

# An Investigation of the Challenges of Internationalization on Export Performance of Zambia's Manufacturing SMEs

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## Abstract

The internationalization of Small and Medium Enterprises (SMEs) within the manufacturing sector is frequently hindered by significant challenges that impede their export performance. To comprehensively address these obstacles and pinpoint vital predictors of export performance among manufacturing SMEs, the study assessed the state of export performance of manufacturing SMEs in international markets, identified the challenges of internationalization that affect export performance of manufacturing SMEs and examined the effect of internationalization challenges on export performance. A quantitative approach was used to conduct this study and a total of 92 manufacturing SMEs participated in the study. Multiple Regression Analysis and Analysis of Variance (ANOVA) was analysed using Statistical Package for Social Sciences (SPSS) version 23.0. The study findings revealed a substantial relationship between internationalization challenges and export performance. Challenges stemming from exogenous factors such as governmental policies, procedural intricacies, and competitive dynamics collectively exert a negative effect on export performance. A negative correlation exists between financial challenges and export performance implying that each unit increment in human resource challenges could potentially lead to a reduction of 0.59 units in the export performance. In contrast, information and knowledge challenges exhibit a positive correlation to export performance suggesting a promising avenue for potential improvement. This study provides indispensable insights into the challenges encountered by manufacturing SMEs during their internationalization journey and the subsequent repercussions on their export performance. The implications underscore the necessity of tailored strategies to effectively surmount these challenges, particularly within realms such as knowledge acquisition and management. By proactively addressing these challenges, manufacturing SMEs can navigate international markets with heightened agility, thereby elevating their export performance.

**Keywords:** Challenges, Internationalisation, Manufacturing, Export Performance, SMEs, Zambia

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## 1. Introduction

SMEs are the backbone of economies worldwide, constituting 90% of businesses and generating 50% of employment opportunities. They play a crucial role in economic and social development, contributing significantly to the GDP of various countries such as China, Germany, Japan, and the United States (World Bank, 2022). Despite their pivotal role in national economies, SMEs in the manufacturing sector face hurdles in internationalizing their operations and entering foreign markets. Data from the World Trade Organization (WTO) reveals that manufacturing SMEs' exports to international markets account for only a fraction of their total sales, lagging larger firms (WTO, 2022). African manufacturing SMEs face substantial challenges, with only 3% of their total sales coming from direct exports, compared to 8.7% for manufacturing SMEs in developing Asia (WTO, 2016).

The study explores the factors contributing to these low export numbers and identifies internationalization challenges as major obstacles. Internationalization is crucial for manufacturing SMEs to gain access to technological and knowledge capabilities from foreign markets, enabling them to become global market players (Schweizer, et al., 2010). However, these challenges, which include working capital financing, limited information, and lack of skills and knowledge, hinder SMEs' ability to establish and maintain business operations in foreign markets (OECD, 2009). The study aims to investigate and address these challenges, empowering manufacturing SMEs to unlock their full potential in the global market. By overcoming these obstacles, SMEs can drive economic growth, foster innovation, and create more employment opportunities in both developed and developing countries.

## 2. Literature Review

### 2.1 Manufacturing SMEs

SMEs lack a standardized definition, but their categorization is often based on the number of employees they employ. Various organizations provide different criteria for defining SMEs, such as WTO, which considers firms with 10 to 250 employees as SMEs, and the International Trade Centre (ITC), which defines SMEs as those employing fewer than 100 workers. This classification holds significant implications for policy formulation,

financing access, taxation, and support programs aimed at fostering the growth of these enterprises. The growth of manufacturing SMEs can lead to skill development and human capital formation through employee training, enhancing technical and managerial capabilities.

To capitalize on the potential of manufacturing SMEs as drivers of job creation, the Zambian government and stakeholders need to provide an enabling environment and support. This entails actions like improving access to finance, fostering innovation and technology adoption, enhancing infrastructure, and establishing favorable regulatory frameworks. Such measures can leverage the expansion of manufacturing SMEs to drive economic development and tackle unemployment challenges.

