The Significance and Influence of Financial Ratios on Performance of Non-Financial Companies Listed at Dar es Salaam Stock Exchange Tanzania

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Abstract:
The purpose of the study was to examine the influence and significance of selected financial ratios and asset turnover of eight non-financial listed companies at the DSE using panel data analysis for a period of twelve years (2010–2022). The data used was extracted from secondary data in the annual financial reports of the companies within the study period. The coefficients of the fixed effect model (FE) regression model were generated. The analysis revealed that return on capital employed and asset turnover had a positive and statistically significant impact on financial performance, while debt-to-equity had a negative and statistically significant impact on the financial performance of the non-financial firms at DSE. However, current ratio and inventory turnover had a positive but statistically insignificant impact, while interest cover ratio had a negative but statistically insignificant impact on the financial performance of the non-financial firms listed at DSE. The study concludes that capital employed and asset turnover are vital in influencing profitability, and managers should manage the return on capital employed so as to enhance business operations, which ultimately improves financial performance. The study recommends that the management team needs to strive for a higher asset turnover to generate higher sales volumes that ultimately lead to high-profit firms and cater to shareholders' goals of wealth maximisation.

Keywords: Capital employed, asset turnover, non-financial, financial performance, return on assets.

Introduction
Financial ratios are used in trend analysis, cross-sectional analysis, and comparative analysis to examine how a firm's financial status has changed over time. They may be divided into indices of capital market activity, productivity, profitability, cost, liquidity, solvency, and capital structure (Koech et al., 2021). In today’s competitive environment, Rashid (2021) emphasises the use of financial performance indicators, especially financial ratio analysis, in determining the financial health and development potential of management and stakeholders.

Financial ratio analysis can be used to address the concern of business owners and managers around the world to develop a plan for managing their daily operations in order to satisfy their obligations as they become due and grow profitability and shareholder wealth.
According to Bama et al. (2021), since profit is the financial statements' primary goal, their data should be able to predict how much profit will be made in the future. The company's increase or decrease in capital transactions from various sources is reflected in profit, which is a performance measurement method. Investors are continuously looking for a single index or ratio from the financial statements of companies that can instantly tell them the financial performance and going concern status of the business in order to avoid making risky investment decisions (Senan et al., 2021).

Tebrake and Hagan (2020) assert that non-financial firms account for a sizable portion of the economic activity in the majority of advanced economies. They invest, produce goods and services, and employ a sizable portion of the labour force in a nation. It is clear from almost every economic activity how important they are to the "actual" economy. The sector of non-financial corporations includes, for instance, companies that are engaged in manufacturing, distribution of goods (wholesalers and retailers), construction and real estate, transportation services, and other non-financial business services (professional, scientific, and technical services), as well as information and cultural services. Producers of goods and services, investors, and financial market debtors all play a part in the non-financial sector.

In terms of size, organisation, and performance, Tanzania's capital market is a developing market. Tanzanians can save money and invest in over 29 companies in five (5) different industries through the Dar es Salaam Stock Market (DSE), a stock exchange. There are 14 firms under investigation in the financial sector: eight in the manufacturing sector, five in commercial services, one in telecommunications, and one in oil and gas (DSE, 2023). This market acts as a gauge of how the economy is doing with regard to saving and investing. Young and elderly, individual and institutional, domestic and international, all have different expectations and objectives when it comes to the stock market.

The DSE’s overall performance is falling as a result of the public's lack of interest in investing in company shares, which is causing the non-financial firm's profitability to decline year over year. Due to a lack of international investors, total turnover at the (DSE) decreased by 65.5% in October 2022. (DSE, 2022). Low individual stock market participation contributes to the DSE's low profitability for non-financial firms. Tanzania has the fewest stock market participants of any African country as of 2022, with only 400,000 (DSE, 2022). The share prices of listed non-financial companies are not doing well; for instance, the lowest share is priced at 80 Tanzanian shillings and the highest at 17,000 Tanzanian shillings. As a result, there is a significant price discrepancy among these non-financial enterprises. This can be a result of these companies' bad financial outlooks or the limited number of stock market participants. In light of this, this study aim to explore the influence of selected ratios on the profitability of non-financial companies listed on the DSE between 2010 and 2022.

