Working capital management, accounts receivable, and performance of Small and Medium Enterprises (SMEs)

Marus Eton^{1*}, Fabian Mwosi², Bernard Patrick Ogwel³, Simon Peter Olupot⁴ Muni University, Uganda¹ Bishop Barham University College, Kabale, Uganda² Kampala, International University, Kampala, Uganda³

Kabale University, Kabale, Uganda⁴

eton.marsu@gmail.com¹



Article History: Received on 25 August 2025 1st Revision on 3 October 2025 Accepted on 6 October 2025

Abstract

Purpose: This study examined how working capital management and accounts receivables influence the performance of SMEs in Uganda and proposes policy options to address the financial and managerial challenges identified. The study provides insights into how efficient financial practices can support SME sustainability in a competitive business environment.

Research Methodology: A cross-sectional research design was adopted to assess the existing conditions of working capital management and accounts receivable practices. Data were collected through a self-administered questionnaire distributed to 180 SMEs selected for the study. Inferential statistical techniques were applied during data analysis to test the research hypotheses, and several hypothesis tests were conducted to form a sound basis for interpretation and conclusion.

Results: The findings indicate that improvements in working capital management significantly enhance SME performance. Similarly, better accounts receivable practices—such as offering discounts and regularly reviewing credit policies—can contribute to improved financial outcomes. The results show that both working capital management and accounts receivables are significant predictors of SME performance.

Conclusions: SMEs that adopt sound working capital and receivables management strategies can thrive even in challenging business environments. Effective financial management also reduces the need for borrowed capital, enabling SMEs to operate more efficiently and sustainably.

Limitations: The study was geographically limited to Lira City, which may restrict the applicability of findings to broader contexts. **Contribution:** The study provides important guidance for SME owners and policymakers on how working capital and receivables management practices influence enterprise performance.

Keywords: Accounts Receivable, SMEs, Working Capital Management

How to Cite: Eton, M., Mwosi, F., Ogwel, B. P., & Olupot, S. P. (2025). Working capital management, accounts receivable, and performance of Small and Medium Enterprises (SMEs). *International Journal of Financial, Accounting, and Management*, 7(3), 453-471.

1. Introduction

National and international economies have aggressively promoted the growth of SMEs, and regardless of their size or stages of development, SMEs are essential to an economy. SMEs are significant because

they help economies achieve sustainable growth by fostering innovation and job growth (Zygmunt, 2017). SMEs have a critical role in advancing technological development for societal economic operations (International Trade Centre, 2019) and are considered businesses that pay taxes, provide important services and goods, employ people, and contribute back to the community (Hettihewa and Wright, 2018). Unfortunately, many SME business owners launch their companies because they are unemployed. SMEs are firms with fewer than 50 workers and annual sales of less than £10 million, while medium-sized enterprises are firms with fewer than 250 employees and annual sales of less than £50 million (European Commission, 2016). In the context of Uganda, the Ministry of Trade, Industry, and Cooperatives defines SMEs as businesses that employ 5-49 people and have an annual turnover ranging from 10 million Uganda shillings to 100 million, while medium enterprises consist of any enterprise that employs 40-100 people with an annual turnover ranging from 100 million to 360 million Uganda shillings (Uganda Bureau of Statistics, 2021). It is estimated that 90% of businesses worldwide are private sector-led SMEs (World Bank, 2019).

SMEs have made substantial economic contributions to many countries, although they experience considerable challenges that affect their business operations (Dimson *et al.*, 2020). As seen by the global collapse of various SMEs, economic uncertainty has a detrimental impact on the performance of SMEs in most countries (Doan et al., 2020). SMEs cannot obtain the funding needed to accelerate their expansion because of the lack of government support. It has been claimed that increasing SMEs' access to affordable and low-cost finance promotes the creation of quality jobs (Brixiová, Kangoye and Yogo, 2020). However, SMEs performance and expansion are highly dependent on the financial resources at their disposal (Mohammed and Bunyaminu, 2021). From a quantitative perspective, the success of SMEs can be interpreted as the amount of output, financial results, profitability, market share, and liquidity (Zimon, 2018).

It is noted that 30% of SMEs shut down their business operations before witnessing their third birthdays (Orobia *et al.*, 2020), while less than one half of the small startups exit for at least five years of their operations and a fraction develops into a major high-performing enterprise (OECD., 2019). In Uganda, SMEs continue to operate with numerous challenges, including limited financial resources, infrastructure, and access to wider markets (Okitela, 2024), which causes approximately 30% of them to fail to live beyond their second year (Orobia *et al.*, 2020). Muhwezi and Kiliman (2023) emphasized that SMEs in Uganda have a low survival rate, with between one and 23 businesses exiting operations in a period of just 4.85 years. This is evidence that all is not well with regard to the performance of SMEs, even though they are regarded as vehicles for job creation and poverty elevation in Uganda. Lakuma (2016) attributed the poor performance of SMEs in Uganda to financial constraints, the unavailability of working capital, and market failure. However, Lakuma (2016) merely hypothesized this conclusion because the author did not qualitatively ascertain the relationship between working capital management and accounts receivables on the performance of SMEs in Uganda.

However, previous scholarly studies conducted outside the context of Uganda show that maintaining liquidity, improving operational efficiency, and accelerating the growth rate of SMEs are all facilitated by Working Capital Management (WCM), particularly accounts receivable management (Shaik, 2021). Inadequate accounts receivable management can lead to cash flow issues that affect the productivity and profitability of SMEs. Inadequate access to financing, a lack of institutionalized financial institutions, and inadequate financial management abilities exacerbate the challenges SMEs face. If the aforementioned factors are not addressed, they may result in extended rising debt or a viscous debt cycle, slow cash conversion rates, and poor financial performance. It is critical to understand how WCM and accounts receivable (AR) influence the performance of SMEs, as this would aid in the creation of stronger financial management practices that will support the sustainability and success of these businesses.

1.1 Objectives of the study

i) To examine the relationship between working capital management and the performance of SMEs in Lira City.

- ii) To establish the relationship between accounts receivable and the performance of SMEs in Lira City.
- iii) To determine whether there is no significant difference in the performance of SMEs across the nature of firms in Lira City.
- iv) To ascertain whether there is no significant difference in the performance of SMEs across the current total working capital in Lira City.
- v) To establish whether there is no significant difference in the performance of SMEs across firm owner/managers' education level in Lira City.
- vi) To find out whether there is no significant difference in the performance of SMEs across firm owner/managers' age in Lira City.

2. Literature Review

2.1 Working Capital management (WCM)

Abor and Abor (2017) state that working capital management is the control of current assets and liabilities, which includes accounts payables and receivables and inventory, in a way that optimizes the benefits that accrue from the firm. WCM is an essential part of the financial management process that describes and monitors it (Seth *et al.* 2020). WCM gauges a business's ability to rely on its current assets to satisfy its ongoing obligations (Ahangar, 2021). WCM acts as a focal point in the business process for funding choices that impact how well-performing organizations succeed (Soukhakian and Khodakarami, 2019). The size of WC is influenced by the amount of operational cash flow that the corporate entity has access to, and a greater cash flow signal's efficient and effective WCM leads to a lower WC demand (Adiyanto, Murhadi and Wijaya, 2020). The working capital management procedures adopted by a company can lead to increased profitability and decreased operating costs (Chauhan, 2019). This is crucial because it enables businesses to boost their cash flow and liquidity, which enables them to meet their daily obligations. Having ideal working capital would provide company enterprises with enough money to enable the acquisition of resources that help in their operations (Bian *et al.*, 2018; Dhole et al., 2019).

Soda et al. (2022) argue that businesses should use their WC properly because they will need more money to pay off their short-term liabilities as they fall due. Akbar et al. (2021) argue that managers of business firms should ensure proper cash usage to avoid having too much cash tied up in the WC. Companies should be able to manage working capital (WC) efficiently to reduce the need for external borrowing and only allow the use of external money for expansion when necessary (Braimah *et al.*, 2021). A business is deemed to have performed well when it uses its resources more effectively than its rivals and stands out in terms of financial success (Morara and Sibindi, 2021). A company's capacity to bargain with service providers is enhanced by investments that consider WCM, as they allow for considerable payment savings while increasing the organization's value (Seth *et al.*, 2021). To optimize profits, corporations must ensure that their working capital is managed effectively and efficiently (Braimah *et al.*, 2021).

