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Solvency Management and Financial Sustainability of Supermarkets in Kenya

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Abstract: Supermarkets are vital drivers of the Kenyan Economy. However, lack of effective solvency management and cash flow challenges have deterred financial sustainability among supermarkets and left them on the brink of collapse. This paper investigated the influence of solvency management on the financial sustainability of supermarkets in Kenya. The study specifically examined the effect of financial leverage, operating margins, and firm size on supermarkets' financial sustainability. The cash flow theory guided the study. The paper was a conceptual review and adopted a descriptive research design. It applied data from the empirical findings of studies related to solvency management and financial sustainability. Results revealed a significant relationship between solvency management and financial sustainability. It indicated that constructs of solvency management comprising financial leverage, operating margins, and firm size influence supermarkets' financial sustainability in Kenya.

Key words: Solvency Management, Financial Leverage, Operating Margins, Firm Size, Financial Sustainability

1. Introduction

Solvency describes the organization's ability to meet its long-term debts and other financial obligations (Navarro-Sarrión, 2016). Solvency is an important indicator and a measure of financial health as it is the ability of the company to manage operations in the long-run. The capacity of a corporate entity to meet its long-term financial commitments determines its financial sustainability. Batchimeg (2017) opined that solvency serves as a critical aspect of the overall business of supermarkets. It generally describes supermarkets' capability to meet their financial obligations in the long-run. Supermarkets, like other organizations, are considered solvent when total assets exceed liabilities consistently. Kinuthia (2015) noted that supermarkets are systematically important entities worldwide, and it is evident that solvency is crucial for their financial sustainability and stability. Insolvency among supermarkets represents the risks of not having their own adequate funds to cover the eventual losses and other business uncertainties.

According to Navarro-Sarrion (2016), solvency management aims to ensure capital sufficiency for an organization from its own funds so as to absorb losses. Furthermore, solvency management focuses on controlling the degree of indebtedness through the requirement that the indicator of indebtedness will not fall below a certain minimum threshold. Insolvency in supermarkets appears as a result of the inability to settle debts and liabilities owed to the suppliers and other service providers (Kinuthia, 2015). Appropriate solvency levels are pursued to avoid the situation of bankruptcy. Effective solvency management usually represents the key to supermarkets' success and survival in dynamic and innovative retail markets. As such, it is paramount for supermarkets to maintain a balanced structure of assets that are weighted to the risk, and ensure a proper mix between equity and debt funds to sustain themselves in the long run (Shisia, Sang, Waitindi, & Okibo, 2014). The parameters of solvency management usually include; financial leverage, operating margins, and firm size.

Financial leverage is the utilization of debt funds to finance company operations and acquisitions of additional assets (Jati, 2019). The use of financial leverage amplifies the company's returns. An increase in assets' value leads to greater gains if the loan interest rates increase assets' value. However, financial leverage has an inherent risk of bankruptcy. Financial leverage typically increases the minimum requirement of operating profits to meet the interest expense (Jati, 2019). If an organization does not attain the required level of activity and cash losses, the bankruptcy becomes inevitable (Amat & Manini, 2017). Cash losses contribute to insolvency, and an organization cannot meet its debt obligations in such situations.

Amat and Manini (2017) maintained that solvency management incorporates the aspects of managing acquisitions and usage of debts. It emphasizes on balancing the assets and liabilities and ensuring that assets' level is always above the level of liabilities. However, inappropriate solvency management implies that the right balance between assets and liabilities cannot be maintained. Loss of asset values means that adequate returns cannot be generated to cover the liabilities, and the organization becomes insolvent and financially unsustainable (Ngarari, 2019). Operating margins are a vital component of solvency management (Kaleem, 2016). The main aim of the existence and operations of supermarkets is profit maximization. The operating margin indicates the profitability level of supermarkets while considering the variable costs. Supermarkets require healthy operating margins to cater for the costs, particularly the operating costs and fund costs. The failure to meet the operating expenses and fund costs amount to insolvency and, eventually, financial unsustainability. Supermarkets with higher operating margin ratios are considered financially sound and sustainable (Ngarari, 2019). They can meet supplier expenses, operating costs, and interest costs on debts. Therefore, supermarkets with sufficient operating margins could successfully survive, even during the economic crisis.

