CHAPTER 1
CURRENT TRENDS IN ECONOMIC DEVELOPMENT

CAPITAL STRUCTURE AND ITS DETERMINANTS OF EXTERNAL FINANCING OF SMALL BUSINESSES IN MBEYA CITY, TANZANIA

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Abstract. *Small business owners are the breeding ground for medium and large enterprises in the the emerging and developed world economy. However, it is not clear what theories apply in the capital structure of small business owners and determinants of being financed in Mbeya City. The present study assessed the capital structure for small business owners in Mbeya City and its determinant of external financing. Thus, purposive sampling technique was used to select a total of 80 small business owners and employed both descriptive statistics and quantitative approaches. Findings showed that capital structure of small business owners was dominated by internal followed by external sources as startup of businesses. Moreover, findings showed that all predictor variables interest rate, collateral and audited financial records were statistically significant and directly related with the ability of financial institutions in financing small businesses. Based on these findings, it is therefore concluded that interest rate, collateral and audited financial records are the determinants of the financial institutions in financing small businesses. So, results have impact on how small business owners are creative in financing business. This has an implication to policymakers on how to raise creativeness in decision making to ensure business performance. Consequently, findings provide the motive to those who intends to engage in business on how to mobilize capital for sustainable business. Thus, it is recommended that government should create a favorable environment by reducing tax interest rates to increase retained earnings and enable in accessing external funding.*

Keywords: *Capital structure, collateral, external financing, pecking order theory, trade-off theory*

JEL Classification: D02; O32

Formulas: 2, fig.: 6, tabl.: 1, bibl.: 25

Introduction. Capital is an essential financial resource for business start up while there is no business without capital depending on the type of business. Kofi (2021) observed that business owners use the pecking order theory to finance business in financial distress contrary to debts. Accordingly, David *et al.* (2021) believe that capital structure has impacts on the performance of the company. Hitherto, Kruk (2021) explains the source of money supply and the strategy to be adapted as a source for investment in business. Furthermore, Kruk (2021) argues that the trade - off between debt and equity is a challenge accelerated by agency problems from insiders and outsiders giving rise to the capital structure puzzle.

However, in most cases financial institutions are the main source of external finance for business owners (Olachosim *et al.,* 2020). It is essential for financial institutions system be prepared to extend credit to the private sector. On the other hand institutional and regulatory nature may bias their active financial system (OECD, 2019). Business owners face challenges like limited finance and insufficient production due to application of low technology and supply chain management (Arsawan *et al.,* 2019). Although Mashenene and Rumanyika (2019) documented the limitations of businesses as a breeding ground of major ones of which these problems still exist and as a result individual enterprises face challenges that lead capital to collapse.

Furthermore, Nguyen and Mai (2021) observed that the ratio of profit after tax in total assets including tangible assets affect the debt-to-total assets in order to determine the target of capital structure. Hitherto, traditional trade-off and pecking order theories are reported to be the most accepted theories of capital structure (Mostafa and Boregowda, 2014). Enterprises are important for economic growth, yet they face various challenges including a lack of access to external financing (Ahmed *et al.,* 2021). Despite the Challenges facing in accessing loans from financial institution, complains on the failure are due to the non-compliance in requirements including collateral, financial statements from deficit side and high interest rates on the surplus side (Robert *et al.,* 2018). In view of this circumstance this study seeks to establish what determines external financing of business enterprises contrary to internal financing. However, little information is available on the determinants external financing business owners in Mbeya City, Tanzania. The present study, therefore, assessed the nature of the capital structure and determinants of external financing of small business owners in Mbeya City.

Literature Review. Accordingly, Eckbo and Kisser (2021) believe that the tax shield is an observable factor but the costs of financial distress are not. As a result, firms maintain the safety of margin before taking advantage of the tax shield. Thus, the benefit from tax shields is offset by the costs of financial distress as it is articulated as the traditional trade-off theory of capital structure (Kruk, 2021). Furthermore, Shang (2021) explains uncertainty of the market timing theory of capital structure as a case the share price of new stock is overvalued and repurchased while shares' price is undervalued due to information asymmetry. It is argued that the availability of loans increases the profit of the small business in relation to the total assets (Lwidiko and Ishengoma, 2021). It therefore believed that external sourcing of capital help in boosting profitability of businesse (Jumanne *et al.,* 2021). Mostafa and Boregowda (2014) and Mubeen *et al. (*2020) explain that traditional trade-off theory and pecking

order theory are the most accepted theories of capital structure.

