FREE CASH FLOW AND SHORT-TERM DEBT OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE KENYA

Abstract

The short-term debt account's value is crucial in assessing the performance of the business. Free cash flow is the amount of money a business has left over after covering its cash outflows for operating costs and capital asset maintenance. If a company takes on more debt, it will have less free cash flow available for equity in the current year. Since the debt has been paid off and does not need to be repaid, this decrease is offset in the upcoming years by a rise in free cash flow to equity. The exact opposite occurs if the company takes on additional debt. The study was anchored on free cash flow theory and trade off theory. The study applied secondary data obtained from the firms from 2007-2011. Panel data was used to increase data observations. The data was initially analysed using pooled ordinary least squares (OLS) regression model. The result showed a positive and significant relationship between free cash flow and short term debt of firms. With this result, it is recommended that managers of listed firms on NSE should assess the company's overall financial flexibility and short term debt needs to determine the optimal balance between free cash flow and short term debt as excessive reliance on free cash flow for short term debt repayment may increase vulnerability

Keywords: Agency Theory, Free Cash Flow, Short Term Debt, Trade off Theory

Introduction

Short-term debt also known as current liabilities, are the debts that a company has that it plans to pay off in a year (Ganti, 2020). It is mentioned on the balance sheet of the company under the current liabilities part of the total liabilities section. The short-term debt account's value is crucial in assessing the performance of the business. Concern for the company's liquidity increases with the debt-to-equity ratio (Seta, Morella & Zucchi, 2020). The company may be in bad financial shape and not have enough cash on hand to meet its upcoming obligations if the account exceeds its cash and cash equivalents. Short-term bank loans to a firm are one kind of short-term debt. These loans show up on a company's balance sheet when it needs urgent funding to cover its working capital requirements (Ali, Adalberto & Muhammed, 2022).

An additional typical kind of short-term debt is accounts payable for a business (Khartit, 2020). All overdue payments owed to stakeholders and outside vendors are tracked in this liabilities account. A company may issue commercial paper, an uninsured short-term financial instrument, to finance inventories, receivables, and short-term obligations like payroll (Ayuba *et al.*, 2019).

Commercial paper rarely has maturities further than 270 days. Salaries and wages may or may not be regarded as short-term debt, depending on how firms pay their staff. Additionally, lease payments are occasionally recorded as short-term debt (Dhamash *et al.*, 2019). There are situations when taxes are considered short-term debt. A business may be seen to have a short-term liability and classified as having short-term debt if it has unpaid quarterly taxes.

In Canada, the amount of government debt rose from 1048.75 CAD billion in 2021 to 1134.49 CAD billion in 2022 (Ngunyen *et al.*, 2023). Analysts and Trading Economics global macro models predict that by the end of 2023, Canada's government debt will total 900.00 CAD billion. In June 2023, the short-term debt value was 1,100.1 USD billion, down from 1,031.0 USD billion in the same month the previous year. Russia's short-term debt worth increased from 72.8 USD billion in 2022 to 80.2 USD billion in 2023 (Demirgue-Kunt, Asul & Thierry, 2023). As of 2022, Russia's gross external debt by short-term remaining maturity was 137.6 billion US dollars, a drop from 2021 (Hirdinis, 2023). In 2022, Japan's short-term debt was valued at 3,091.0 USD billion. In March 2023, the Nominal GDP of the nation was recorded at 1,080.1 USD billion (Wong *et al.*, 2023).

Pakistan's short-term debt was valued at USD 2.9 billion as of June 2023 (Rumil, Hengky and Grace, 2023). In June 2023, the nominal gross domestic product of the nation was recorded at 341.3 USD billion. The estimated total public debt and liabilities of Pakistan are approximately Rs. 2.978 trillion/US$1.0 billion, or 0.3 percent of the country's GDP (Natsir & Yusbardini, 2020). India's short-term debt value decreased from 128.4 USD billion in 2022 to 123.6 USD billion in 2023 (Jin & Jian, 2023). In Indonesia, the value of short-term debt was 48.9 USD billion in 2022. The national government debt of Indonesia was 516.5 USD billion in August 2023 as opposed to 520.8 USD billion in June (Mihail & Carmen, 2023).

Nigeria's Short-term debt value was 0.1 USD mn in 2019 compared to 1.0 USD bn in December 2020 (Ayuba *et al.*, 2019). Short-term debt in South Africa decreased from 33.0 USD billion in 2022 to 30.2 USD billion in 2023. South Africa's short-term debt (as a percentage of total external debt) was reported to be 21.35% in 2021 by the World Bank's monitoring of growth indicators (Dang *et al.*, 2023). The World Bank database of economic indicators, which is put together from officially recognized sources, states that as of 2021, Rwanda's short-term debt (as a percentage of total external debt) was 4.6496% (Khan, Muhammed & Pal, 2023). The World

Bank's compilation of economic growth indicators states that as of 2021, Kenya's short-term debt (as a percentage of total external debt) was 5.8915 percent (Kiprotich, 2022).