Solvency of supermarkets is a key indicator of financial health and sustainability (Kinuthia, 2015). Supermarkets' ability to grow and sustain their businesses in a highly competitive business environment depends significantly on the strength of their asset base and market capitalization. Therefore, firm size determines the operational capacity and solvency at every phase of the business life cycle. Firm size indicates the solvency level in the sense that large-sized companies are deemed better in managing cash flow hence difficult to fail and liquidate (Shisia, Sang, Waitindi, & Okibo, 2014). Company size is also a proxy for the volatility of assets. As a vital determinant of a firm's earning capacity, firm size contributes to supermarkets' ability to meet liability obligations and financial sustainability (Odalo, George, & Njuguna, 2016).

Supermarkets in Kenya are vital players in the wholesale and retail industry (Nzioka, 2013). The wholesale and retail sector contributes substantially to the economic growth and development of the Country. Based on the report by the Kenya National Bureau of Statistics (KNBS), the wholesale and retail trade industry account for 8.4% of Kenya's Gross Domestic Product (Mathai, 2014). The key companies in the Kenya wholesale and retail trade industry comprise Carrefour, Tuskys, Nakumatt, Uchumi, Choppies, Naivas, and Quickmart, among others (Mwangi & Muturi, 2018). Despite their immense contribution to the Country's development, Kenya's biggest supermarket brands have currently encountered financial sustainability challenges that have affected their operations. In particular, Nakumatt and Uchumi supermarkets have consistently delayed in paying suppliers and employees. They are also struggling in settling bank debts, thus demonstrating signs of insolvency and eventual financial unsustainability. Insolvencies have been attributed to cash-flow constraints that hinder supermarkets from meeting financial obligations. A report by the Kenya Union of Commercial, Food and Allied Workers (KUCFAW) indicated that major supermarkets have financial challenges in meeting employees' salaries and default on remission of statutory deductions such as NHIF and KRA remittances (Kinuthia, 2015).

Lack of effective solvency management has been demonstrated by low operating margins (Ngarari, 2019). Opportunities for revenue growth and financial sustainability are usually exploited through appropriate cost control mechanisms. Retail business is driven by the sale of large volumes at small cost margins. However, the gross and operating margins among the supermarkets in Kenya are relatively low. The value of wholesale and retail trade companies is created through growth, expanded operations, meant to improve operating margins. The ability to attain and maintain financial sustainability is determined by the operating and net margins (Shisia *et al.*, 2014). Low-cost margins usually lead to efficiency and promote profitability and operating costs minimization.

2. Statement of the Problem

Supermarkets are vital drivers of the Kenyan Economy (Mwangi & Muturi, 2018). Therefore, the importance of the financial sustainability of supermarkets cannot be overemphasized. However, lack of effective solvency management and cash flow challenges among supermarkets have left them on the brink of collapse. Financial leverage as a component of solvency management plays a key role in determining financial sustainability. The use of debt promotes business expansion, an increase in revenues and profitability. Nevertheless, financial leverage has inherent risks of bankruptcy and distress (Navarro-Sarrión, 2016). The failure by the organization to settle debt obligations lead to insolvency problems and deter financial sustainability. Accumulation of debts by supermarkets without clear frameworks to offset them is also a major indication of ineffective solvency management (Mwangi & Muturi, 2018). This inability to settle an obligation is a huge financial sustainability challenge among Supermarkets in Kenya. The organization's size determines its performance through sales volume, number of revenue-generating assets, and market capitalization. However, supermarkets in Kenya have expanded by establishing many branches without realizing the corresponding return on investments (Mathai, 2014). Branch expansions make supermarkets incur huge costs and low operating margins, thus plunging themselves into financial unsustainability. This paper examined the influence of solvency management on the financial sustainability of supermarkets in Kenya.

3. Objectives of the Study

The general objective of the study was to determine the influence of solvency management on financial sustainability of Supermarkets in Kenya and specific objectives included the following;

i. To ascertain the effect of financial leverage on financial sustainability of supermarkets in Kenya.
ii. To examine the influence of operating margins on financial sustainability of supermarkets in Kenya.
iii. To determine the influence of firm size on financial sustainability of supermarkets in Kenya.

4. Research Questions

1. What are the effects of financial leverage on financial sustainability of supermarkets in Kenya?
2. How operating margins contribute to financial sustainability of supermarkets in Kenya?
3. Does firm size influence financial sustainability of supermarkets in Kenya?

