Due to the nature of the food and beverage industry, where a rise in total assets reflects how the food chain has grown, it is more predictable. Businesses with more tangible assets tend to borrow more money than those with less, depending on the industry. It is still unknown in the Zimbabwean context whether the capital markets have acknowledged the expansion of food and beverage companies without having a negative impact on the firm's quality. But we anticipate a strong correlation between firm growth and firm valuation.

Growth = (Growth in Total Assets)

There is a lot of proof that firm size and leverage are significantly related (Mazanec, 2023). Based on the results of this investigation, we employed the natural logarithm of total assets (LnTA) as a substitute for business size (Suzulia & Saluy, 2020). Large companies tend to be more leveraged because diversification benefits and a cushion against unfavourable cash flow changes. Given that size has been used in research as an inverse proxy for bankruptcy probability and that size also lowers the costs associated with financial distress, we anticipate a positive association between size and firm value. As a result, the amount of the company's assets reflects the size of the company.

Size = ln total assets

Model Specification

The model was adapted from Mwangi et al. (2014), which exploited the panel multiple linear regression model using pooled Ordinary Least Square method, and the research exploited the fixed effects least square dummy variable regression model.

$$EV_{it} = \beta_0 + \beta_1CS_{it} + \beta_2LIQ_{it} + \beta_3PROF_{it} + \beta_4SIZ_{it} + \beta_5GRW_{it} + \epsilon_{it} \quad (1)$$

$$MCAP_{it} = \beta_0 + \beta_1CS_{it} + \beta_2LIQ_{it} + \beta_3PROF_{it} + \beta_4SIZ_{it} + \beta_5GRW_{it} + \epsilon_{it} \quad (2)$$

Where:

EV_{it} is the dependent variable representing the firm value of firm i at time t and is measured as enterprise value on the ZSE.

β₀ is a constant

β₁, β₂, β₃, β₄, β₅ are regression coefficients which represents the degree to which financial performance changes as the independent variable change by one unit.

CS_{it} is the debt-to-equity ratio or leverage of firm i at time t and is measured as a firm's capital structure proxied (total debt / total assets).

LIQ_{it} is the liquidity of firm i at time t and is measured as current assets / current liabilities.

Prof_{it} is the profitability of the firm i at time t measured as a ratio of profit after tax net of the prior period

SIZ_{it} is the size of a firm I, and time t is measured as the natural log of the firm's assets.

GRW_{it}, is the firm I growth at time t, change of total assets period 1 to period

ε_{it} is the error term.

RESULTS AND DISCUSSION

The Hausman Test was used to identify which estimator should be used to determine which model would be most appropriate for data analysis. Comparing the alternative hypothesis, that the FEM and REM estimators differ significantly, to the null hypothesis, there is no systematic difference between the fixed and random effects coefficients. The Hausman Test is a model specification test used to choose the most suitable model from FEM and REM. Fixed effects are the alternative hypothesis, whereas random effects are the preferred model according to the null hypothesis results in table 1 below.

The Hausman test's χ^2 value is 49.60, and the p-value of 0.0000, which is statistically significant at 1%, implies that FEM is the most appropriate estimator for this analysis. The decision criterion, if its p-value is below 0.05, accepts the null hypothesis and rejects the alternative. Also, it indicates a relationship between the unique mistakes and the model's

regressors. Therefore, inferring that the FEM is appropriate and should be chosen over the REM.

Table 1: Hausman Model Specification Test Results

| Test | p-value | Chi2 (4) | Remark |
|---------|---------|----------|--------------|
| Hausman | 0.0000 | 49.60 | Fixed Effect |

Source STATA

Panel Unit Root Test Results

The Levin-Lin-Chu test determined the variables' panel unit root. In contrast to the alternative, which is that the panel is stationary, the null hypothesis is that the panel data includes the unit root. The variable will become non-stationary if the null hypothesis is accepted; hence to correct the error, the non-stationary variable must be differentiated until it becomes stationary.

According to the findings above, the variables EV, LIQ, MCAP, SIZ GWR and PROF are stationary at I(0), while CS is stationary at I(1), thus after first differencing the variable. This indicates that all the variables depict stationarity but at different levels, and they were fit to be included in the estimation procedure.