Internationalization, as defined by scholars like Sanyal et al. (2020), Schweizer et al. (2010), and Welch & Luostarinen (1988), refers to the extension of business activities beyond national borders, either through direct or indirect exports, contractual agreements, or foreign direct investment (FDI). This study focuses on manufacturing SMEs involved in the production and export of goods, particularly those in light industrial sectors. Manufacturing SMEs are vital contributors to job creation and economic growth, playing a pivotal role in absorbing the labor force, spurring innovation, and generating demand in related industries. However, to maximize their potential, challenges related to market access, infrastructure, and regulatory environments must be addressed.

The challenges of internationalization encompass both internal and external factors. Internal challenges include resource limitations, financial constraints, marketing issues, and human resource constraints. On the other hand, external challenges consist of competition, procedural obstacles, government support, and exogenous influences. These challenges collectively have a negative impact on the export performance of SMEs in international markets, hindering their growth and success.

## *2.2 Internationalization Challenges*

Internationalization challenges are obstacles that hinder firms from engaging in international activities. They can encompass attitudinal, structural, or operative impediments (Leonidou, 1995). These challenges can inhibit firms from venturing into foreign markets and continuing their operations there (Devadason & Subramaniam, 2016). The OECD categorizes these challenges as internal, stemming from the firms themselves, and external, arising from the environment in which firms operate (OECD, 2009).

Export performance is crucial for manufacturing SMEs aiming to enhance business competitiveness and growth. It has become significant for SMEs of various sizes. Various strategies can facilitate exports, including joint ventures, franchising agreements, strategic alliances, and foreign direct investment (FDI) through mergers and acquisitions (Malhotra et al., 2003). However, manufacturing SMEs tend to lag behind service-based SMEs in terms of export performance (WTO, 2016). The export performance of manufacturing SMEs also varies among countries, with larger economies often dominating exports (OECD, 2018).

Challenges of internationalization can be categorized as internal or external to SMEs (OECD, 2009). Internal challenges stem from factors within the company, such as informational/knowledge challenges, financial challenges, marketing challenges, and human resources challenges. External challenges arise from factors in the home or foreign markets, including competition challenges, procedural challenges, governmental challenges, and exogenous challenges. These challenges collectively impact SMEs' ability to internationalize and engage in export activities.

The challenges of internationalization have been found to negatively affect the export performance of manufacturing SMEs. Research in various countries, such as Pakistan, Vietnam, and Sri Lanka, has shown that challenges related to knowledge, resources, procedures, exogenous factors, technology, government support, and legal requirements can hinder SMEs' export performance. However, research on the challenges of internationalization in Sub-Saharan Africa, particularly among least-developed countries, remains limited. This study aims to contribute to addressing this research gap by focusing on the challenges faced by manufacturing SMEs in Zambia.

## *2.3 Export Performance*

Empirical literature defines export performance for manufacturing SMEs as the proportion of their export sales in the international market (WTO, 2016). This is often expressed as a percentage of total sales or volumes of exported goods (Raza et al., 2018; Hironaka et al., 2017). Additionally, the literature indicates that export performance can be analyzed on a global scale, reflecting SMEs' share of export sales in international markets, or can be narrowed down to regional, national, and sector-specific levels, providing more targeted insights (WTO, 2016).

## **3. The Theoretical and Conceptual Framework**

The Theory of Constraints (TOC), introduced by Goldratt in the 1980s, is a management approach focused on maximizing organizational profit. It acknowledges that constraints hinder an organization's desired performance

and development. The TOC process involves identifying, exploiting, optimizing, and elevating constraints through high-level actions. While initially applied in production and resource allocation, TOC's systematic process can be extended to supply chain management, project management, and research and development, offering a structured way to enhance business operations and meet performance goals.