5. Review of Literature

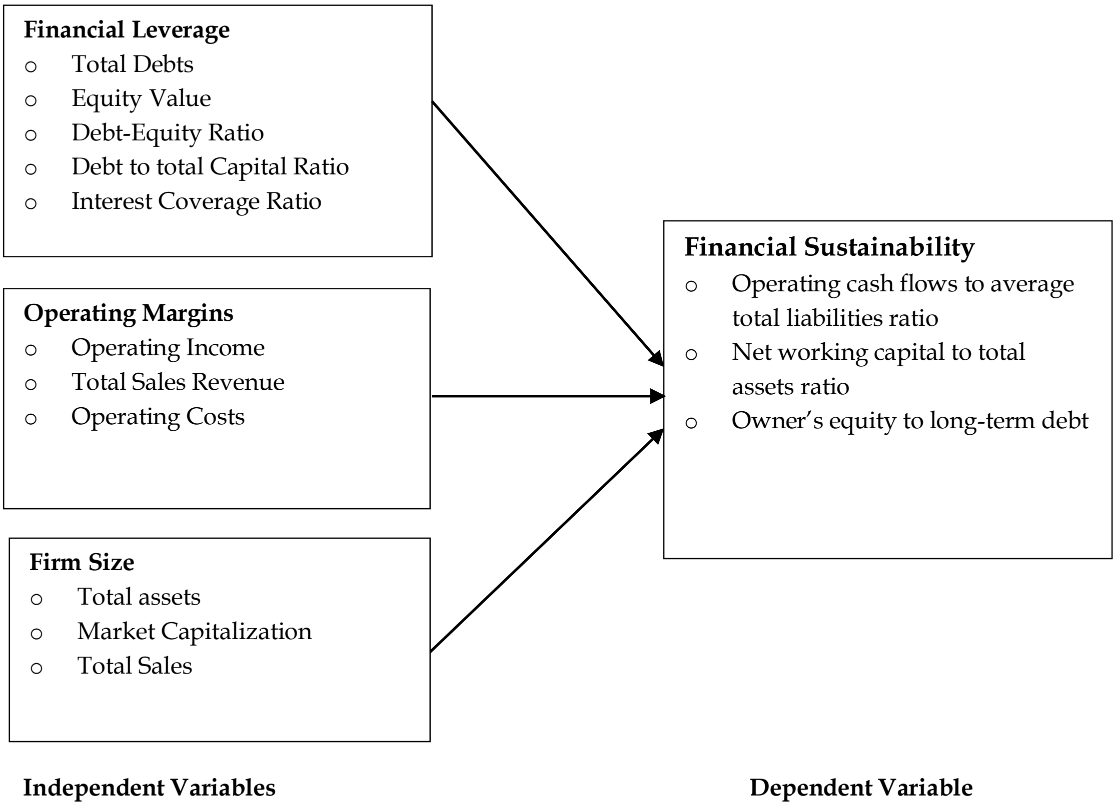
This section includes the theoretical review, conceptual framework, review of variables and empirical literature review.

5.1 Theoretical Review

Free Cash Flow Theory

Free cash flow theory was developed by Jensen in 1986. The free cash flow theory explains the relationship between free cash flows and the role of debt in organizations. According to the free cash flow theory, the conflicts of interest between shareholders and managers over payout policies are especially severe when the organization generates substantial free cash flow as corporate management is for firm growth and against dividend payout as they reduce resources under their control (Smith & Pennathur, 2019). An increase in sales revenue is highly beneficial to firms lacking free cash flows. Free cash flows are associated with increases in managers' compensation because compensation changes are positively related to the growth in sales revenue (Bhandari & Adams, 2017). Use of debt promote organizational efficiency and deal with the agency conflict (Susanto, Pradipta, & Djashan, 2017). The use of debt is more suitable for firms with large free cash flows and few growth prospects than growing firms with highly profitable investments and no free cash flows. According to Smith and Pennathur (2019) free cash flow theory suggests that share price declines on the sale of debt and preferred share arise because these sales bring new cash under managers' control. Managers in firms with high free cash flows prefer investing them in projects with low net value overpaying them to shareholders as dividends and obscuring these investments engage in earnings management (Susanto *et al*., 2017). The free cash flow theory supports the study as it explains the components of solvency management. The theory focuses more on debt use, and financial leverage is a key variable as well as a component of solvency management. The theory further describes organizational efficiency, which brings along the construct of operating margins and its effect on financial sustainability.

Conceptual Framework



5.2 Review of Study Variables

The constructs of solvency management; financial leverage, operating margins and firm size and financial sustainability have been discussed in this section.