Table 2. Stationarity Test Results

| Estimator | LLC-Statistic | p-value | Order of Intergration | Remark |
|-----------|---------------|---------|-----------------------|------------|
| EV | -1.7113 | 0.0435 | I(0) | Stationary |
| MCAP | -1.234 | 0.0023 | I(0) | Stationary |
| CS | -1.402 | 0.0000 | I(1) | Stationary |
| LIQ | -10.1772 | 0.0000 | I(0) | Stationary |
| SIZ | -10.4764 | 0.0000 | I(0) | Stationary |
| GWR | -2.0607 | 0.0197 | I(0) | Stationary |
| PROF | -11.0789 | 0.0235 | I(0) | Stationary |

Source; stata

Co-integration Test Results

When there is a long-term link between two or more variables in a time series, co-integration is evident (Gujarati, 2004). The presence of a long-run relationship was investigated using the panel unit root of the residual. If the residual has a unit root, the variables are co-integrated.

According to the research findings, the residual is white noise since it lacks a unit root, which indicates that the variables are related over the long term.

Table 3: Co-integration Test Results

| Estimator | LLC | p-value | Order of Intergration | Remark |
|---------------|---------|---------|-----------------------|------------|
| Residual (r1) | -6.5373 | 0.0000 | I(0) | Stationary |

Source; Stata

Model Significance test results

The significance of the model was assessed using the Wald test by analysing the combined significance of the regressors. According to the null hypothesis Table 4 below, the variables have no bearing on the model.

The null hypothesis is rejected since the outcome p-value of 0.0000 is less than 0.05 and indicates that the exogenous variables are statistically significant to the model. This

confirms the Fixed effect panel regression model estimated in this research is significant and can be relied on.

Table 4 Wald Test Results

| Test | p-value | F statistic | Remarks |
|------|---------|-------------|------------------------------------|
| Wald | 0.0000 | 8.95 | Variables significant to the model |

Source; Stata

Multicollinearity test results

Since the correlation coefficients are less than 0.8 following the study's findings, we conclude no significant multicollinearity exists. The maximum correlation between variables in the study is 0.3683, significantly lower than the maximum acceptable correlation of 0.8. This implies that the explanatory variables included in the study give us completely different information from one another

Table 5: Correlation Matrix

| Variables | CS | LIQ | GWR | PROF | SIZ |
|-----------|--------|---------|--------|--------|--------|
| CS | 1.0000 | | | | |
| LIQ | 0.2914 | 1.0000 | | | |
| GWR | 0.0374 | -0.3683 | 1.0000 | | |
| PROF | 0.1037 | 0.1620 | 0.1573 | 1.0000 | |
| SIZ | 0.0236 | 0.2654 | 0.1478 | 0.1872 | 1.0000 |

Source: Stata

Descriptive Statistics

With a mean of 1.178 percent and 4.29 percent, the dependent variables EV and MACAP had respective minimum and maximum values of -3.6 percent, 1.66 percent, 7.2 percent, and 8.24 percent. Manufacturing was, on average, lucrative as measured by EV over the research period, while being very volatile, as shown by the overall standard deviation of 1.983. Manufacturing companies, on average, have a capital structure (CS) value of 3.9, which indicates that they are severely leveraged. Due to the necessity to expand their production capabilities and their access to government funding and assistance since they make a big contribution to job creation, manufacturing companies appear to use debt excessively. The industry's capacity utilisation is changing, as indicated by the growth rate of 11.89 percent, which indicates that firms are expanding faster.

Table 6: Descriptive Statistics

| | EV | MCAP | SIZ | CS | PROF | GWR | LIQ |
|--------------------|--------|-------|--------|-------|--------|--------|--------|
| Mean | 1.178 | 4.287 | 8.237 | 3.973 | 8.666 | 11.876 | 14.346 |
| Median | 1.500 | 2.312 | 5.345 | 3.800 | 8.700 | 3.800 | 10.200 |
| Mode | 0.100 | 1.900 | 7.872 | 2.700 | 1.500 | 4.000 | 7.300 |
| Standard Deviation | 1.983 | 1.836 | 1.984 | 1.151 | 5.031 | 2.432 | 8.752 |
| Range | 10.800 | 6.189 | 18.239 | 4.600 | 15.300 | 15.000 | 27.400 |
| Minimum | -3.600 | 1.675 | 8.230 | 2.400 | 1.000 | 1.000 | 3.900 |
| Maximum | 7.200 | 8.245 | 2.846 | 7.000 | 16.300 | 16.000 | 31.300 |

Source: Stata

Panel Regression Results Presentation

The fixed effect regression model outcomes are displayed in the table below.