**Literature Review**

**Theoretical Literature Review**

**The Agency Theory**

Jensen and Meckling (1976) founded agency theory focus on the principal-agent problem, which arises from information asymmetry between managers and owners. This leads to conflicts between major and minor shareholders, and between creditors and owners. To address these issues, owners should give stock to managers, increase executive compensation, raise debt levels, establish an independent board of directors, and make profit distribution a requirement. Agency theory can assess agent performance and entity control, enabling better monitoring of institutions. However, Scott (2021) criticizes positivist agency proponents for focusing only on the agent side, suggesting that the principal side may also be affected.
Stakeholder Theory

Freeman (1984) founded stakeholder theory focuses on how managers should behave to advance their own interests, such as maximizing profit or shareholder value. It emphasizes the interaction and creation of value by various stakeholders, including clients, partners, employees, financiers, communities, and managers. Stakeholder management provides a realistic, efficient, successful, and moral strategy for governing enterprises in complex and volatile environments. Managers play a crucial role in developing these values, as they are responsible for the interaction and creation of value. Financial performance is essential for economic development, as it influences future decision-making. Accounting techniques, such as financial ratios, help managers evaluate operations, growth, and compare to rivals, preparing for future performance.

Empirical Literature Review

The study by Senan et al. (2021) examined the financial performance of Indian listed firms from 2007-2018 using a generalize moment method. Findings showed that current ratio and return on capital employed positively impact financial performance. Key success factors include profit after tax, return on equity, return on capital employed, and Tobin-Q.

In India, Kumar (2017) conducted study on the effect of return on capital employed on company performance for the period 2012 to 2017. The study used the multiple regression and the secondary. The results revealed that the capital employed had insignificant positive relation with the financial performance.

Companies must analyze various environments and implement appropriate funding policies to survive intense competition. Factors affecting a company’s capital structure include bankruptcy costs, non-debt tax shields, information asymmetry, market timing, target debt ratio, industrial leverage, debt capacity, market share, and governance. Recent research has expanded the scope of capital structure to include non-financial stakeholders like parts suppliers and product purchasers. Accurate communication of financial and non-financial information is crucial for long-term growth and development.

Migun and Odhiambo (2019) conducted a study to look into how Kenyan MFIs’ financial performance was impacted by their debt-to-equity ratio. Discovering the impact of the debt-to-equity ratio, the portfolio-to-asset ratio, and the operational expense ratio on the financial performance of MFIs in Kenya was one of the explicit goals. The sample size was made up of a panel data set of 12 MFIs chosen using the purposeful sampling method for the period of 2009 to 2013, and secondary data was used. Based on the Hausman specification, the fixed effect model was preferred, but the study employed a random effect model because the fixed effect model produced non-significant results. Results from the random effect model showed a weak negative correlation between the debt-to-equity ratio and the return on assets ratio.

Lyimo (2015) did a study in Tanzania to examine the impact of working capital management for the period of 2006 to 2013. Used the diagnostic research design and sample size of two cement companies. The multiple regression analysis was also applied. The results show that current ratio had positive impact on profitability while asset turnover had negative impact of firm profitability.

Methodology

This study used a analytical study design, in which the phenomenon being studied is explained using quantitative research approach. The study used a sample of eight non-financial companies listed at DSE for the period of 12 years (2010-2022). The purposive sampling was employed as the study focuses on non-financial companies listed in DSE.

The fixed effect model was used to examine the impact of capital structure on profitability for the non-financial listed companies at DSE. In this model, profitability (ROA, RE) is used as the dependent variable and regressed against several independent variables which include capital employed (ROCE), asset turnover (AT), current
ratio (CR), inventory turnover ratio (ITR), debt to equity ratio, (DE) and interest cover ratio (ICR).