Financial Leverage

Financial leverage entails the utilization of debt funds, along with the organization's equity (Batchimeg, 2017). Financial leverage has been a constant element of concern in the corporate world, particularly in the whole sale and retail industry. The development and advancement of financial markets has led to increase in the organization's funding opportunities, which are critical for performance optimization. Debt and equity funds are major categories of financing options available to the companies (Kinuthia, 2015). Financial leverage is always applied on the basis of the company's equity and involves the use of debt financial instruments comprising bank loans, bonds, and debentures. Corporate entities ought to decide the appropriate proportion of debt funds and strike the right balance that can reduce cost and increase earnings and enhance financial sustainability (Navarro-Sarrión, 2016).

Debt funds have a significant link to supermarkets' solvency management (Batchimeg, 2017). Supermarkets acquire debts for fund stocking, investments, and operational expansions. Therefore, financial leverage is an important aspect of solvency management and financial management at large. Financial leverage is intended to streamline business processes, facilitate the acquisition of assets, increase returns, and promote effective financial sustainability in supermarkets (Navarro-Sarrión, 2016). It offers a mechanism of increasing overall and net returns by funding some business activities through loans or other financial debt securities. Financial leverage is indicated by the value of debts, debt ratio, debt to total capital ratio, and the interest coverage ratio.

Financial leverage comes with financing costs that supermarkets are obligated to meet (Jati, 2019). They are obligated to pay interests on debts, and failure to make such payments leads to insolvency. Effective solvency management ensures that a company obtains debts, whose costs can be settled without financial constraints. The supermarkets' solvency is a crucial indicator of financial sustainability and is measured by the interest coverage ratio. The interest coverage ratio measures the supermarket's safety of margin for pay interests on debts. Financial leverage is associated with financial and operational risks, whereby the value of assets decline and financial losses increase with increased use of debt funds (Amat & Manini, 2017). The supermarket's ability to meet interest obligations is a crucial aspect of its solvency management. Therefore, it is paramount for supermarkets to have effective solvency management and adequate earnings to cover interest payments to attain financial sustainability.

Operating Margins

Operating margins assesses the financial net-benefits of supermarkets (Kaleem, 2016). They indicate an organization's ability to meet its obligations and improve performance at the same time. Supermarkets with high operating margins are able to maintain their solvency and are financially sustainable. The organization's operating margin further creates value for the company's owners and returns for servicing debts, employees' salaries, and supplier bills. This implies that the company is solvent and financially sustainable. Supermarkets with low operating margins encounter financial difficulties in meeting their financial obligations to the employees, suppliers, and debtors (Ngarari, 2019).

Supermarkets' inability to meet financial obligations is highly attributed to ineffective solvency management (Mwangi & Muturi, 2018). Insolvency among supermarkets indicates financial unsustainability. Operating margins are applied by companies in setting financial targets meant to facilitate long-term financial objectives. Operating margins are determined by the operating income, total sales revenue, and operating costs. Operating margins increase when sales revenue increases more than operating costs (Hidaya, 2014). Therefore, operating margins are improved with growth in revenues and cost minimization. Consequently, operating margins solvency levels and enhance financial sustainability.

Firm Size

Firm size is a critical construct that explains solvency management and financial sustainability (Nzioka, 2013). Firm size is based on the assets, sales revenue, and market capitalization of the organization. Firm size is measured by asset turnover that is a ratio of average sales and total assets of the organization. Generally, an increase in the scale of supermarket operations reduces marginal costs. Omar (2015) asserted that large-sized supermarkets usually have a competitive advantage through the benefits of economies of scale. Therefore, large supermarkets may encounter few limitations in accessing debt facilities from financial institutions to expand operations and increase investments. High levels of assets and market capitalization offer opportunities to increase revenue and enhance their ability to meet financial obligations.

Odalo, George, and Njuguna (2016) opined that an increase in firm size without realization of a commensurate return on assets investments leads to insolvency. The growth of supermarkets is funded by both equity and debt funds. These funds have costs that are covered by the returns; hence low returns mean that costs cannot be fully paid. Moreover, human capital is applied in supermarket operations; hence failure to meet employee salaries on a timely basis is a sign of insolvency (Shisia *et al.*, 2014). Additionally, the increase in the size of supermarkets could mean an increase in supplies. Therefore, if little returns are realized from sales, supermarkets face financial constraints in paying supplier bills. Despite the financial benefits of firm size, the inability to meet the associated financial obligations amount to insolvency and deter financial sustainability in supermarkets (Omar, 2015).