Capital structure is a necessity of any business to flourish while the failure of it will lead to the dormant of the intended business. Accordingly, Czerwonka and Jaworski (2020) found that the direction of the influence of the diagnosed firm-specific factors is consistent with the pecking order theory. On the other hand, Kofi (2021) observed that business owners invest more of their capital in current assets and access more capital, debt capital, and equity capital to avoid financial distress. Also, it was evidenced that firms already in financial distress followed the pecking order theory when making financial decisions (Opoku-Asante *et al*., 2022; Mostafa and Boregowda, 2014; Lemmon and Zender, 2010).

Aims. The present aimed at assessing the nature of capital structure of small business owners in Mbeya City, Tanzania. It has been observed that small business owners finance their business from their earned livelihood contrary to external financing. However, externally financing has some conditions to be met in the process to acquire loans and being able to pay the cost of using it as regulated by financial institutions and the control of central banks.

Methodology. The study was conducted in Mbeya City at Mwanjelwa and the SIDO markets area. The area was chosen since the objects of interest, small business owners who face the problem of capital structure in their daily operations were accessible.

The approach of the Study. Leavy (2017) explains that a mixed approach involves collecting and integrating quantitative and qualitative data. The study employed a mixed research design approaches (Chen *et al*., 2021).

The population of the Study. The target population of the study was small business owners in Mwanjelwa and SIDO markets.

Sampling Technique and Sample size determination. The present study employed the purposive sampling technique to interview respondents in a study area, whereby business owners were picked from the sampling frame of small business owners as they were knowledgeable about the capital structure of their businesses (Leavy, 2017). The sample size of small business owners was computed using the formula (Cole, 2021):

$$n = \left[\frac{N.p(1-p)}{(N-1)\left(\frac{B}{C}\right)^2 + p(1-p)} \right] \quad (1)$$

Whereby: n = sample size; N = the finite population; p = probability of data; B = acceptable amount of sampling error; C = Z, normal distribution associated with consistence level which is 1.96 corresponds to 95%.

n=?, N=100, p=0.5, B=5%, C=1.96

$$n = [(100)\ (0.5)\ (1-0.5)] \div [(100-1)\ (0.05/1.96)2 + (0.5)\ (1-0.5)]$$
$$n = 79.5 \approx 80$$

Data Collection Instruments. The research used both open and closed interview schedule questionnaires in collecting information from small business owners at Mwanjelwa and SIDO markets in Mbeya City.

Data analysis techniques. The linear regression model was used to assess determinants of financing small businesses by financial institutions as dependent variable and regulatory requirement of collateral, audited financial records/statements on the deficit side and interest rate imposed as a cost of using capital from financial institutions:

$$Financing\ Small\ businesses\ (Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon. \quad (2)$$

β_0=Constant term; β_1, β_2, β_3 are coefficient variables that were estimated.
X_1=Interest rate,
X_2=Collateral requirements, and
X_3=Audited financial statements
ε= White error noise (include other variables not listed).

The data collected were analyzed using the Statistical Package for Social Sciences computer software where descriptive statistics were presented in percentages in histograms.

Results. In Fig. 1 presents Characteristics of Respondents, which are characterized by gender, age, level of education, number of family members, marital status, number of dependents.