The model was specified as follows:

\[ \text{ROA}_{it} = \beta_0 + \beta_1 \text{ROCE}_{it} + \beta_2 \text{AT}_{it} + \beta_3 \text{CR}_{it} + \beta_4 \text{ITR}_{it} + \beta_5 \text{DE}_{it} + \beta_6 \text{ICR}_{it} + \epsilon_{it} \]  
(1)

Results

The model equation is as follows.

\[ \text{ROA} = -0.0605 + 0.018 \text{ROCE} + 0.2367 \text{AT} + 0.0183 \text{CR} - 0.0089 \text{ITR} - 0.00679 \text{ICR} \]

The key findings of the fixed effect model are presented in Table. The constant has a negative impact on the return on assets in the model, whereas the independent variables have varying impacts on the dependent variable. The fixed effect model was used and discussed in depth. According to the overall model (ROA), the R-squared explain 50.5 percent of the total variation in return on assets, and the residuals can explain the remaining 49.50 percent. F-statistics were also found to be significant. As a result, the model is a good fit in general. Even in the case of zero return on capital employed, zero asset turnover, zero.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROCE</td>
<td>0.0180</td>
<td>0.019</td>
</tr>
<tr>
<td>AT</td>
<td>0.237</td>
<td>0.000</td>
</tr>
<tr>
<td>CR</td>
<td>0.0183</td>
<td>0.083</td>
</tr>
<tr>
<td>ITR</td>
<td>-0.0089</td>
<td>0.100</td>
</tr>
<tr>
<td>DE</td>
<td>0.0019</td>
<td>0.72</td>
</tr>
<tr>
<td>ICR</td>
<td>-0.0068</td>
<td>0.017</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.0605</td>
<td>0.054</td>
</tr>
<tr>
<td>Observations</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.505</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author estimation

The results indicates that the coefficient of capital employed is positive and statistically significant at the 1% level, indicating that capital employed has a positive impact on the profitability of listed non-financial companies on the DSE. As a result, we reject the null hypothesis that capital employed has a positive impact on the profitability of non-financial companies on the DSE during the study period. The results also show that for one-unit increase in capital employed, the profitability of non-financial companies at DSE is expected to increase by 0.018 units while holding the other variables constant (p 0.019).

The coefficient of asset turnover is positive and statistically significant at the 1% level, indicating that asset turnover has a positive impact on the profitability of listed non-financial companies on the DSE. As a result, we reject the null hypothesis accept that return on assets has a positive impact on the profitability of non-financial companies on the DSE during the study period. The results also show that for one-unit increase in asset turnover, the profitability of non-financial companies at DSE is expected to increase by 0.2367 units while holding the other variables constant (p< 0.0000).

The coefficient of the current ratio is positive and statistically significant at 10% level. This implies that the current ratio has impact on the profitability of the non-financial firms at DSE. The results also show that for one-unit increase in current ratio, the profitability of non-financial companies at DSE is expected to increase by 0.0183 units while holding the other variables constant (p< 0.083). Additional, inventory turnover has a negative significant relationship with the profitability of the non-financial companies at DSE implying that an increase of inventory turnover, the profitability of non-financial companies at DSE decrease by 0.0089.

The coefficient of debt-to-equity is positive and statistically insignificant. This indicates that debt-to-equity has no impact on the profitability of the non-financial firms listed at DSE. The coefficient of interest cover ratio is negative and statistically significant at 5% level where we accept that interest cover ratio had negative
impact on the profitability of the non-financial firms at DSE. The results also show that for one-unit increase in interest cover ratio, the profitability of non-financial companies at DSE is expected to decline by 0.00679 units while holding the other variables constant (p< 0.017).

Discussion

As the results reveals that the coefficient of capital employed and asset turnover positive are statistically significant at the 1% level. The results agrees with the study of Serian et al. (2021), Kumar (2017), who found that capital employed has a positive relationship with firm profitability of the non-financial firms listed at DSE. ROCE offers a thorough assessment of a company’s entire performance by taking into account both capital efficiency and profitability. Therefore, there are reasons why businesses should monitor ROCE. It aids in evaluating the success of capital allocation choices and the capacity to provide returns on capital invested. As a result, ROCE enables accurate comparisons between businesses engaged in various sectors and draws attention to a business’ capacity to make a profit on the capital it uses. The ROCE measure, which is significant for investors, demonstrates the firm’s capacity to generate returns on investors’ investments. A continuously high ROCE shows that the business is producing alluring returns, which might inspire investors' confidence and perhaps draw in additional cash. A firm that has a high ROCE is making significant profits from its investments, while one with a low ROCE may be operating inefficiently or making bad investment choices. A company’s financial health may be better understood by looking at ROCE rather than simply net income or profits per share.