Businesses are evaluated based on their profitability; therefore, managing their working capital prudently is essential if they want to succeed in each of their diverse and challenging operating situations (Elbadry, 2018). Effective WCM prioritizes a company's ability to create sufficient cash flow to pay its short-term obligations as they come due while supporting its ability to continue operating (Altaf and Shah, 2018). According to Bhatia and Srivastava (2016), efficient WC management is essential for increasing shareholder wealth and significantly increasing overall firm assets (Asiedu *et al.*, 2020). It also has a considerable impact on earnings (Braimah *et al.*, 2021). Businesses can redeploy unused resources through WCM to do so efficiently and effectively (Aktas, Croci and Petmezas, 2015). It has been established that the WCM system has a negative effect on the financial performance of SMEs (Al-Mawshek, 2022), while Bhattacharyya et al. (2023) in their study on improving SMEs performance established that WCM had a positive influence on performance that was independent of financial inclusion. This led to the development of the first hypothesis.

H1: Working capital management positively and significantly predicts the performance of SMEs in Lira City.

2.2 Accounts receivable (AR)

Trade credit is represented on the balance sheet by accounts receivable, which are measured as a percentage of all assets (Yazdanfar and Öhman, 2015). Two dimensions that make up a financial service provider are the supply and demand sides (Yang et al., 2021). Tefera (2019) explains that the supply side refers to when a supplier or financial institution talks financial services with individuals or enterprises, the demand side is referred to when a person chooses to connect with the financial provider to receive funds (Brixiová, Kangoye and Yogo, 2020). Despite the fact that each firm should have its unique credit policies, the agreement in the credit conditions or policies must also emphasize or explicitly state how long it would take to recover the credit (Aeeni *et al.*, 2019). The decision of any financial institution to extend credit to its clients is determined by the firm's credit management policy. Due to an unreliable, immature, and cash-strapped banking sector, small and medium-sized firms (SMEs) in developing countries continue to have limited access to formal lending (Motta & Sharma, 2020).

Financial institutions frequently react the same way to SMEs, excluding certain of them from functioning in particular industries or failing to complete their loan applications (Elahi et al., 2021). Access to financial information, the need for collateral, and the availability of business support services are all crucial predictor variables that severely restrict SMEs' capacity to access bank loans (Amadasun & Mutezo, 2022). The problems that SMEs have that restrict their access to finance include high operating expenses, information asymmetry, high SMEs risks, and collateral hurdles (Yin et al., 2020). When seeking loans from a formal financial institution, the majority of SMEs face challenges with their firm size, poor financial management and reporting, loan repayment plans, entrepreneurs' educational backgrounds, and insufficient business planning (Meresa, 2018). The main factors influencing formal financing alternatives for SMEs are asset-based financing and credit history, whereas awareness plays a crucial role in both informal and formal financing in the informal setting (Adeosun, Shittu and Ugbede, 2021). SMEs are aware of the importance of debt management and employ various methods for possible debtor screening and follow-up tactics for recovering it. The same methods can be used to regulate and monitor bad debts (Richard & Kabala, 2020). Owuor et al. (2021) in their study revealed that the accounts receivable had an indirect and significant effect on the financial performance of chartered universities in Kenya. Lyani (2018) established that AR practices led to the growth of SMEs when adopted, this led to the development of the second hypothesis

H2: Accounts receivable positively and significantly predicts the performance of SMEs in Lira City.

2.3 Small and Medium Enterprises (SMEs)

Pitchayadol et al. (2018) claimed that the definition of an SME varies by location and industry and is based on numerical criteria, such as the number of employees, capital base, assets owned by the SME, and annual revenue. Quartey (2001) defines SME as enterprises that employ a maximum of 50 people and have a sales turnover of a maximum of 360 million (US \$ 218,181) and medium enterprise employs more than 50 people and sales are more than 360 million (US \$ 218,181), and have total assets of more than 360 million (US\$ 218,181). The SME's capacity for growth may be constrained if the industry is not particularly promising and faces a number of challenges, including a lack of marketing strategies, unfavorable bank loan rules, poor infrastructure, and a lack of compliance procedures (Islam *et al.*, 2021). A long inventory lifespan, short average payment term, low fixed asset percentage, and average collection time are all factors that affect individual SME owners' and extended cash conversion cycles (El-Sady, Ahmed and Hamdy, 2022).

Herrera and Kouame (2017) assert that SMEs' growth capacity may be impacted by the business environment in which they operate. The management system of SMEs has become competitive despite the dynamic and constantly shifting business environment, thanks to the management strategies that managers have chosen to use (Pisar and Bilkova, 2019). Inadequacy of collateral security and struggle for financial resources come to into view to limit the use and access to financial services (Eton, 2018). Governments should support SMEs by offering incentives, including direct subsidies, tax breaks for R&D, and unsecured, unguaranteed bank loans. These initiatives can originate from both the public and

private sectors (An and Zhang, 2021). To support their investments and attract adequate sources of finance, SMEs should be encouraged to maintain up-to-date financial records, such as income and cash flow statements (Chilembo, 2021). The most common and major source of finance for firms is bank loans (Chen and Kieschnick, 2018). Additionally, banks are hesitant to lend money to these risky companies because the majority of SME asset bases are insufficient and cannot be used as security for loans (Fuad, 2020).

SME owners have the freedom to expand markets quickly, employ people, stimulate the economy, and subsequently support export trade (Yang et al., 2019). Because of the heightened level of competition worldwide, it is essential to be innovative and make use of all business talents to survive (Dima et al., 2018). SMEs must focus on utilizing interorganizational links to enhance their turnover by obtaining a competitive edge and access to markets because the business environment is changing (Adeniran and Johnston, 2016). Sincere business owners should observe the law, follow business ethics, and behave in a manner that aids the rapid growth of their organizations (Dudek and Śpiewak, 2022). SME owners' resistance to change, poor technology, governmental limitations, cultural barriers, and economic barriers are only a few examples of the internal problems SMEs face (Chouki et al., 2020). Many SMEs find it challenging to maintain reliable records and deliver accurate financial reports, which makes it challenging for them to evaluate their progress (Musah, 2017). Business owners' commitment is crucial for the expansion of many SMEs in the marketplace (Koreen and Cusmano, 2019). SMEs need access to debt financing to function well and prosper (Badi and Ishengoma, 2021). Yazdanfar (2013) revealed that firm age has an inverse relationship with SME performance, whereas high ownership and management of SMEs have a positive effect on firm performance (Lappalainen and Niskanen, 2012). If a company invests in adequate WCM, it would allow efficient performance of an SME (Ukaegbu, 2014). This has led to the development of hypothesis (H3, H4, H5 and H6)

- *H3:* There is no significant difference in the performance of SMEs across the nature of firms in Lira City.
- *H4:* There is no significant difference in the performance of SMEs across the current total working capital in Lira City.
- **H5:** There is no significant difference in the performance of SMEs across firm owner/manager's education level in Lira City.
- **H6**: There is no significant difference in the performance of SMEs across firm owner/managers' age in Lira City.

2.4 Working Capital Management, accounts receivables and performance of SMEs

For SMEs, managing the daily short-term funding of their business units is difficult. This management procedure must be completed quickly because it is complex in nature. WCM procedures, such as liquidity management, financial reporting, and asset management, would help SMEs function better, even though SMEs with shorter WC component periods would likely do so (Anangwe and Malenya, 2020). SMEs should use an optimal credit policy that enhances adequate cash flows while ensuring a continuous increase in sales and revenue (Olagunju, Nwaobia and Ogundajo, 2020). Efficient management of accounts receivable ensures liquidity and profitability of the firm, hence improving its financial performance (Foulks, 2005). Delaying debt payments may result in an SME losing the opportunity to access purchase discounts whenever a request is made by the suppliers (Seth et al., 2020). The negative effects of credit and cash constraints on corporate investment are slightly worse than those for SMEs due to a larger increase in working capital requirements, which are lower for liquid assets that can be modified to match inventories and accounts receivable (Nicolas, 2022). A financially sound and prosperous business would build an effective WCM and WC term, which might lead to a higher financial advantage (Lyngstadaas, 2020). Higher WC investment levels would give a company a competitive advantage over its rivals and improve overall performance (Baños-Caballero, García-Teruel and Martínez-Solano, 2020).