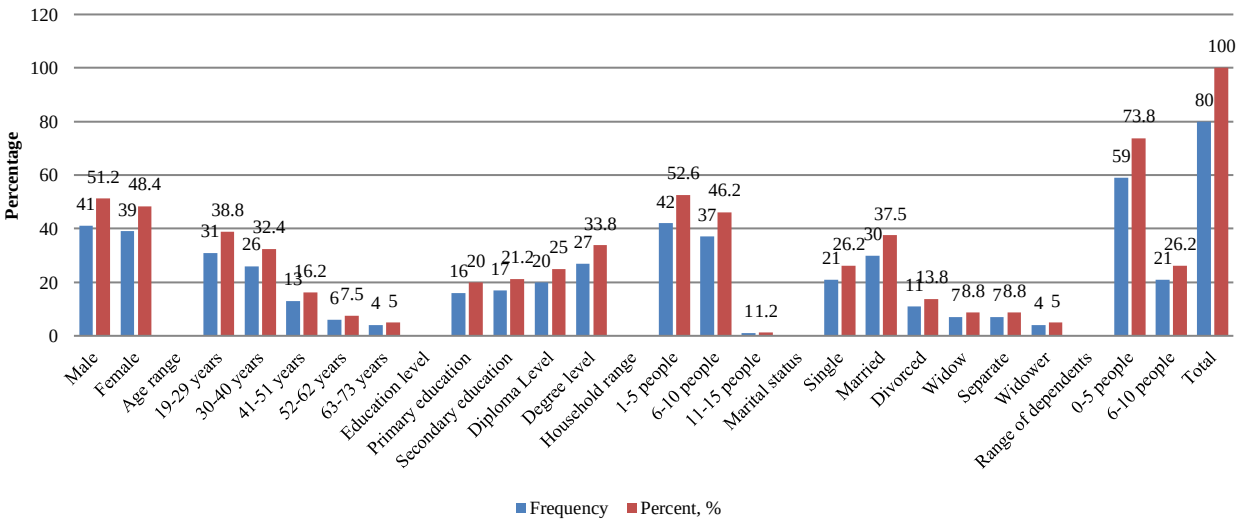

Figure 1. Characteristics of respondents

In Fig. 2 presents information on the share of Small Businesses by their types.