Table7: Regression Results of Panel data equation (1) with EV as the dependent variable

| Variable | coefficient | std.error | t-statistics | P-Value |
|---------------------|-------------|-------------|--------------|---------|
| Constant | -202,9226 | -58,3299 | -3,4800 | 0,0010 |
| CS | -4,3170 | 0,1863 | -5,2900 | 0,0000 |
| LIQ | -0,3669 | 0,1690 | -2,1700 | 0,0135 |
| GWR | 2,5661 | 1,0122 | 2,5400 | 0,0140 |
| PROF | 0,0854 | 0,2605 | 0,3300 | 0,7440 |
| SIZ | 0,2346 | 0,7645 | 1,6700 | 0,0000 |
| R2 | | | 0,8120 | |
| Adjusted R2 | | | 0,7669 | |
| F-statistics | | | 18,0000 | |
| Prof (F statistics) | | | 0,0000 | |
| D-W Statistics | | | 8.95 | 0,0000 |
| F-test | | F-tset 8.95 | | 0,0000 |
| Hausman test | | | 49.60 | 0,0000 |

Source: Stata

Table 8: Regression Results of Panel data equation (2) with MCAP as the dependent variable

| Variable | coefficient | std.error | t-statistics | P-Value |
|---------------------|-------------|--------------|--------------|---------|
| Constant | -356,10976 | -72,1095 | -2,3450 | 0,0000 |
| CS | -1,5418 | 1,9830 | -6,0845 | 0,0000 |
| LIQ | 0,0123 | 0,7862 | -2,3109 | 0,1205 |
| GWR | -1,276 | 1,8217 | 3,2332 | 0,4523 |
| PROF | 0,0012 | 0,2543 | 0,0843 | 0,0023 |
| SIZ | 0,0987 | 0,6891 | 1,8746 | 0,0000 |
| R2 | | | 0,2945 | |
| Adjusted R2 | | | 0,7889 | |
| F-statistics | | | 13,0000 | |
| Prof (F statistics) | | | 0,0000 | |
| D-W Statistics | | | 98,09 | 0,0000 |
| F-test | | F-test 19,36 | | 0,0000 |
| Hausman test | | | 367,09 | 0,0000 |

Source: Stata

The association between the various firm error components and the explanatory factors was used to choose between the fixed and random effect models for the investigation. Fixed effect models are employed if they are correlated, but random effect models are used if they are not. We choose between a fixed effect model and a random effect model using the formal Hausman test employed in several studies. The alternative to the random effect is inconsistent; therefore, the null hypothesis is that the random effect model is consistent and effective. In other words, the null hypothesis presupposes no correlation between the explanatory factors and the specific firm error components. The choice of a fixed effect model over a random effect model and vice versa follows the rejection of the null hypothesis. Because the Chi-square statistic with P value for equation 1 is 49,60 and p-value 0,0000 and

for equation 2 is 367,09 and p-value 0,0000, the results reject the null hypothesis and recommend employing a fixed effect model.

The findings demonstrate the importance of business value and capital structure, despite the fact that the relationship is negative for all of the equations. The study by Aggarwal and Padhan (2017), which demonstrates that employing more debt has a negative impact on the firm's success on the market, is consistent with the negative link. If the company employs more debt in its capital structure, it will have a negative impact on its value, according to the usage of market capitalization as an independent variable. The debt in the capital structure also has a detrimental impact on the enterprise value.

The findings go counter to the pecking order theory, which contends that debt is favoured over equity and that firms in the manufacturing sector employ more equity than debt. Therefore, Modigliani and Miller, who contend that business value is not based on how the assets are financed, are supported by the manufacturing sector. Additionally, debt in Zimbabwe is very expensive and challenging to service, which is why the majority of businesses are employing more equity in their operations. When the firm value was calculated using the enterprise value, liquidity had a negative statistically significant link with the firm value with a coefficient of -0,3669 at a 10% level, but not significantly with the share price.