However, cash management techniques could not be sustained due to varying degrees of cash management incompetence demonstrated by some SMEs managers (Eton *et al.*, 2019). For SMEs to operate and meet time demands, effective cash flow management in the business cycle must be regular and transparent to everyone (Islam *et al.*, 2021). The way small and medium-sized businesses manage

their networks helps proprietors stay in touch with their clients and suppliers, which helps them acquire access to low-cost sources of funding (Eton *et al.*, 2021). Le (2019) asserts that investments in WC management can increase the value and profitability of companies. Short-term business financing helps businesses perform better because it lowers finance costs and agency costs and provides them with more flexibility (Mahmood *et al.*, 2019). During economic difficulties, SMEs with a longer cash cycle for converting working capital obtained from short-term debt financing are more likely to fail (Wang, 2019). Businesses with faster cash conversion cycles and shorter receivable collection periods are more likely to be profitable, even when those with slower inventory turnover and accounts payable times are more likely to be profitable (Aldubhani *et al.*, 2022). SMEs may retain the payment standard interval slightly longer than the collection period to reduce all payment receivables and short-term financial expenses (Ahmed and Mwangi, 2022). WCM is one of the most crucial decisions that can impact an organization's financial performance (Singh, Kumar and Colombage, 2017; Gallegos Mardones, 2022). Businesses can maximize their returns on investment by establishing an effective working capital management plan (Nguyen, Pham and Nguyen, 2020).

Adopting aggressive working capital management strategies is essential for boosting a company's profitability, cash flow, cost-cutting capacity, and liquidity (Boisjoly, Conine Jr, and McDonald IV, 2020). According to Nicolas (2022), short-term credit issues are as important as long-term credit issues in SME investment decisions. To help SME managers and owners adopt and improve the best financial management practices to support the growth of their businesses, targeted financial literacy programs must be implemented (Adda, 2020). The choice of WCM system will have an impact on or minimize the enterprise's risk, operational expenses, and sustainability, which will increase profitability (Peng and Zhou, 2019). SMEs should have clear policies in place for handling accounts receivable, including policies regarding credit extensions and financing receivables, as these factors have a significant impact on how well SMEs perform financially (Muthoni, Kiprotich and Kipyego, 2020). Musabayana et al. (2022) assert that national standards must be adhered to by government policies. Governments must perform a needs assessment of the local community and stakeholders, including community leaders, to create a sound policy framework that fosters the expansion of SMEs. However, Kumar and Ayedee (2021) note that local SMEs face several restrictions that make them far more vulnerable than large, global SMEs. Compared to non-failing SMEs, failing SMEs face challenges such as decreased liquidity, short average payment time, longer cash conversion periods, smaller fixed asset percentages, and excessive reliance on debt to finance their assets (El-Sady et al., 2022).

3. Research Methodology

3.1 Design, sample and instrument

A cross-sectional research design was adopted in this study to determine the state of working capital management, accounts receivable, and performance of SMEs in Lira City. The unit of analysis was SMEs that were dealing in trade, manufacturing, and services since they are the dominant businesses in Lira City. With Stratified Random Sampling, every unit in a stratum has the same chance of being selected; therefore, adequate representation of minority subgroups of interest can be ensured by stratification and varying sampling fractions between strata as required.

Descriptively, trade businesses mostly included dealers in merchandize. Service businesses included financial services, transportation and logistics, hospitality, education, and health, while manufacturing businesses included agro-processing, construction, metal fabrication, and textiles and garments. SMEs were selected from the two divisions of Lira City East and City West. From the 340 targeted study population in Lira City, 180 SMEs were considered for the study, of which 90 SMEs were selected from each division. Stratified random sampling was used to obtain a sample of 180 SMEs to participate in the study. This involved dividing the 340 SMEs into subgroups based on the location and nature of the business. From the subgrouping, 180 SMEs were randomly selected, considering the percentage of each SME subgroup.

In a proportional manner, data were collected from each segment of the SME, and the survey was based on a self-administered questionnaire, which was developed and structured as follows. The first section contained four items that captured information on firm owners and managers. The second section had

13 items that measured working capital management. The third section had 15 items that captured the measurement items on accounts receivable. The fourth section had 14 items that measured the performance of SMEs. Data analysis involved generating mostly inferential statistics to logically address the research hypothesis.

3.2 Measurement validation

To validate the internal consistency and validity of the instrument, we ran a PLS-SEM measurement model test using Smart PLS 4. In our analysis, we assessed (1) factor loadings, which were all above the threshold of 0.708 for all latent variables (Hair *et al.*, 2022). Convergent validity was assessed using the AVE, with all variances exceeding the cut-off point of 0.5 for all latent variables (Hair *et al.*, 2022). (See Table 1). Therefore, the measurement model was reliable and valid, since all the coefficients for the latent variables satisfied the above conditions for the validity and reliability of the instrument.

Table 1. VIF for inner measurement model with emerging random variable

Variables	VIF	
Accounts receivable -> Performance of SMEs	1.482	
Current total working capital -> Performance of SMEs	1.170	
Nature of firm -> Performance of SMEs	1.126	
Owner/manager's age group -> Performance of SMEs	1.017	
Owner/manager's education level -> Performance of SMEs	1.306	
Random variable -> Accounts receivable	1.000	
Random variable -> Performance of SMEs	1.036	
Random variable -> Working capital management	1.000	
Working capital management -> Performance of SMEs	1.443	

Source(s): Analysis of VIF statistics

3.3 Discriminant validity

To ascertain whether the exogenous variables predicted the endogenous variable differently, we used the Fornell-Lacker criterion, heterotrait—monotraitratio ratio (HTMT), and cross-loadings, as suggested by Becker *et al.* (2023). Table 3 shows that the Fornell-Lacker criterion and heterotrait—monotrait ratio (HTMT) values for all latent variables satisfied the validity criteria of below 0.85, as recommended by Becker *et al.* (2023). (See table 3). Additionally, all measurement items loaded higher on each intended latent variable, with all values exceeding the threshold of .708 (Becker *et al.*, 2023), implying that all variables in the model were discriminant.

Table 1. Discriminant validity results – Fornell-Larcker criterion and Heterotrait-monotrait ratio (HTMT)

Latent	Fornell-Larcker criterion		Heterotrait-monotrait ratio			
variables	1	2	3	1	2	3
Working capital management	.798					
Accounts receivable (2)	.381	.772		.512		
Performance of SMEs (3)	.636	.535	.757	.837	.687	

Source: Created by authors

3.4 Assessment of endogeneity bias

Using Smart PLS 4, our study tested for endogeneity based on Park and Gupta's (2012) Gaussian copula approach to account for any variable that could have been omitted from the PLS path model and to confirm the robustness of our model. The results in Table 3A reveal that none of the Gaussian copulas in Models 1

and 2 were significant. For instance, in the Gaussian copula of model 2 (endogenous; working capital management, Accounts Receivable), considering the working capital management constructs as potentially endogenous generates copulas of non-significant copulas of -.042, with a corresponding P value of .914. In model two, by considering the construct of accounts receivable as potentially endogenous, no significant copulas are produced (Path estimates = -.278, P value = .315). Thus, we conclude that endogeneity is not an issue in our data and that our structural model is robust (Hult *et al.* 2018).