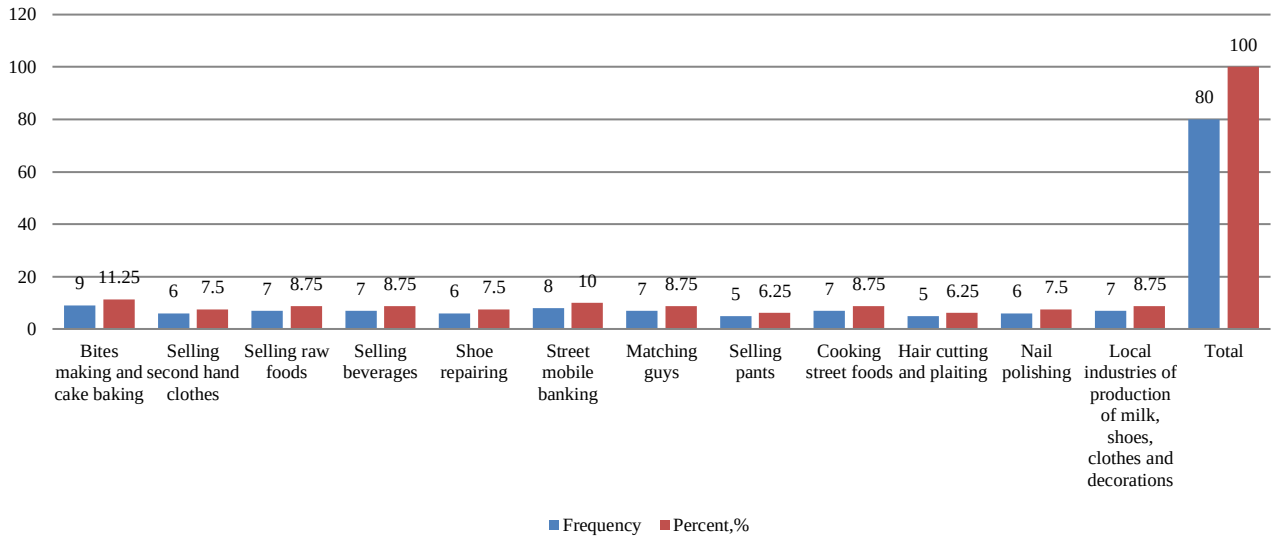

Figure 2. Types of small businesses conducted by respondents

In Fig. 3 presents the main Challenges explained by the respondents

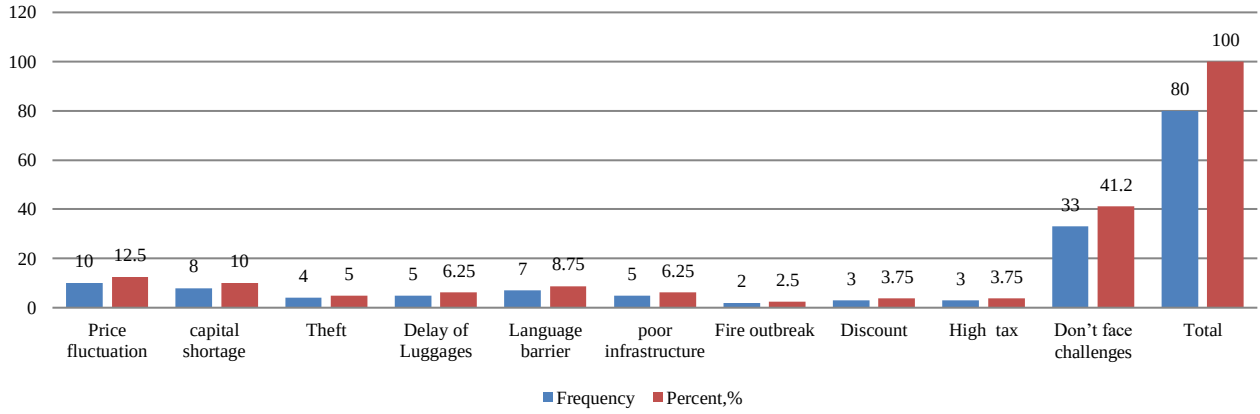

Figure 3. Challenges explained by respondent

In Fig. 4 presents the main technology used by small business entrepreneurs.

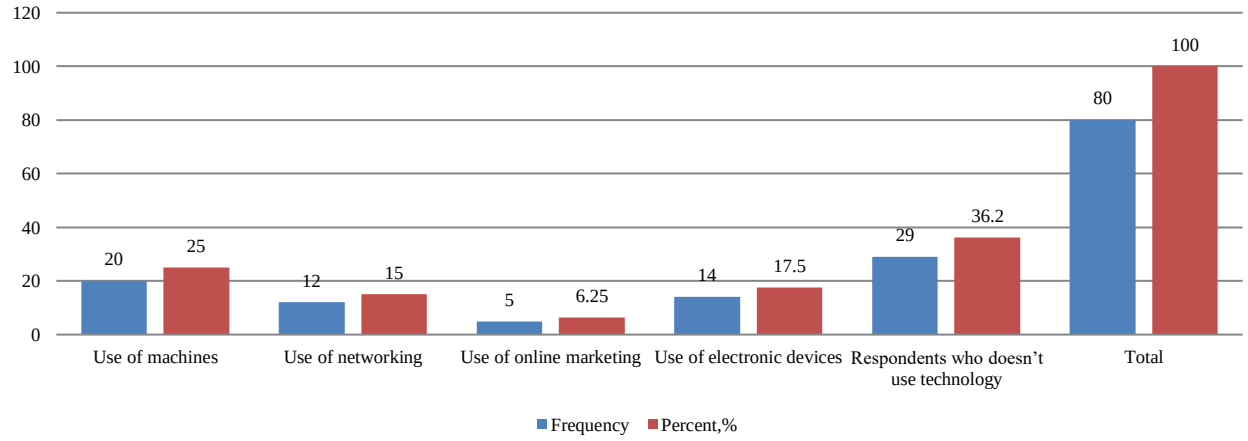

Figure 4. Types of technology used by small business owners

In Fig. 5 presents the technological changes and its effects on the business growth trend.

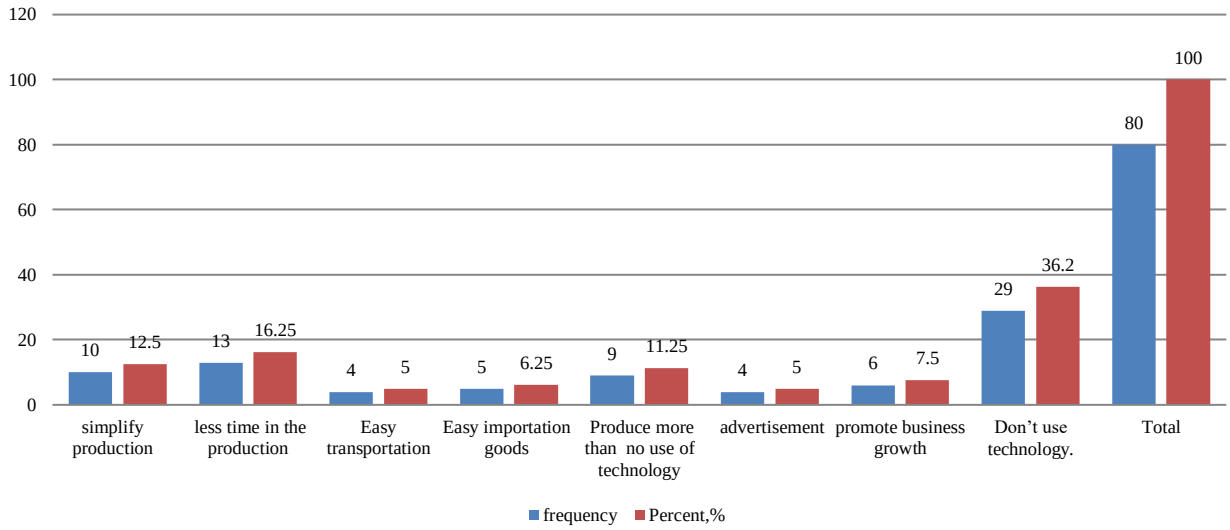

Figure 5. Technological changes and effects on the business growth trend

In Fig. 6 presents the capital structure adopted by small business owners.