Given that the p-value from the regression findings is less than 0.05 and is 0.035, the influence of liquidity on financial performance was deemed to be statistically significant. Liquidity was included as a control variable in explaining profitability. A negative correlation exists between liquidity and financial performance, as indicated by the negative coefficient of -0.3669328. When all other factors are held constant, the performance will decline by 0.3669328 for every unit increase in liquidity. The results contradict the study's expectations and Xu and Banchuenvit's (2013) research, which found a positive association between liquidity and return on equity. Zimbabwe has high inflation compared to other markets; holding cash or highly liquid assets in the balance sheet leaves the company susceptible to the ravages of inflation; this could explain the surprising negative relationship between liquidity and profitability. Profitable companies tend to keep as little liquid assets as possible, while those with high values of liquid assets lose to inflation.

A company's expansion had a favourable impact on its enterprise value and a detrimental one on its market capitalization, respectively. The results, which showed a correlation between profitability and the total current assets to total assets of 2.566, were statistically significant at the level of 5% confidence. The findings show a favourable correlation between the ratio of total current assets to total assets and financial performance as measured by return on equity. According to the study, keeping other model components unchanged would raise return on equity by 2.566162 for every unit increase in the ratio of total current assets to total assets. These findings confirm the assertions made by Mwangi at El (2014) and Afza and Nazir (2007) that performance is favourably correlated with the ratio of total current assets to total assets.

Although it is not statistically significant in equation 1 when the enterprise value is included, the firm's profitability is positively correlated with the firm value when the market capitalization is included. This suggests that the expansion of the company's profit margins affects the market share price. Investors place a higher value on businesses that generate more profits since it suggests that they have the potential and capacity to increase their wealth. At a 1% level, the firm's size was statistically significant in both equations in the positive direction. The findings of Aggarwal and Padhan (2017), which suggest that firm size influences the value placed on firms either on the market or in absolute terms, are consistent with the findings of this study.

CONCLUSION

The study provides empirical support for the hypothesis that capital structure impacts the firm value of manufacturing companies listed on the Zimbabwe stock exchange. Accordingly, it has been demonstrated that publicly traded food processing companies' capital structure and firm value are highly correlated. Businesses change their capital structures to reduce their debt ratio and gradually enhance their equity. High debt levels are used by businesses, which lowers the firm value of businesses in the manufacturing sector.

Several management conclusions can be made based on the results of our study on the capital structure theory in Zimbabwe-listed manufacturing enterprises. First and foremost, managers in the food business must comprehend how diverse elements affect their companies' capital structures. These elements could include financial policies, industry-specific traits, and the state of the economy. By carefully considering these variables, managers can choose the best capital structure for their businesses. Second, managers need to pay special attention to the costs associated with debt and equity financing. According to our research, Zimbabwean food industry businesses primarily rely on debt finance. However, Managers should consider alternative funding choices like equity financing or intra-corporate loans, given the nation's high cost of debt financing.

Thirdly, managers need to give effective working capital management a top priority. According to our research, businesses with significant working capital needs had lower debt-to-equity ratios. Maintaining ideal working capital levels allows businesses to cut back on the requirement for outside funding, which favours their capital structure. Fourth, managers need to be aware of the regulatory landscape. In the food industry in Zimbabwe, our study found that the regulatory environment was a crucial factor in determining capital structure choices. While researching advantageous financing solutions for their businesses, managers should adhere to regulatory standards. To ensure their capital structure stays optimal, managers should examine it frequently. It's crucial to regularly assess how changes in the business environment affect their organisations' capital structures as market conditions change.

Further research: Considering that the study only examined a small number of listed manufacturing firms, all listed and unlisted companies must be considered to fully grasp the scope of the capital structure in this industry. There is a need to investigate the financial statements and other pertinent data of a sample of manufacturing enterprises in Zimbabwe to ascertain their capital structure and performance indicators, given the volatility of the reporting currency, for further research. Additionally, analyse a few organisations' capital structure decisions and company value using case study methodology to gain additional in-depth insights.