Free cash flow is the amount of money a business has left over after covering its cash outflows for operating costs and capital asset maintenance (Fernando, 2023). In contrast to earnings or net revenue, free cash flow is a profitability metric that considers fluctuations in working capital from the balance sheet as well as spending on assets and equipment. It also eliminates non-cash expenses from the income statement (Graham, 2019). A company's available cash after it has paid its debts and distributed dividends and interest to investors is also known as free cash flow. Free cash flow is a gauge of a business's health that investors as well as management use to reconcile net income after deducting capital expenditures, modifications to working capital, and non-cash expenses (Velasquez, 2023). Before issues with basics show up on the income statement, free cash flow might highlight them.

If a company takes on more debt, it will have less free cash flow available for equity in the current year (Kindness, 2023). Since the debt has been paid off and does not need to be repaid, this decrease is offset in the upcoming years by a rise in free cash flow to equity. The exact opposite occurs if the company takes on additional debt. In the current year, the free cash flow to equity rises, but in the following years, it decreases (Graham, 2019). Free cash flow needs to be computed over a number of years when valuing businesses. Therefore, there's a good likelihood the company will alter its funding strategies during this extended period of time. Since free cash flow takes working capital fluctuations into consideration, it can offer valuable information about a company's worth and the strength of its underlying trend (Khartit, 2021).

The Nairobi Securities Exchange (NSE) was established in 1954. The NSE is essential to the expansion of Kenya's financial system since it promotes investing and saving while also making it simpler for domestic and foreign companies to obtain the capital they need (NSE, 2020). The Kenyan Capital Markets Authority keeps an eye on the NSE. The majority of financial and non-financial companies are listed on the Nairobi Securities Exchange. As per NSE (2019), non-financial firms are those that are not involved in the financial services provider assistance industry.

Theoretical Review

Trade Off Theory

The theory was proposed by Myers (1984). The theory states that every company has an optimal capital structure that may be determined by balancing the benefits and drawbacks of equity. A firm chooses how much debt capital and how much equity capital to include in its capital structure by evaluating the benefits and drawbacks of each source. While having a lot of debt in the capital structure might result in agency fees and insolvency, debt capital also offers tax deductions. Information asymmetry and the competing interests of many company stakeholders result in agency costs. (Meckling & Jensen, 1976). nThrough the integration of agency costs into the trade-off theory, a company can ascertain its optimal financial configuration by balancing the benefits of debt (like tax advantages) against the drawbacks of excessive debt (like financial distress) and the ensuing agency costs for equity versus debt. The theory states that a company's capital structure shouldn't be more debt-heavy than it needs to be because doing so will raise the cost of debt relative to its benefit.

Agency Theory

Jensen and Mecking (1976) proposed the agency theory, which is characterized by a specific percentage of debt in the organization's financial structure that lowers agency costs resulting from disagreements between managers and firm owners (Leland, 1998). Agency expenses would decrease as a result of fewer disagreements between agencies, which would lead to an increase in revenue. According to Jensen and Meckling (1976), a company's use of debt can help control and supervise managers to ensure that they pursue objectives that are beneficial to the business. The inclusion of debt in the financial structure, according to Buferna, Bangassa, and Hodgkinson (2005), incentivizes managers to support a company's expansion in order to provide cash flows that would finance debt payments. The company becomes more profitable as a result (Dawar, 2014). This theory holds that employing debt, whether it be short-term or otherwise, reduces agency conflicts between managers and shareholders of a company, which promotes economic progress (Rashid, 2015).

Empirical Review

The relationship between financing free cash flow management and the financial performance of mutual funds in Kenya was examined by Soet, Muturi, and Oluoch (2019). A causal research

design was used in the study. Financial reports covering the years 2011–2016 contained secondary panel data taken from the audited financial statements of 22 mutual funds. Eviews software was used to create descriptive statistics. The significance of the association between the variables was examined using inferential statistics. The findings showed that financing free cash flow management significantly and negatively impacted return on equity and return on assets.

Mutende (2019) looked at the connection between free cash flow and the financial performance of listed companies on Kenya's NSE. The study employed a cross-sectional descriptive research approach. Secondary panel data from sixty (60) listed companies at Kenya's NSE was used in the study. The research used the census sampling method. For the 2006–2015 study period, data were obtained through the use of secondary sources. Both basic and complex regression analysis were used in the study. The results demonstrated that free cash flow has a statistically significant positive impact on the success of the company.

Santoso (2023) evaluated the effects of leverage and free cash flow on revenue management, with the variable of excellent corporate governance acting as a moderator. 200 data samples from 20 different consumer goods subsectors within the organization were included in the research sample between 2011 and 2020. Intentional sampling was the method of sampling that was employed. Moderate Regression Analysis (MRA) was used to analyse the data. According to the testing results, debt has no effect on earnings management, free cash flow has a major negative impact on it, and excellent corporate governance can both have a positive and a negative impact on earnings management. It demonstrates that there is no way to lessen the impacts of leverage.