Financial Sustainability

Financial sustainability entails the organization's consistency in generating positive net-returns, the ability to cover costs and accelerate growth (Omar, 2015). Financial sustainability is an essential aspect of assessing the long-term stability of supermarkets' financial position. Financial sustainability is also informed by the ability of the supermarkets to generate profits from their business operations. Financial suitability is majorly indicated by the balance between the operating cash flows and the company's total assets (Mohamed, 2016). Operating cash flows usually depict the cash generating ability of the organization. Financial sustainability is also determined by the ratio of net-working capital to total assets. The owner's funds or total equity indicate the stability and sustainability of supermarkets. The ratio of owners' equity to long-term debts influences solvency and financial sustainability, a key objective of supermarkets (Mathai, 2010).

5.3 Empirical Literature Review

Mwangi and Muturi (2018) examined the influence of internal control mechanisms on supermarkets' financial performance in Kenya. The study revealed that components of internal controls; control activities and monitoring have a significant effect on the supermarkets' financial performance in Kenya. In correlation analysis, the results showed that control activities and monitoring had correlation coefficients of r=.814 and r=.658, respectively. The findings further showed a correlation coefficient R=.755 and coefficient of determination R^2=.555, which implied that internal controls had a strong association with financial performance. The level of performance determines the long-term survival and sustainability of supermarkets.

Mathai (2010) researched on the relationship between working capital management and profitability of retail supermarket chains in Kenya. The study found a strong relationship between working capital management and profitability of retail supermarket chains in Kenya with a coefficient of determination (R^2=.448) and correlation coefficient (R=.724). The study suggested that supermarkets should have working capital management that will help in decision making for investment mix and policy, matching investments to objectives, asset allocation for institutions, and balancing risk against profitability. Moreover, the debt ratio was found to have an insignificant positive relationship with profitability. Debt ratio is a critical component of financial leverage, which indicate solvency level and supermarkets' financial sustainability.

Shisia, Sang, Waitindi, and Okibo (2014) conducted an in-depth analysis of the Altman's failure prediction model on corporate financial distress in Uchumi supermarket in Kenya. In the analysis, Multivariate Discriminant Analysis (MDA) statistical technique was adopted. According to Altman's failure prediction model, ratios measuring profitability, liquidity, and solvency are the most significant ratios for determining performance and sustainability. The study revealed that the Altman failure prediction model was appropriate to Uchumi supermarket as it recorded declining Z-score values indicating the company experienced financial distress.

Ngarari (2019) examined the importance of financial statement analysis in determining supermarkets' financial health in Kenya. The independent variables included profitability, liquidity, solvency, and stability, while the dependent variable was financial health and was measured mainly by the Z-score. The findings revealed that financial statement analysis is important in establishing a business's financial health to make important managerial decisions. The study also revealed that financial statements analysis is important for owners and managers to make informed decisions on managing solvency and preventive actions against bankruptcy.

Mohamed (2016) did a study on the effect of financial leverage on the financial performance of non-financial firms listed at the Nairobi Securities Exchange. The results indicated that financial leverage had a significant negative relationship with financial performance. Firm size had a positive and insignificant relationship with financial performance, while liquidity affected financial performance significantly. The correlation coefficient R=.237 and coefficient of determination R^2=.056 showed a weak relationship between financial leverage and performance. It was concluded that financial leverage has an adverse effect on financial performance, whereas the size of the firm improves the financial performance, and liquidity improves the financial performance of the listed non-financial firms.

Hidaya (2014) sought to establish the relationship between working capital management and supermarkets' financial performance in Nairobi County. The study revealed that the working capital management accounted for 75.3% of the performance variance as shown by the R^2=.753. The F-statistic value of 14.637 was significant at 95% confidence level; thus, the regression model was fit to explain the relationship between working capital management and supermarkets' performance. The study concluded that components of working capital management, inventory collection period, leverage, and fixed turnover ratio influence the financial performance of supermarkets in Nairobi County.

Nzioka (2013) conducted a study on the relationship between firm size and commercial banks' financial performance in Kenya. Findings indicated a moderate correlation between three of the studied bank size factors, which include total deposits, total loans, and total assets. Total loans had relatively stronger effects on financial performance compared to total assets. The correlation coefficient R=.5524 and coefficient of determination R^2=.3052 showed a strong relationship between firm size and performance. In regression analysis, total assets had beta coefficient β=.0356 that were significant at a 95% confidence level. The study concluded that performance is dependent on firm size.