REFERENCE

- Abrar, A., & Javaid, A. Y. (2016). The impact of capital structure on the profitability of microfinance institutions. *South Asian Journal of Management*, 10(1), 21-37.
- Aggarwal, D., & Padhan, P. C. (2017). Impact of capital structure on firm value: Evidence from Indian hospitality industry. *Theoretical Economics Letters*, 7(4), 982-1000.
- Anderson, T. W., & Hsiao, C. (1982). Formulation and estimation of dynamic models using panel data. *Journal of Econometrics*, 18(1), 47-82.
- Aquino, R. (2010). *Capital structure of Philippine listed and unlisted firms: 1997-2008*. University of the Philippines, College of Business Administration.
- Awunyo-Vitor, D., & Badu, J. (2012). Capital structure and performance of listed banks in Ghana.
- Blundell, & Bond. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometric*, 87, 115-144.

- Ceballos-Mina, O. E., & Santiago-Ayala, L. E. (2019). Capital structure-firm value nexus: The moderating role of profitability. *Revista Finanzas y Política Económica*, 11(2), 375-386.
- Chadha, S., & Sharma, A. K. (2016). An empirical study on capital structure in Indian manufacturing sector. *Global Business Review*, 17(2), 411-424.
- Dhankar, R. S., & Boora, A. S. (1996). Cost of capital, optimal capital structure, and value of firm: An empirical study of Indian companies. *Vikalpa*, 21(3), 29-36.
- Dickson, P., Marobhe, M., & Kaaya, I. (2013). The Relationship between Capital Structure and Commercial Bank Performance: A Panel Data Analysis.
- Dodoo, R. N. A., Kumi, M., & Mangudhla, T. (2023). The effect of capital structure on firm performance: empirical evidence from emerging economy. *EuroMed Journal of Management*, 5(1), 83-99.
- Flannery, M. J., & Hankins, K. W. (2013). Estimating dynamic panel models in corporate finance. *Journal of Corporate Finance*, 19, 1-19.
- Froot, K., A., & Stein, J., C. (1998). Risk management, capital budgeting, and capital structure policy for financial institutions: an integrated approach. *Journal of Financial Economics*, 47(1), 55-82.
- Gujarati, D., N. (2009). *Basic Econometrics*. Tata McGraw-Hill Education.
- Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability.
- Homapour, E., Su, L., Caraffini, F., & Chiclana, F. (2022). Regression analysis of macroeconomic conditions and capital structures of publicly listed British firms. *Mathematics*, 10(7), 1119.
- Luu, D. H. (2021). The impact of capital structure on firm value: A case study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(5), 287-292.
- Magomo, N. T. (2020). *Does capital structure theory remain relevant under abnormal macroeconomic environment: the case of Zimbabwean manufacturing firms during the period 2009-2018*
- Mawanza, W., & Mugumisi, N. (2013). Capital structure and corporate performance: A case for tourism and hospitality sector of Zimbabwe. *Global Journal of Commerce and Management Practice*, 2(6), 85-90.
- Mazanec, J. (2023). Capital Structure Theory in the Transport Sector: Evidence from Visegrad Group. *Mathematics*, 11(6), 1343.
- Mbulawa, S. (2020). *Determinants of Capital Structure Choices by Listed Firms in Zimbabwe under Hyperinflation and Dollarization*. AERC.
- Modigliani, F., & Miller, M., H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261-297.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
- Natsir, K., & Yusbardini, Y. (2020). The Effect of Capital Structure and Firm Size on Firm Value Through Profitability as Intervening Variable. 8th International Conference of Entrepreneurship and Business Management Untar (ICEBM 2019),
- Nursetya, R. P., & Hidayati, L. N. (2020). How Does Firm Size and Capital Structure Affect Firm Value? *Journal of Management and Entrepreneurship Research*, 1(2), 67-76.
- Suzulia, M. T., & Saluy, A. B. (2020). The effect of capital structure, company growth, and inflation on firm value with profitability as intervening variable (study on manufacturing companies listed on bej period 2014-2018). *Dinasti International Journal of Economics, Finance & Accounting*, 1(1), 95-109.
- [Record #616 is using a reference type undefined in this output style.]

Xinhua. (2023). *Zimbabwe's manufacturing industry optimistic despite operational challenges*.
<https://english.news.cn/20230407/f02dfd5e363942e1ba617aeefb96a84a/c.html>