Lagari, Ahmed, and Garcia (2023) examined how free cash flow affected the financial performance of the company in China. The paper analysed longitudinal data for a sample of 20288 listed Chinese non-financial enterprises from the period of 2018-2020 using the generalized estimating equations methodology. The study's conclusions demonstrated that a drop in free cash flow indicators and measurements significantly improves businesses' financial performance. Based on empirical evidence, it appeared that low-leverage firms exhibit a greater degree of pronounced performance improvement levers, specifically cash flow measures and metrics. This implied that modifications to free cash flow measures and metrics positively impact low-leverage firms' financial performance more than they do high-leveraged firms .

Research Methodology

The population of interest was comprised of all firms that are listed on the NSE between 2007-2011. Firms that had been listed for less five years or had incomplete data was left out. The study opted to undertake a census because of the small number of firms listed on the NSE. It was therefore possible to collect data from all the firms.

The appropriate ratios was computed using secondary data from enterprises listed on the NSE financial statements. Descriptive and inferential statistics was used to analyse panel regression analysis, correlation analysis, and the acquired panel data. As a result, the panel regression technique was utilized to test hypotheses, and conclusions was drawn after. The **0.05** significance level, or 95 percent confidence interval, was used to guide the test of hypotheses. The random effect modelT:

$Y_{it} = \alpha + X_{it}\beta + \varepsilon_{it} + \mu_{it}$

Where

ε_{it} = within entity error term

μ_{it} = between entity error term

Y_{it} = Short term Debt for i^{th} firm in t^{th} year.

X_{it} = Free cash flow (Earnings before Tax plus Interest plus Depreciation divided by Operating cash)

β = Vector of Coefficient

Results and Discussion

Table 1 presents findings from panel data analysis of secondary data procured from NSE quoted companies

Table1: Panel Regression Result

Fixed-effects (within) regression				Number of obs =	520	
Group variable: Company				Number of groups =	52	
R-sq:	within = 0.3345			Obs per group: min =	10	
	between = 0.2292			avg =	10.0	
	overall = 0.2359			max =	10	
				F(9,459) =	25.64	
corr(u_i, Xb) = -0.1377				Prob > F =	0.0000	
Short term debt	Coef.	Std. Err.	T	P>t	[95% Conf.	Interval]

Free cash flow	0.0604971	0.0336033	1.80	**0.072**	-0.0055383	0.1265325
_cons	0.5774872	0.1326202	4.35	0.000	0.3168691	0.8381053
sigma_u	0.21772789					
sigma_e	0.05938035					
rho	0.9307692	(fraction of variance due to u_i)				
F test that all u_i=0:	F(51, 459) = 15.59			Prob > F = 0.0000		

The table presents the regression for free cash flow and short term debt. From the table, the overall r-squares is 23.59% which means overall 23.59% of the variations in short term debt were explained as shown by independent variable. The within r-squared is 33.45% which means that 33.45% of the variations within variable are explained as shown by model. The between r-squared is 22.92% which means that 22.92% of the variations between the variables were explained as shown by model. From the above table, free cash flow is positively and significantly related to the short term debt.

This implies that a higher threshold of free cash flow would result in the increased use of the short term debt. This supports the trade-off theory and agency theory as free cash flow reduces agency cost which are cost that arises from firm uncertainties and provides firms with financial flexibility. The positive effect supports Mutende (2019) and Lagari, Ahmed, and Garcia (2023) results. The findings also suggest a significant relationship between free cash flow and short term debt, indicating that free cash flow does exert a significant influence on NSE listed companies' short term debt financing decisions.

Conclusion and Recommendation

The study examined the effect between free cash flow on short run debt amongst listed firms on the Nairobi securities exchange, Kenya. The findings showed a positive and significant relationship between free cash flow and short term debt, indicating that firms with higher free cash flow tend to hold higher levels of short term debt compared to firms with lower free cash flow. This finding suggests that free cash flow plays a crucial role in shaping short-term debt financing decisions, with firms with abundant cash flow using short term debt for various purposes, such as managing working capital, financing seasonal fluctuations, or exploiting favourable interest rate environments.

With this result, it is recommended that managers of listed firms on NSE should assess the company's overall financial flexibility and short term debt needs to determine the optimal balance between free cash flow and short term debt as excessive reliance on free cash flow for short term debt repayment may increase vulnerability. Managers should strike balance between short term debt and equity financing to minimize the overall cost of capital and optimize the company's capital structure. Authorities should encourage companies to adopt sound financial practices, including debt management and a balanced approach to debt financing. Authorities of companies should consider implementing regulatory measures to discourage short term debt accumulation.

Studies can be carried out on free cash flow and short term debt on financial institutions like banks, cooperative societies, and insurance firms in Kenya. Other African country listed firms can be investigated based on the same variables.

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