Lopez-Valeiras, Gomez-Conde, and Fernandez-Rodriguez (2016) analyzed the firm size and financial performance with intermediate indebtedness effects. The study revealed that indebtedness leverages the effect of size on financial performance. Indebtedness enhances the realization of the potential benefits of a larger organizational size. The relationship between size and financial performance is negatively mediated by indebtedness.

Omar (2015) investigated the relationship between firm size and financial performance of microfinance banks in Kenya. The study found a strong relationship between Operating efficiency and financial performance. The regression analysis results showed that operating efficiency and logarithm of assets had a statistically significant effect on financial performance. The correlation coefficient and coefficient of determination were R=.908 and R^2=.824, respectively; thus, firm size influenced financial performance to a large extent.

6. Methodology

The paper applies a descriptive research design. It covers the studies published in peer-reviewed journals. This approach is suitable for synthesizing the existing information in a particular area of study. The descriptive research design accumulates and synthesizes the information to demonstrate the value of the literature review in relation to the issues of concern (Yates & Leggett, 2016). The descriptive research design further provides comprehensive current knowledge hence enhancing understanding of the problem under review. The study sought to align solvency management to supermarkets' financial sustainability, which justifies the descriptive research design choice. The review applies purposive sampling in the selection of journals. Since it is a conceptual review, it comprises secondary information in the studies obtained from selected journals. Data was analyzed qualitatively and in accordance to the research problem and study objectives.

7. Results

Findings showed that financial leverage, as a component of solvency management, influenced supermarkets' financial sustainability in Kenya. Mwangi and Muturi (2018) showed that internal controls determine the performance and sustainability of supermarkets. The internal controls explain the control activities in usage of debts, control of debt costs and maintenance of right levels of solvency in supermarkets. Mwangi and Muturi further showed that internal controls and performance had a strong link with performance and sustainability, as indicated by the correlation coefficient (R=.755) and coefficient of determination (R^2=.555). Similarly, Mathai (2010) found a strong relationship between working capital management and profitability of retail supermarket chains in Kenya with a coefficient of determination (R^2=.448) and correlation coefficient (R=.724). Working capital management describes the use of debt along with equity, solvency, and financial sustainability of supermarkets. Moreover, Shisia, Sang, Waitindi, and Okibo (2014) found that the Altman failure prediction model was appropriate to Uchumi supermarket as it recorded declining Z-score values indicating the company experienced financial distress. Financial distress is contributed by the inability to settle debt obligations, which leads to insolvency and deter financial sustainability.

Additionally, the study revealed that operating margins influenced the financial sustainability of supermarkets. Ngarari (2019) noted that financial statement analysis is important in establishing a business's financial health to make important managerial decisions. The study also revealed that financial statements analysis is important for owners and managers to make informed decisions on managing solvency and preventive actions against bankruptcy by maintaining the right operating efficiency levels. Omar (2015) found a strong relationship between operating efficiency and financial performance depicted by correlation coefficient (R=.908) and coefficient of determination (R^2=.824). It implied that operating margins determined financial sustainability.

Financial sustainability is also affected by firm size. Nzioka (2013) found that total assets influence the return on assets, which is an indicator of financial performance as well as sustainability. The correlation coefficient R=.5524 and coefficient of determination R^2=.3052 showed a strong relationship between firm size and performance. Furthermore, total assets had beta coefficient β=.0356 that was significant at a 5% level of significance. The study concluded that performance is dependent on firm size. Lopez-Valeiras, Gomez-Conde, and Fernandez-Rodriguez (2016) found that indebtedness had a mediating effect on firm size and financial performance. Based on the findings, indebtedness promotes the realization of the potential benefits of a larger organizational size.

8. Conclusions

Based on the study findings, the financial sustainability of supermarkets is determined by solvency management. As a construct of solvency management, financial leverage aims to increase the organization's earnings and financial sustainability. The use of debts enables supermarkets to expand operations and increase opportunities in earning more revenue. Increased levels of revenue are further meant to meet the financial obligations in ensuring solvency and financial sustainability. However, financial leverage has costs and risks. The costs include interests on debts, while risks involve bankruptcy and distress. Infective solvency management results in insolvency and deters financial sustainability in supermarkets. Operating margins are anchored on a balance between net-income and operating costs. Low levels of operating margins indicate signs of insolvency and financial unsustainability. The firm size indicates the revenue-generating capacity of the supermarket. Large-sized supermarkets can generate more earnings and maintain solvency for financial sustainability. However, supermarkets' expansion without clear mechanisms of generating returns to cover costs contributes to insolvency and hinders financial sustainability.