The findings on the asset turnover contradicts with the study by Lyimo (2015) who established that asset turnover had negative impact on the profitability of non-financial companies at DSE. Andreas et al. (2021) asserts that in order to generate optimum sales and avoid unnecessary burdens, the amount of money granted by the firm to purchase fixed and current assets must be handled properly and efficiently. The productive assets held will have a significant impact on the management that oversees all operational operations inside the organisation. To continue running the business at its best, this condition mandates that the management of the organisation maintain a standard of asset management. The reference activity ratio may be used to analyse the company's capacity to carry out all of its operations or to measure the efficiency of its resource utilisation (Hery, 2019). A high asset turnover demonstrates the management team’s effectiveness in successfully and efficiently managing both the assets and the money already in place. Increased sales may be a sign that management is successfully using resources, which may inspire investors to place their money with the firm.

Asset turnover for non-financial enterprises at DSE is the variable with the highest positive significance. Accordingly, the report advises that in order to increase their profitability, businesses should use their assets to produce more sales. The capital employed, on the other hand, is the second positive variable and affects the profitability of the non-financial firms at DSE. As a result, the study advises the non-financial firms at DSE to invest their money in projects with positive net present values in order to increase returns on investment. The debt-to-equity variable had a negative influence on the profitability of the non-financial enterprises listed on the DSE, suggesting that these businesses are relying on loan capital rather than equity capital, which increases the risk of insolvency.

The results on influence of current ratio and inventory turnover on firm profitability are contradicting with prior studies by Abdullahi & Mamuda (2022) which found that current ratio and inventory turnover has a positive impact on firm profitability. The current ratio often demonstrates your company's capacity to earn enough cash to cover its immediate liabilities. This ratio may fall as a result of rising short-term debt, falling current assets, or a mix of both. Whatever the cause, a reduction in this ratio indicates a decreased capacity for cash generation.
Businesses often increase inventory sales in order to enhance inventory turnover in an effort to boost profitability. One of the most crucial asset posts is inventory, since it is a current asset post with a high value. These inventories are merchandise in trade firms, but they might be raw materials, works-in-progress, or completed items in industrial inventory firms. Lack of or excessive inventory is a detrimental sign. The faster the inventory turnover, the higher the costs that may be contained, increasing a company’s profitability. On the other hand, if inventory turnover is slower, profit gains will be lower. It’s not as simple as one would think to attain a high inventory turnover rate; the business must take numerous factors into account while running its own operations. Among them are meeting customer demands, enhancing product quality, and handling inventory consistently and effectively. The corporation sells its products more quickly as a result of the increased inventory turnover rate, which boosts operational profit and, eventually, net income. Net income is a measure of a company’s profitability.

The results on impact of debt to equity ratio and interest cover ratio coincides with a recent study by Kim et al. (2021) and Migun & Odhiambo (2019), which found a negative relationship between firm profitability and debt-to-equity ratios, meaning that higher debt-to-equity ratios erode firm profitability due to higher interest rates. According to the agency costs theory, there are two contradictory effects of debt on profitability: first, it is positive in the case of agency costs of equity between shareholders and managers, and second, it is negative, resulting from the agency costs of debt between shareholders and lenders. If a company’s debt-to-equity ratio is high, there is a chance that the company’s stock price will be low because if the company makes a profit, it tends to use that profit to increase capital spending and profitability.

On the other hand, the interest cover ratio has a negative relationship with firm profitability but is statistically insignificant. This implies that the increase or decrease of the interest cover ratio has no impact on the profitability of the non-financial companies at DSE. A declining interest coverage ratio, which might be a sign that the company’s liquidity is declining, may have a significant impact on a company’s ability to meet its financial obligations. Companies with poor interest coverage ratios may find it difficult to make timely payments to their creditors and may be in danger of default.

Conclusion

The paper examine the influence and significance of financial ratios on firm profitability for the non-financial firms listed in the DSE in Tanzania. The results reveal that there is a positive and negative influence of financial ratio on firm profitability. Return on capital employed, asset turnover and current ration have a positive relationship while inventory turnover and interest cover ratio have a negative impact on profitability. Therefore it is very crucial for firms to pay attention to the level of this financial ratios. The model had to drop debt to equity ratio as it was not significant. The study confirms and concur with literature on the significance of the financial ratio and firm profitability of non-financial companies.

References