Table 2. Endogeneity test

Structural model with categorical variables	Original sample (O)	P values
Accounts receivable -> Performance of SMEs	0.338	0.000
Current total working capital -> Performance of SMEs	-0.407	0.287
Nature of firm -> Performance of SMEs	-0.352	0.246
Owner/manager's age group -> Performance of SMEs	0.168	0.417
Owner/manager's education level -> Performance of SMEs	0.123	0.522
Working capital management -> Performance of SMEs	0.437	0.000
Structural model without categorical variables		
Accounts receivable -> Performance of SMEs	0.341	0.000
Working capital management -> Performance of SMEs	0.508	0.000
Gaussian copula of model 1 (endogenous; Accounts Receivable		
Accounts receivable -> Performance of SMEs	0.372	0.026
Working capital management -> Performance of SMEs	0.428	0.244
GC (Working capital management -> Performance of SMEs) Performance of SMEs	0.072	0.819
Gaussian copula of model 2 (endogenous; Working cap management, Accounts Receivable)		
Accounts receivable -> Performance of SMEs	0.598	0.042
Working capital management -> Performance of SMEs	0.555	0.162
GC (Working capital management -> Performance of SMEs) Performance of SMEs	-0.042	0.914
GC (Accounts receivable -> Performance of SMEs) -> Performance of SMEs	-0.278	0.315

Source: field data 2025

4. Results and Discussions

4.1 Participants

Table 1 presents a summary of the firm characteristics. Table 1 also shows that SMEs participating in trade and service activities dominated the study, with a combined percentage of approximately 82%. The majority of SMEs (71 %) operate with a current working capital of less than 50 million Uganda shillings. The 50 million shillings is believed to be low, which would affect the faster growth of the SMEs business activities, especially in a highly competitive business atmosphere within the district.

Table 4. Characteristics of firms (n= 132)

	Column N %
Trade	42.4%
Manufacturing	3.8%
Service	49.2%
Other business activities	4.5%
Total	100.0%
Less than 50 million	71.2%
	Manufacturing Service Other business activities Total

Greater than 50 million but less than 100 million	13.6%
Greater than 100 million but less than 150 million	10.6%
Above 150 million	4.5%
Total	100.0%

A total (132) respondents participated in the study. Respondents were categorized into younger (20-34 years), middle (35-49 years), and older (\geq 50 years). Table 1 presents a description of the respondents. Table 1 shows that about 74% of respondents were over 35 years, and approximately 86% had attained qualifications above the secondary school level.

Table 5. Characteristics of respondents (n = 132)

		Column N %
	20-34 years	
Age of respondents —	35 – 49 years	52.3%
Age of respondents —	50 years and above	22.0%
_	Total	100.0%
	Secondary and below	14.4%
	Two year certificate	10.6%
Highest level of advection —	Two year Diploma	17.4%
Highest level of education	University degree	57.6%
-	Other education levels	0.0%
	Total	100.0%

Source: Field data 2025

4.2 Hypotheses test results

In this study, Partial Least Squares Equation Modelling (PLS-SEM) was used to derive the structural model to test the hypothesis. (See figure 1).

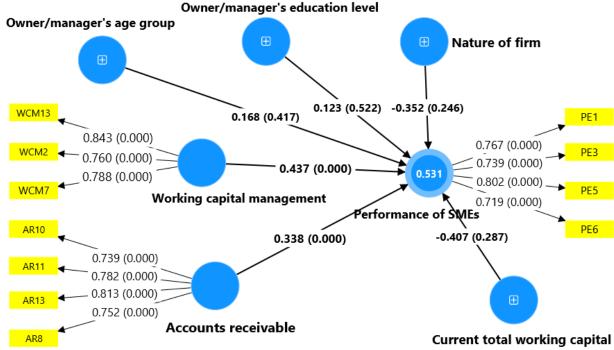


Figure 1: Shows structural model for performance of SMEs with the path coefficients and p values; R square; Outer weights and p values

Table 6. Path analysis results

Total effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV	P valu es
Accounts receivable -> Performance of SMEs	0.338	0.337	0.086	3.947	0.00
Current total working capital -> Performance of SMEs	-0.407	-0.261	0.383	1.065	0.28 7
Nature of firm -> Performance of SMEs	-0.352	-0.397	0.303	1.161	0.24 6
Owner/manager's age group -> Performance of SMEs	0.168	0.044	0.207	0.812	0.41 7
Owner/manager's education level -> Performance of SMEs	0.123	0.143	0.191	0.641	0.52
Working capital management -> Performance of SMEs	0.437	0.433	0.068	6.387	0.00
Variance predictions					
R Square adjusted	.509				
R Square	.531				

Source: Field Data 2025

4.2.1 Relationship between working capital management and performance of SMEs

The findings reveal that working capital management positively and significantly predicts SME performance (β = .437** ρ < .01); thus, H1 is supported. (See figure 1). This implies that improvements in working capital management lead to improvements in SME performance. In other words, working capital management practices, such as ensuring sufficient cash flow to meet short-term commitments and maintain high inventories, are associated with improvement in terms of productivity levels, increasing the capital base, and increasing the number of employees.

4.2.2 Relationship between accounts receivable and performance of SMEs

The findings reveal that accounts receivables positively and significantly predict SME performance ($\beta = .338** \rho < .01$). (See figure 1). Therefore, **H2** is accepted. The findings reveal that a unit improvement in accounts receivables leads to a 33.8% improvement in SME performance. This means that improvement in accounts receivable management practices, such as offering discounts for early payments, regular review of credit policy, and offering long discount periods, results in improvement in the performance of SMEs with regard to capital base and productivity levels improvement.

4.2.3 Findings on performance of SMEs across nature of firms

The results show that the performance of SMEs does not vary across the nature of firms ($\beta = -.352$ $\rho \ge .05$), implying that the performance of SMEs does not depend on whether the firm deals in trade, manufacturing, service, or other business activities. (See figure 1). Subsequently, hypothesis *H3*, which states that there is no significant difference in the performance of SMEs across the nature of firms in Lira City, is accepted.

4.2.4 Findings on performance of SMEs across current total working capital

The results show that there was no significant difference between the performance of SMEs and current working capital ($\beta = -.407* \rho \ge .05$), implying that there is no significant difference in the performance of SMEs across the current total working capital in Lira City. Consequently, Hypothesis *H4*, which states that there is no significant difference in the performance of SMEs across the current total working capital in Lira City, is supported.

4.2.5 Findings on performance of SMEs across firm owner/manager's education level

The results show that there was no significant difference in the performance of SMEs across the firm owner/manager's education level ($\beta = .123 \rho \ge .05$); therefore, **H5** is supported.

4.2.6 Findings on performance of SMEs across firm owner / manager's age

The results show that there was no significant difference in the performance of SMEs across the firm owner/manager's age in Lira City (β = .168 ρ ≥.05); therefore, hypothesis H6 is supported. The regression results in Table 1 show that exogenous variables (working capital management, accounts receivable, nature of firms, current total working capital, and owner/manager's education level) explain 53.1% of the variance in the endogenous variable (performance of SMEs) (R Square = .531). The remaining 46.9% of the change in SME performance was explained by factors outside the scope of this study. The inner model shows that working capital management has the strongest effect on SME performance (β = .437**), followed by accounts receivable management (β = .338**). (See figure 1). The P value of .000 implies that a significant relationship exists between working capital management and performance of SMEs and between accounts receivable management and performance of SMEs. Hence, working capital and accounts receivable management are strong indicators of SME performance.

4.3 Discussion

4.3.1 Relationship between working capital management and performance of SMEs

The findings reveal that working capital management positively and significantly predicts SME performance of SMEs thus, hypothesis HI is not supported. This implies that improvements in working capital management lead to improvements in SME performance. In other words, working capital management practices, such as ensuring sufficient cash flow to meet short-term commitments and maintain high inventories, are associated with improvement in terms of productivity levels, increasing the capital base, and increasing the number of employees. The findings disagree with HI, which states that working capital management does not affect the performance of SMEs in Lira City. However, the findings are consistent with Baños-Caballero et al. (2020), who aver that higher working capital investment levels would give a company a competitive advantage over its rivals and improve overall performance.

These findings are also in line with Boisjoly et al. (2020), who acknowledged that adopting aggressive working capital management strategies is essential for boosting a company's profitability, cash flow, capacity for cost-cutting, and liquidity. Contextually, working capital management practices, such as preparing stock budgets, monitoring stock levels, and maintaining accurate stock records, guarantee the continuous availability of stock required to meet varying customer product demands. Consequently, this results in increased sales revenue and overall profitability for SMEs because stock-outs and associated costs are minimized. In addition, practices such as monitoring stock levels and recording and/or maintaining accurate stock records result in the continuous availability of sufficient stock to meet customer demands. This further increases sales volume and SMEs profitability, thus improving the overall performance of SMEs.