References

[1.] Amat, O., & Manini, R. (2017). Credit scoring for the supermarket and retailing industry: Analysis and application proposal.

[2.] Batchimeg, B. (2017). Financial performance determinants of organizations: The case of Mongolian companies. Journal of competitiveness, 9(3), 22-33.

[3.] Bhandari, S. B., & Adams, M. T. (2017). On the definition, measurement, and use of the free cash flow concept in financial reporting and analysis: a review and recommendations. *Journal of Accounting and Finance*, *17*(1).

[4.] Hidaya, K. (2014). *The relationship between working capital management and financial performance of supermarkets in Nairobi County* (Doctoral dissertation, University of Nairobi).

[5.] Jati, W. (2019). The Effect of Financial Leverage, Operating Leverage and Current Ratio on Profitability at PT. Manunggal Persada Jakarta. PINISI Discretion Review, 3(2), 135-142.

[6.] Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, *76*(2), 323-329.

[7.] Kaleem, M. A. (2016). An assessment of working capital management practices in Ghana. A case study of selected supermarkets in Kumasi Metropolis (Doctoral dissertation).

[8.] Kinuthia, J. N. (2015). The effects of working capital management on the financial performance of retail supermarkets in Nairobi County, Kenya (Doctoral dissertation, University of Nairobi).

[9.] Lopez-Valeiras, E., Gomez-Conde, J., & Fernandez-Rodriguez, T. (2016). Firm size and financial performance: intermediate effects of indebtedness. *Agribusiness*, *32*(4), 454-465.

[10.] Mathai, A. N. (2010). *The relationship between working capital management and profitability of retail supermarket chains in Kenya* (Doctoral dissertation, University of Nairobi, Kenya).

[11.] Mohamed, I. (2016). *Effect of Financial Leverage on Financial Performance of Non-Financial Firms Listed at the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).

[12.] Mtani, B. P., & Masanja, N. M. (2018). The Impact of Working Capital Management on Financial Performance of Supermarkets in Arusha City-Tanzania.

[13.] Mwangi, J. K., & Muturi, W. (2018). Influence of Internal control mechanism on financial performance of supermarkets in Kenya. *International Journal of Social Sciences and Information Technology*, 4(5), 272-288.

[14.] Mwaura, C. N. (2017). *The effect of inventory turnover on the financial performance of medium and large Retail supermarkets in Kenya* (Doctoral dissertation, University of Nairobi).

[15.] Navarro Sarrión, D. (2016). Supermarkets in Spain: a profitability analysis. Ngarari, E. D. W. (2019). Importance of Financial Statement Analysis in Determining Financial Health of Supermarkets in Kenya.

[16.] Ngarari, E. D. W. (2019). Importance of Financial Statement Analysis in Determining Financial Health of Supermarkets in Kenya.

[17.] Nzioka, P. K. (2013). *The relationship between firm size and financial performance of commercial banks in Kenya* (Doctoral dissertation, University of Nairobi).

[18.] Odalo, S. K., George, A., & Njuguna, A. G. (2016). Relating Company Size and Financial Performance in Agricultural Firms Listed in the Nairobi Securities Exchange.

[19.] Omar, S. H. (2015). *The relationship between firm size and financial performance of microfinance banks in Kenya* (Doctoral dissertation, University of Nairobi).

[20.] Shisia, A., Sang, W., Waitindi, S., & Okibo, W. B. (2014). An in-depth analysis of the Altman's failure prediction model on corporate financial distress in Uchumi supermarket in Kenya.

[21.] Smith, D. D., & Pennathur, A. K. (2019). Signaling Versus Free Cash Flow Theory: What Does Earnings Management Reveal About Dividend Initiation?. *Journal of Accounting, Auditing & Finance*, *34*(2), 284-308.

[22.] Susanto, Y. K., Pradipta, A., & Djashan, I. A. (2017). Free cash flow and earnings management: board of commissioner, board independence and audit quality. *Corporate Ownership and Control*, *14*(4-1), 284-288.