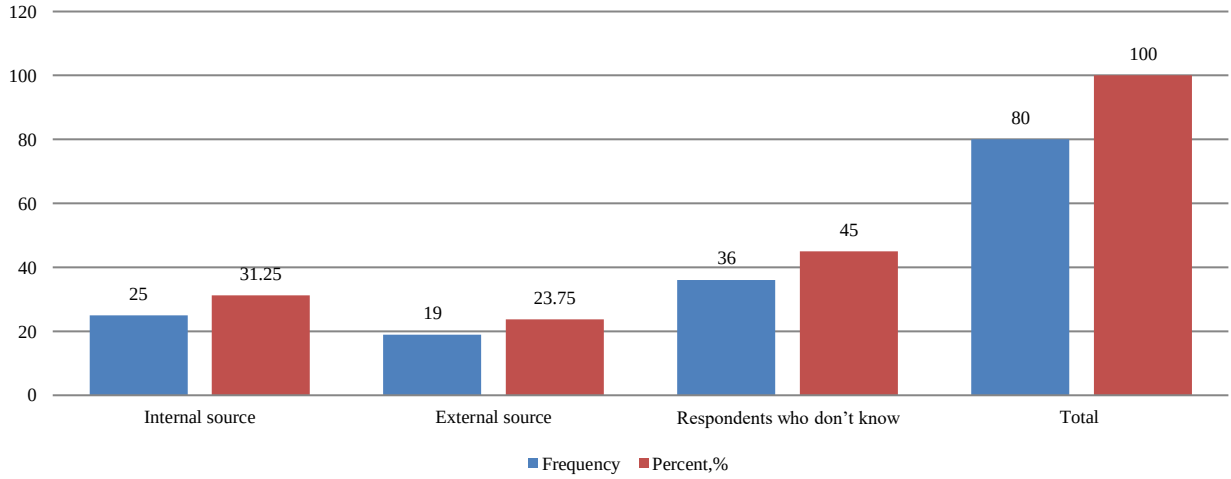

Figure 6: Methods used while capital structuring.

Analysis of determinants of financial institutions in Financing small businesses.

Table 1. Regression results on determinants of financial institutions in financing small businesses

Variables	Standardized Coefficient	t	p-value
Interest rate	0.261	2.853	0.005
Collateral	0.434	4.83	0.000
Financial statements	0.316	5.354	0.000
Constant	0.000	-0.840	0.403

Dependent variable: Financing small businesses

Discussions. The characteristics of the respondents include gender, age, marital status, household size, number of dependents, income per day, employment status, and years of experience. Findings (Figure 1) showed that 51% and 49% of small business owners were males and females, respectively. Results suggest that male small business owners are the majority. However, the difference was small (2%) indicating that female are copping up close to male as they are exercising financial freedom with little family binding commitments compared to the past era where male dominated resources. Of all participants, 39% were aged in the 19-29 years followed by 33% aged in the 30-40 years while 5% aged in the 63-73 years. Results indicate that the majority of small business owners are young ones under 30 years old. Findings suggest that as age increases, the participation in small business declines. Furthermore, findings (Figure 1) showed that 34% of the participants had attained a degree level followed by 25% had diploma level while 20% had primary education level. Results suggests that as the education level increases, the likelihood of taking risk increases contrary to being risk averse as used. This could be attributed to the unemployment level of graduates has led them to be self–employed. Also, the entrepreneurial education courses provided in higher education institutions influence beneficiaries in owning a small business.

Findings (Figure 1) showed that 53% of small business owners had a household size of 1-5, followed by 46% with a household size of 6-10 while 1% had a household size of 11-15. Results indicate that majority of the respondents had a small number of households sizes. This suggests that low household sizes had surplus saving from little expenditure as a result invest in small businesses to earn the livelihood. Furthermore, findings showed that 38% of small business owners were married followed by 26% of them being single while 5% of the rest were widowers. This suggests that married business people own businesses compared to other people who are not married. The reason is due to the motive behind binding commitments in family responsibilities leading them to work hard. Consequently, 74% of participants had 0- 5 dependents while 26% had 6- 10 dependants. Results suggest that the majority (74%) of the respondents had a small number of dependants, thus saving is achieved for financing business.