4.3.2 Relationship between accounts receivable and performance of SMEs

The findings reveal that accounts receivables positively and significantly predict SME performance of SMEs, therefore, Hypothesis H2 is rejected. The findings reveal that improvements in accounts receivables lead to improvements in the performance. This means that improvement in accounts receivable management practices, such as offering discounts for early payments, regular review of credit policy, and offering long discount periods, results in improvement in the performance of SMEs with regard to capital base and productivity levels improvement. The findings disagree with H2, which states that accounts receivable does not affect the performance of SMEs in Lira City. The findings are in agreement with Foulks (2005), who emphasized that efficient management of accounts receivable ensures liquidity and profitability of the firm, hence improving its financial performance. Accounts receivable management practices, such as keeping sales credit records, speedy debt collection, appropriate assessment of the creditworthiness of customers, and swift follow-up of credit customers for timely payment, result in increased liquidity levels, thus improving the overall performance of SMEs.

4.3.3 Performance of SMEs across nature of firms

The results show that the performance of SMEs does not vary across the nature of firms, implying that the performance of SMEs does not depend on whether the firm deals in trade, manufacturing, services, or other business activities. (See figure 1). Subsequently, hypothesis *H3*, which states that there is no significant difference in the performance of SMEs across the nature of firms in Lira City, is accepted. These findings are incongruent with those of Pitchayadol et al. (2018) in their understanding of SMEs. They argue that firm performance varies by location and industry and is based on numerical criteria such as the number of employees, capital base, assets owned by the SME, and annual revenue. While firm characteristics provide a sure foundation for varying definitions of SMEs, they equally explain variations in SME performance.

4.3.4 Performance of SMEs across current total working capital

The results show that there is no significant difference between the performance of SMEs and current total working capital, implying that there is no significant difference in the performance of SMEs across the current total working capital in Lira City. Consequently, Hypothesis *H4*, which states that there is no significant difference in the performance of SMEs across the current total working capital in Lira City, is supported. These results seem to disagree with those of many previous studies that argue that working capital management is a prerequisite for firm performance (Le, 2019; Baños-Caballero et al., 2020; Gallegos Mardones, 2022). Firms require effective WCM to attain competitive advantages and high investment levels.

4.3.5 Performance of SMEs across firm owner/manager's education level

The results show that there is no significant difference in the performance of SMEs across the firm owner/manager's education level; therefore, Hypothesis *H5* is supported. The results are inconsistent with those of Doms et al. (2010), who showed strong variations in business performance and entrepreneurial activity based on education level. Highly educated individuals are likely to operate businesses in metropolitan areas and employ an educated workforce. Consequently, business performance is higher among educated business owners than among less educated business owners. Human capital drawn from an educated labor force is a key driver of both entrepreneurship and business performance (Millan *et al.*, 2014). While the influence of education level on entrepreneurial activity is clear, there is some evidence of higher business performance among educated than less-educated business owners.

4.3.6 Performance of SMEs across firm owner / manager's age

The results show that there is no significant difference in the performance of SMEs across the firm owner/manager's age in Lira City; therefore, Hypothesis *H6* is supported. The findings on age agree with Kaunda (2013), who found an inverse relationship between the age of the business owner and the performance of their businesses. However, from a South African perspective, proactive innovativeness and autonomy are significant predictors of performance among young adult-owned businesses (Matchaba-Hove and Goliath, 2016). Similarly, Academic research by Brownson (2014) shows that age is a key predictor of entrepreneurial activity in Nigeria. These studies provide evidence that different age groups bring different experiences to businesses and, consequently, to business performance.

5. Conclusion

This study determined the extent to which working capital management and accounts receivable influence the performance of SMEs in Lira City, Uganda. The findings show that working capital management and accounts receivable are significant predictors of SME performance in Lira City. In precise terms, working capital management and accounts receivable predict 43.2% and 39.2% of the variations in the performance of SMEs in Lira City, respectively. This study confirms that working capital management and accounts receivable lead to improved SME performance. The significance of these findings is drawn from working capital management practices, such as maintaining sufficient cash flow to meet short-term commitments and maintaining high inventories, which are associated with productivity levels, increased capital base, and increased employee size. These practices not only promote performance but also protect SMEs from bankruptcy. Noted in this study However, firm characteristics such as the nature of the firm, age, and the education level of the business owner do not determine significant differences in the performance of SMEs. These factors require further research,

which should be longitudinal and possibly on a wider sample. From a practical perspective, SMEs that attend to sound working capital management practices can thrive even in the most challenging business environments. Sound working capital management practices can reduce the appetite for loaned capital, which has marred most SMEs. From a methodological perspective, investigating working capital management and performance among SMEs that deal in a specific line of business is likely to generate divergent results than amalgamating them. From a policy perspective, training in financial management must start early enough to prepare youth for business. Many youths without any form of training in financial management have dived into business to remedy unemployment and have suffered serious financial losses.

5.1 Limitation

This study, like any other, has certain limitations that may affect the generalization of the findings. These could include the type of SMEs chosen, geographical area, data collection instruments, and population. The study was conducted in Lira City, and the characteristics and business environments in other areas could be different. This makes the applicability of the findings in other areas somewhat tricky. Therefore, increasing the generalization of our findings to other types of businesses may require further research.

5.2 Suggestion

Clear and robust cash flow forecasting, cash flow management techniques, and short-term funding must be adopted to improve liquidity and reduce risk in the management of SMEs. The development of a clear credit policy needs to be at the forefront of SMEs managers to have debt follow-ups and collection details. Multiple credit collection methods must be adopted to allow SMEs to achieve total debt collection and avoid bad debts. A strong debt management tool needs to be developed that helps assess debt collection and gives out incentives for early debt payments, among others. SMEs should note the cash conversion cycle and average accounts receivable days to ensure that businesses are not affected by cash or stock shortages.

Acknowledgement

We would like to thank the respondents and the editor for their support in making this work better.

References

- Abor, J.Y. and Abor, J.Y. (2017). 'Working Capital Management', *Entrepreneurial Finance for MSMEs: A Managerial Approach for Developing Markets*, pp. 225–255.
- Adda, G. (2020). 'Financial management practices and growth of small and medium-scale enterprises: The case of Kassena-Nankana West District', *Research in business and management*, 7(2), pp. 39–58.
- Adeniran, T. V and Johnston, K.A. (2016). 'The impacts of ICT utilisation and dynamic capabilities on the competitive advantage of South African SMEs', *International Journal of Information Technology and Management*, 15(1), pp. 59–89. doi: https://doi.org/10.1504/IJITM.2016.073915
- Adeosun, O.T., Shittu, A.I. and Ugbede, D. (2021). 'Disruptive financial innovations: the case of Nigerian micro-entrepreneurs', *Journal of Business and Socio-Economic Development*, 3(1), pp. 17–35. doi: https://doi.org/10.1108/JBSED-01-2021-0006
- Adiyanto, R., Murhadi, W.R. and Wijaya, L.I. (2020). 'Working Capital Management dan Firm Profitability Perusahaan Sektor Manufaktur di Bursa Efek Indonesia dan Bursa Efek Filipina Periode 2014-2018', *Journal of Entrepreneurship and Business*, 1(1), pp. 31–42. doi: https://doi.org/10.24123/jerb.v1i1.2822
- Aeeni, Z. et al. (2019). 'Baumol's theory of entrepreneurial allocation: A systematic review and research agenda', European Research on Management and Business Economics, 25(1), pp. 30–37. doi: https://doi.org/10.1016/j.iedeen.2018.09.001
- Ahangar, N. (2021). 'Is the relationship between working capital management and firm profitability non-linear in Indian SMEs?', *Small Enterprise Research*, 28(1), pp. 23–35. doi: https://doi.org/10.1080/13215906.2021.1872685

- Ahmed, A.Y. and Mwangi, L.W. (2022). 'Working capital management and financial performance of Small and Medium Enterprises in Garissa County, Kenya', *International Journal of Current Aspects in Finance, Banking and Accounting*, 4(1), pp. 56–71. doi: https://doi.org/10.35942/ijcfa.v4i1.229
- Akbar, A. et al. (2021). 'Does working capital management influence operating and market risk of firms?', Risks, 9(11), p. 201. doi: https://doi.org/10.3390/risks9110201
- Aktas, N., Croci, E. and Petmezas, D. (2015). 'Is working capital management value-enhancing? Evidence from firm performance and investments', *Journal of Corporate Finance*, 30, pp. 98–113. doi: https://doi.org/10.1016/j.jcorpfin.2014.12.008
- Al-Mawshek, R.M.S.A. (2022). 'Effect of working capital policies on firms' financial performance', *Cogent Economics & Finance*, 10(1), p. 2087289. doi: https://doi.org/10.1080/23322039.2022.2087289
- Aldubhani, M.A.Q. *et al.* (2022). 'Impact of working capital management on profitability: evidence from listed companies in Qatar', *Journal of Money and Business*, 2(1), pp. 70–81. doi: https://doi.org/10.1108/JMB-08-2021-0032
- Altaf, N. and Shah, F.A. (2018). 'Investment and financial constraints in Indian firms: does working capital smoothen fixed investment?', *Decision*, 45, pp. 43–58. doi: https://doi.org/10.1007/s40622-018-0178-8
- Amadasun, D.O.E. and Mutezo, A.T. (2022). 'Influence of access to finance on the competitive growth of SMEs in Lesotho', *Journal of Innovation and Entrepreneurship*, 11(1), p. 56. doi: https://doi.org/10.21203/rs.3.rs-1027267/v1
- An, Y. and Zhang, Y. (2021). 'Crossing the valley of death for SMEs: Management practices from China', Sage Open, 11(3), p. 21582440211047580. doi: https://doi.org/10.1177/21582440211047581
- Anangwe, Z.L. and Malenya, A. (2020). 'Effect of financial management practices on performance of micro and small enterprises in Bungoma Town', *The strategic journal of business & change management*, 7(2), pp. 648–671. doi: https://doi.org/10.61426/sjbcm.v7i2.1648
- Asiedu, M.A. *et al.* (2020). 'Working Capital Management Effect on Return on Equity-Evidence from Listed Manufacturing Firms on Ghana Stock Exchange (GSE)', *International Journal of Finance and Accounting*, 5(1), pp. 47–66. doi: https://doi.org/10.47604/ijfa.1125
- Badi, L. and Ishengoma, E. (2021). 'Access to debt finance and performance of small and medium enterprises', *Journal of Financial Risk Management*, 10(3), pp. 241–259. doi: https://doi.org/10.4236/jfrm.2021.103014
- Baños-Caballero, S., García-Teruel, P.J. and Martínez-Solano, P. (2020). 'Net operating working capital and firm value: A cross-country analysis', *BRQ Business Research Quarterly*, 23(3), pp. 234–251. doi: https://doi.org/10.1016/j.brq.2019.03.003
- Becker, J.-M. *et al.* (2023). 'PLS-SEM's most wanted guidance', *International Journal of Contemporary Hospitality Management*, 35(1), pp. 321–346. doi: https://doi.org/10.1108/ijchm-04-2022-0474
- Bhatia, S. and Srivastava, A. (2016). 'Working capital management and firm performance in emerging economies: Evidence from India', *Management and Labour Studies*, 41(2), pp. 71–87. doi: https://doi.org/10.1177/0258042x16658733
- Bhattacharyya, A., Rahman, M.L. and Wright, S. (2023). 'Improving small and medium-size enterprise performance: Does working capital management enhance the effectiveness of financial inclusion?', *Accounting & Finance*, 63(4), pp. 3943–3969. doi: https://doi.org/10.1111/acfi.13081
- Bian, Y. *et al.* (2018). 'A dynamic lot-sizing-based profit maximization discounted cash flow model considering working capital requirement financing cost with infinite production capacity', *International Journal of Production Economics*, 196, pp. 319–332. doi: https://doi.org/10.1016/j.ijpe.2017.12.002
- Blome, C., Schoenherr, T. and Rexhausen, D. (2013). 'Antecedents and enablers of supply chain agility and its effect on performance: a dynamic capabilities perspective', *International Journal of Production Research*, 51(4), pp. 1295–1318. doi: https://doi.org/10.1080/00207543.2012.728011
- Boisjoly, R.P., Conine Jr, T.E. and McDonald IV, M.B. (2020). 'Working capital management:

- Financial and valuation impacts', *Journal of Business Research*, 108, pp. 1–8. doi: https://doi.org/10.1016/j.jbusres.2019.09.025
- Braimah, A. *et al.* (2021). 'Working capital management and SMEs profitability in emerging economies: The Ghanaian case', *SAGE Open*, 11(1). doi: https://doi.org/10.1177/2158244021989317
- Brixiová, Z., Kangoye, T. and Yogo, T.U. (2020). 'Access to finance among small and medium-sized enterprises and job creation in Africa', *Structural Change and Economic Dynamics*, 55, pp. 177–189. doi: https://doi.org/10.2139/ssrn.3695409
- Brownson, C.D. (2014). 'Differences in age, gender, social norm and education as determinant of entrepreneurial behavior in southern Nigeria', *Journal of Small Business and Entrepreneurship Development*, 2(1), pp. 161–173. doi: https://doi.org/10.14738/assrj.413.3357
- Chauhan, G.S. (2019). 'Are working capital decisions truly short-term in nature?', *Journal of Business Research*, 99, pp. 238–253. doi: https://doi.org/10.1016/j.jbusres.2019.02.032
- Chen, C. and Kieschnick, R. (2018). 'Bank credit and corporate working capital management', *Journal of Corporate Finance*, 48, pp. 579–596. doi: https://doi.org/10.1016/j.jcorpfin.2017.12.013
- Chilembo, T. (2021). 'A study of the factors affecting small and medium enterprises (SMEs) access to finance. A case of Lusaka based SMEs', *American Journal of Industrial and Business Management*, 11(5), pp. 437–460. doi: https://doi.org/10.4236/ajibm.2021.115028
- Chin, W.W. *et al.* (2013). 'Controlling for common method variance in PLS analysis: the measured latent marker variable approach', in *New perspectives in partial least squares and related methods*. Springer, pp. 231–239. doi: https://doi.org/10.1007/978-1-4614-8283-3 16
- Chouki, M. *et al.* (2020). 'Barriers to information technology adoption within small and medium enterprises: A systematic literature review', *International Journal of Innovation and Technology Management*, 17(01), p. 2050007. doi: https://doi.org/10.1142/9789811247729 0015
- Dhole, S., Mishra, S. and Pal, A.M. (2019). 'Efficient working capital management, financial constraints and firm value: A text-based analysis', *Pacific-Basin Finance Journal*, 58, p. 101212. doi: https://doi.org/10.1016/j.pacfin.2019.101212
- Dima, A.M. *et al.* (2018). 'The relationship between the knowledge economy and global competitiveness in the European Union', *Sustainability*, 10(6), p. 1706. doi: https://doi.org/10.3390/su10061706
- Dimson, J. et al. (2020). COVID-19 and European small and medium-size enterprises: How they are weathering the storm, McKinsey & Company. Available at: https://www.mckinsey.com/industries/public-sector/our-insights/covid-19-and-european-small-and-medium-size-enterprises-how-they-are-weathering-the-storm (Accessed: 20 January 2021).
- Doan, A., Le, A. and Tran, Q. (2020). 'Economic uncertainty, ownership structure and small and medium enterprises performance', *Australian Economic Papers*, 59(2), pp. 102–137. doi: https://doi.org/10.1111/1467-8454.12174
- Doms, M., Lewis, E. and Robb, A. (2010). 'Local labor force education, new business characteristics, and firm performance', *Journal of urban economics*, 67(1), pp. 61–77. doi: https://doi.org/10.1016/j.jue.2009.10.002
- Dudek, M. and Śpiewak, R. (2022). 'Effects of the COVID-19 pandemic on sustainable food systems: Lessons learned for public policies? The case of Poland', *Agriculture*, 12(1), p. 61. doi: https://doi.org/10.3390/agriculture12010061
- El-Sady, H.M., Ahmed, H. and Hamdy, H. (2022). 'The impact of assets structure and the components of cash conversion cycle on the Egyptian SMEs financial failure predictability', *The Journal of Entrepreneurial Finance (JEF)*, 24(1), pp. 25–43. doi: https://doi.org/10.57229/2373-1761.1427
- Elahi, A.R. *et al.* (2021). 'Critical factors associated with the access to bank credit: An exploratory study', *Humanities and Social Sciences Reviews*, 9(3), pp. 135–144. doi: https://doi.org/10.18510/hssr.2021.9315
- Elbadry, A. (2018). 'The determinants of working capital management in the Egyptian SMEs', *Accounting and Finance Research*, 7(2), p. 155. doi: https://doi.org/10.5430/afr.v7n2p155
- Eton, M. (2018). 'Government interventions in supporting SME growth in Lira district, Northern