Findings (Figure 2) showed that 11% own bites making and cake baking business followed by 10% of them own a street mobile banking business while 6% of the rest own a hair cutting and plaiting business. Results comply with Achmad's (2022) observations on types of small businesses operated. Findings (Figure 3) showed that 13% of participants face price fluctuation problems while 10% of them face a shortage of capital problems while 3% of the rest face fire outbreak problems. Prices of goods and services in emerging economies lack stability due to variations in supply and demand as dictated by the price theory. Similarly, the capital start-up is a challenge on how to access it from financial institutions with regard to collateral (David *et al*., 2019).

Observations (Figure 4) showed that 25% of participants used machines followed by 18% of them using electronic devices while 6% of the rest used online marketing. Results show that technology is mostly integrated into small businesses (Zhao, 2019). Observations (Figure 5) showed that, 36% of participants don't use technology in businesses followed by 16% of them who used less time in production while 11% used and produced more than they were producing without technology. Results meant that

integration of technology in small businesses led to high productivity as it saves time, money and energy to small business owners contrary to those who do not use it because of failure in integration (David *et al.*, 2021).

Observations (Figure 6) showed that, 31% of small business owners used internal sources while 24% of them used external sources in capital structuring contrary to 45% who neither used internal nor external financing. Findings showed that small business owners (31%) preferred internal from retained earnings followed by those who prefer external sources as debt is preferred to equity (David *et al*., 2019; Lemmon and Zender, 2010) by trading off the costs against the benefits of the use of debt and equity. Results comply with the pecking order theory that firms prefer internal finance over external finance and debt over equity (Mostafa and Boregowda, 2014) followed by the trade-off theory. Therefore, Pecking Order and trade-offs have dominated the capital structure decisions of small business owners in Mbeya City (Jahanzeb *et al.*, 2013).

Research findings (Table 1) showed that interest rate is statistically significant and positive related to ability to finance small businesses at $p<0.05$ level. Results suggest that as interest rate increases by 1% financial institutions will increase loans accessibility by 26.1% to small businesses. This shows that interest rate influence in financing small businesses which means that the deviation of interest affects the effectiveness in financing. Findings contradict with observation by Jrad (2023) and Krasniqi *et al*. (2023) that high interest rates makes loans expensive and unaccessible for bank based investments as it impacts credit risk. As interest rates charged increase on the loan facilities by financial institutions becomes unattractive for most business owners to be financed. As result there will be no customer accepting high charges of interest rate.

Moreover, findings (Table 1) showed that collateral is statistically significant and positive related with ability to finance small businesses at $p<0.05$ level. Results meant that as collateral increase by 1% financial institutions will increase loans accessibility of funds by 43.4% to enterprises on need of credit. Also, results suggest that having collateral increases the ability of financial institutions to finance small businesses (Ismail and Sinha, 2024; Berisha *et al.*, 2023; Rose, 2018). Present findings contradict with observations by Dung and Ngan (2024) that availability of collateral and interest rates on loans exhibit negative association with loans application. Furthermore, observations showed that audited financial statement is statistically significant and positive related to the ability of financial institutions to finance small businesses. Findings suggest that as audited financial statement increase by 1% financial institutions will increase its ability to finance deficit units by 31.6%. Present findings are inline with observation by Ismail and (Sinha, 2024) and Berisha *et al.*(2023) that having audited financial reports increases the ability of financing small businesses with confidence.

Conclusion. Findings in the source of capital structure have shown that the use of internal sources was dominated followed by external sources for small business owners as the startup of businesses. It is therefore concluded that the pecking order theory dominated the nature of capital structure followed by the trade-off theory. Moreover, findings showed that all predictor variables interest rate, collateral and audited financial records were statistically significant and directly related with the ability of financial

institutions in financing small businesses at $p < 0.05$ levels. Based on these findings, it is therefore concluded that interest rate, collateral and audited financial records are the determinants of the financial institutions in financing small businesses. So, results have impact on how small business owners are creative in financing business. This has an implication to policymakers on how to raise creativeness in decision making to ensure business performance. Thus, findings provide the motive to those who intends to engage in business on how to mobilize capital for sustainable business. Thus, it is recommended that future research should investigate how tax imposed for small business owners and interest rates affects capital structure.

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