- Uganda'. International Journal of Emerging Research and Development Vol 1, Issue 2 pp107-113. www.IJERND.Com
- Eton, M. et al. (2019). 'Cash management and financial performance of business firms in Northern Uganda a Case of Lira District', *The International Journal of Business Management and Technology*, 3(4), pp. 115–125.
- Eton, M. et al. (2021). 'Financial inclusion and the growth of small medium enterprises in Uganda: empirical evidence from selected districts in Lango sub-region', *Journal of Innovation and Entrepreneurship*, 10, pp. 1–23. doi: https://doi.org/10.1186/s13731-021-00168-2
- European Commission (2016). *Annual report on European SMEs 2015/2016*. Available at: https://ec.europa.eu/docsroom/documents/21251/attachments/1/translations/en/renditions/native.
- Foulks, L. (2005). Financial Management and Control. London: FTC Fouls Lynch Publications.
- Fuad, M. (2020). 'The Role of Relationship Lending in SMEs Funding', in *ICBAE 2020: Proceedings* of the 2nd International Conference of Business, Accounting and Economics, ICBAE 2020, 5-6 August 2020, Purwokerto, Indonesia. European Alliance for Innovation, p. 333.
- Gallegos Mardones, J. (2022). 'Working capital management and business performance: evidence from Latin American companies', *Economic research-Ekonomska istraživanja*, 35(1), pp. 3189–3205. doi: https://doi.org/10.1080/1331677x.2021.1986675
- Hair, J.F. et al. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R, Handbook of Market Research. Cham: Springer. doi: https://doi.org/10.1007/978-3-319-57413-4 15
- Herrera, S. and Kouame, W. (2017).. *Productivity in the non-oil sector in Nigeria: Firm-level evidence, World Bank Policy Research Working Paper*. doi: https://doi.org/10.1596/1813-9450-8145
- Hettihewa, S. and Wright, C.S. (2018). 'Nature and importance of small business in regional Australia, with a contrast to studies of urban small businesses', *The Australasian Journal of Regional Studies*, 24(1), pp. 96–121.
- Hult, G.T.M. *et al.* (2018). 'Addressing endogeneity in international marketing applications of partial least squares structural equation modeling', *Journal of International Marketing*, 26(3), pp. 1–21. doi: https://doi.org/10.1509/jim.17.0151
- International Trade Centre (2019). SME Competitiveness Outlook 2019: Big Money for Small Business-Financing the Sustainable Development Goals. UN.
- Islam, A.K.M.H. *et al.* (2021). 'Challenges of Small-and Medium-Sized Enterprises (SMEs) in business growth: A case of footwear industry', *Journal of Operations and Strategic Planning*, 4(1), pp. 119–143. doi: https://doi.org/10.1177/2516600x20974121
- Kaunda, C.M. (2013). *Entrepreneurial orientation, age of owner and small business performance in Johannesburg*. University of the Witwatersrand.
- Kock, N. (2015). 'Common method bias in PLS-SEM: A full collinearity assessment approach', *International Journal of e-Collaboration (ijec)*, 11(4), pp. 1–10. doi: https://doi.org/10.1007/978-3-319-64069-3 11
- Koreen, M. and Cusmano, L. (2019). 'Fostering greater SME participation in a globally integrated economy', in *Strengthening SMEs and entrepreneurship for productivity and inclusive growth: OECD 2018 ministerial conference on SMEs*, pp. 73–90.
- Kumar, M.A. and Ayedee, D.N. (2021). 'Technology Adoption: A Solution for SMEs to overcome problems during COVID-19', *Forthcoming, Academy of Marketing Studies Journal*, 25(1).
- Lakuma, C.P. (2016). Study to uncover challenges facing Micro-SMEs underway, Economic Policy Research Centre. Available at: https://eprcug.org/eprc-highlights/study-to-uncover-challenges-facing-micro-smes-underway/ (Accessed: 27 July 1BC).
- Lappalainen, J. and Niskanen, M. (2012). 'Financial performance of SMEs: impact of ownership structure and board composition', *Management research review*, 35(11), pp. 1088–1108. doi: https://doi.org/10.1108/01409171211276954
- Le, B. (2019). 'Working capital management and firm's valuation, profitability and risk: Evidence from a developing market', *International Journal of Managerial Finance*, 15(2), pp. 191–204. doi: https://doi.org/10.1108/ijmf-01-2018-0012
- Lyani, M.N. (2018). 'Effects of accounts receivable financing practices on growth of SMEs in Kakamega County, Kenya', *Expert journal of finance*, 6(1), pp. 1–11.

- Lyngstadaas, H. (2020). 'Packages or systems? Working capital management and financial performance among listed US manufacturing firms', *Journal of Management Control*, 31(4), pp. 403–450. doi: https://doi.org/10.1007/s00187-020-00306-z
- Mahmood, F. *et al.* (2019). 'Moderating effects of firm size and leverage on the working capital finance–profitability relationship: evidence from China', *Sustainability*, 11(7), p. 2029. doi: https://doi.org/10.3390/su11072029
- Matchaba-Hove, T.M. and Goliath, J.E. (2016). 'The entrepreneurial orientation and business performance relationship: a study of young adult-owned small businesses', in *Proceedings of the 28th Annual Conference of the Southern African Institute of Management Scientist, held in Pretoria, South Africa.*
- Meresa, M. (2018). 'Factors affecting the performance of small-scale enterprise (restaurant and hotels) Inraya Azebo Wereda: The case of Mohoni, Maychew and Korem', *International Journal of Managerial Studies and Research (IJMSR)*, 6(1), pp. 68–92. doi: https://doi.org/10.20431/2349-0349.0601010
- Millan, J.M. *et al.* (2014). 'The value of an educated population for an individual's entrepreneurship success', *Journal of business venturing*, 29(5), pp. 612–632. doi: https://doi.org/10.2139/ssrn.1853223
- Mohammed, I. and Bunyaminu, A. (2021). 'Major obstacles facing business enterprises in an emerging economy: the case of Ghana using the World Bank Enterprise Survey', *Journal of Small Business and Enterprise Development*, 28(3), pp. 475–487. doi: https://doi.org/10.1108/jsbed-04-2020-0110
- Morara, K. and Sibindi, A.B. (2021). 'Determinants of financial performance of insurance companies: Empirical evidence using Kenyan data', *Journal of risk and financial management*, 14(12), p. 566. doi: https://doi.org/10.3390/jrfm14120566
- Motta, V. and Sharma, A. (2020). 'Lending technologies and access to finance for SMEs in the hospitality industry', *International Journal of Hospitality Management*, 86, p. 102371. doi: https://doi.org/10.1016/j.ijhm.2019.102371
- Muhwezi, K. and Kiliman, N. (2023). 'Survival of Uganda's small and medium businesses in a cox model'. doi: https://doi.org/10.5897/ajbm2023.9452
- Musabayana, G.T., Mutambara, E. and Ngwenya, T. (2022). 'An empirical assessment of how the government policies influenced the performance of the SMEs in Zimbabwe', *Journal of Innovation and Entrepreneurship*, 11(1), p. 40. doi: https://doi.org/10.21203/rs.3.rs-500309/v1
- Musah, A. (2017). 'Benefits and challenges of bookkeeping and accounting practices of SMEs and its effect on growth and performance in Ghana', *Journal of Accounting, Business and Management* (*JABM*), 24(2), pp. 16–36.
- Muthoni, J.G., Kiprotich, I.N. and Kipyego, L. (2020). 'Management of Accounts Receivable and Financial Performance Of Manufacturing Firms Listed In Nairobi Stock Exchange, Kenya', *International Journal of Scientific and Research Publications*, 10(12), pp. 513–523. doi: https://doi.org/10.29322/ijsrp.10.12.2020.p10858
- Nguyen, A.H., Pham, H.T. and Nguyen, H.T. (2020). 'Impact of working capital management on firm's profitability: Empirical evidence from Vietnam', *Journal of Asian Finance, Economics and Business*, 7(3), pp. 115–125. doi: https://doi.org/10.13106/jafeb.2020.vol7.no3.115
- Nicolas, T. (2022). 'Short-term financial constraints and SMEs' investment decision: evidence from the working capital channel', *Small Business Economics*, 58(4), pp. 1885–1914. doi: https://doi.org/10.2139/ssrn.3469469
- OECD. (2019). OECD Studies on SMEs and Entrepreneurship Strengthening SMEs and Entrepreneurship for Productivity and Inclusive Growth OECD 2018 Ministerial Conference on SMEs. OECD Publishing.
- Okitela, S. (2024). 'SMEs urged to build for sustainabilit through innovation', *New Vision*. Available at: https://www.newvision.co.ug/category/business/smes-urged-to-build-for-sustainability-throug-NV 192895 (Accessed: 26 July 2025).
- Olagunju, A.O., Nwaobia, A.N. and Ogundajo, G.O. (2020). 'Working capital and profitability of listed hotel companies in Nigeria', *African Journal of Hospitality, Tourism and Leisure*, 9(4), pp. 669–684.
- Orobia, L.A. et al. (2020). 'Inventory management, managerial competence and financial performance

- of small businesses', *Journal of Accounting in Emerging Economies*, 10(3), pp. 379–398. doi: https://doi.org/10.1108/jaee-07-2019-0147
- Owuor, G.O., Agusioma, N. and Wafula, F. (2021). 'Effect of accounts receivable management on financial performance of chartered public universities in Kenya', *International Journal of Current Aspects in Finance, Banking and Accounting*, 3(1), pp. 73–83. doi: https://doi.org/10.35942/ijcfa.v3i1.182
- Park, S. and Gupta, S. (2012). 'Handling endogenous regressors by joint estimation using copulas', *Marketing Science*, 31(4), pp. 567–586. doi: https://doi.org/10.1287/mksc.1120.0718
- Peng, J. and Zhou, Z. (2019). 'Working capital optimization in a supply chain perspective', *European Journal of Operational Research*, 277(3), pp. 846–856. doi: https://doi.org/10.1016/j.ejor.2019.03.022
- Pisar, P. and Bilkova, D. (2019). 'Controlling as a tool for SME management with an emphasis on innovations in the context of Industry 4.0', *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 14(4), pp. 763–785. doi: https://doi.org/10.24136/eq.2019.035
- Pitchayadol, P. et al. (2018). 'Innovativeness in Thai family SMEs: An exploratory case study', *Journal of Small Business Strategy (archive only)*, 28(1), pp. 38–48.
- Podsakoff, P.M. *et al.* (2003). 'Common method biases in behavioral research: a critical review of the literature and recommended remedies.', *Journal of applied psychology*, 88(5), p. 879. doi: https://doi.org/10.1037/0021-9010.88.5.879
- Quartey, P. (2001). 'Regulation, competition and small and medium enterprises in developing countries'.
- Richard, E. and Kabala, B. (2020). 'Account receivable management practices of SMEs in Tanzania: a qualitative approach', *Business Management Review*, 22(2), pp. 51–66.
- Seth, H. *et al.* (2020) 'Assessing working capital management efficiency of Indian manufacturing exporters', *Managerial Finance*, 46(8), pp. 1061–1079. doi: https://doi.org/10.1108/mf-02-2019-0076
- Seth, H. *et al.* (2021). 'Exploring predictors of working capital management efficiency and their influence on firm performance: An integrated DEA-SEM approach', *Benchmarking: An International Journal*, 28(4), pp. 1120–1145. doi: https://doi.org/10.1108/bij-05-2020-0251
- Shaik, A.R. (2021) 'Components of working capital and profitability in Saudi Arabian companies', *Investment Management and Financial Innovations*, 18(3), pp. 52–62. doi: https://doi.org/10.21511/imfi.18(3).2021.05
- Singh, H.P., Kumar, S. and Colombage, S. (2017). 'Working capital management and firm profitability: a meta-analysis', *Qualitative Research in Financial Markets*, 9(1), pp. 34–47. doi: https://doi.org/10.1108/qrfm-06-2016-0018
- Soda, M.Z. *et al.* (2022). 'Is firms' profitability affected by working capital management? A novel market-based evidence in Jordan', *Cogent Business & Management*, 9(1), p. 2049671. doi: https://doi.org/10.1080/23311975.2022.2049671
- Soukhakian, I. and Khodakarami, M. (2019). 'Working capital management, firm performance and macroeconomic factors: Evidence from Iran', *Cogent Business & Management*, 6(1), p. 1684227. doi: https://doi.org/10.1080/23311975.2019.1684227
- Tefera, K.T. (2019). 'Determinants of Access to Finance for Micro and Small-Scale Enterprises in Nekemte Town', *Research Journal of Finance and Accounting*, 10(19), pp. 34–46. doi: https://doi.org/10.7176/rjfa/10-19-04
- Uganda Bureau of Statistics (2021). *Annual Statistical Abstract*. Kampala. Available at: https://library.health.go.ug/file-download/download/public/1531.
- Ukaegbu, B. (2014). 'The significance of working capital management in determining firm profitability: Evidence from developing economies in Africa', *Research in International Business and Finance*, 31, pp. 1–16. doi: https://doi.org/10.1016/j.ribaf.2013.11.005
- Wang, B. (2019). 'The cash conversion cycle spread', *Journal of financial economics*, 133(2), pp. 472–497. doi: https://doi.org/10.2139/ssrn.2964330
- World Bank (2019). *Small and Medium Enterprises (SMEs) finance*. Available at: https://www.worldbank.org/en/topic/smefinance (Accessed: 16 October 2024).
- Yang, W. et al. (2021). 'Access to finance and SMEs' trade credit: evidence from a regression discontinuity design', Accounting & Finance, 61(2), pp. 2997–3029. doi:

https://doi.org/10.1111/acfi.12691

- Yang, Y. et al. (2019). 'Alleviating financing constraints of SMEs through supply chain', Sustainability, 11(3), p. 673. doi: https://doi.org/10.3390/su11030673
- Yazdanfar, D. (2013). 'Profitability determinants among micro firms: evidence from Swedish data', *International Journal of Managerial Finance*, 9(2), pp. 151–160. doi: https://doi.org/10.1108/17439131311307565
- Yazdanfar, D. and Öhman, P. (2015). 'The impact of credit supply on sales growth: Swedish evidence', *International Journal of Managerial Finance*, 11(3), pp. 329–340. doi https://doi.org/10.1108/ijmf-07-2014-0110
- Yin, C. et al. (2020). 'Evaluating the credit risk of SMEs using legal judgments', *Decision Support Systems*, 136, p. 113364. doi: https://doi.org/10.1016/j.dss.2020.113364
- Zimon, G. (2018). 'Influence of group purchasing organizations on financial situation of Polish SMEs', *Oeconomia Copernicana*, 9(1), pp. 87–104. doi: https://doi.org/10.24136/oc.2018.005
- Zygmunt, A. (2017). 'Innovation activities of Polish firms. Multivariate analysis of the moderate innovator countries', *Oeconomia Copernicana*, 8(4), pp. 505–521. doi: https://doi.org/10.24136/oc.v8i4.31