In contrast, SWOT analysis, developed by Albert S Humphrey, investigates internal and external factors affecting an organization. The acronym represents strengths, weaknesses, opportunities, and threats. SWOT analysis helps identify controllable internal factors (strengths and weaknesses) and uncontrollable external factors (opportunities and threats). This approach has been widely used to uncover challenges in SME development, particularly in domains like human resources, government regulations, competition, and internationalization. Both TOC and SWOT analysis are powerful tools in business management, assisting organizations, including SMEs, in recognizing challenges and devising strategies for growth and improvement. By applying these approaches in various contexts, organizations gain a deeper understanding of business dynamics and can create effective strategies to overcome obstacles and achieve success. Figure 1 depicts the conceptual framework that was used in this study.

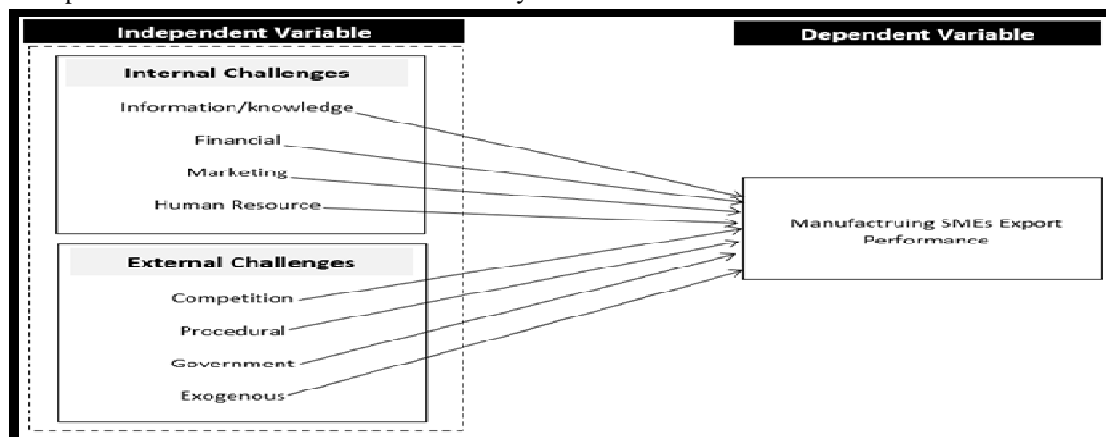


Figure 1: Conceptual Framework

Therefore, based on the conceptual framework in figure 1, following hypotheses have been developed.

$H_0$ : Information/Knowledge challenges cannot affect the export performance of manufacturing SMEs

$H_1$ : Information/Knowledge challenges can affect the export performance of manufacturing SMEs.

$H_0$ : Financial challenges cannot affect the export performance of manufacturing SMEs

$H_1$ : Financial challenges can have effect on the export performance of manufacturing SMEs.

$H_0$ : Marketing challenges cannot affect the export performance of manufacturing SMEs

$H_1$ : Marketing challenges can affect the export performance of manufacturing SMEs.

$H_0$ : Human resource challenges cannot affect the export performance of manufacturing SMEs

$H_1$ : Human resource challenges can have effect on the export performance of manufacturing SMEs.

#### 4. Research Methodology

In this study, a quantitative research approach was employed to identify trends and relationships between variables. Both primary and secondary data collection methods were utilized, and the collected data was carefully analyzed and interpreted to highlight the key research issues. A survey strategy was employed to investigate because survey provides a basis for generalizing the results. Survey questionnaires were used to collect data from the manufacturing companies. Out of a total of 120 manufacturing SMEs that are actively registered with Patents and Companies Registration Agency (PACRA), a sample size of 92 was drawn by considering a confidence level of 95% and margin of error of 5%. Simple random sampling was used to select the manufacturing SMEs.

#### 5. Reliability and Validity

Ensuring reliability and validity is crucial in research as it ensures the collection of high-quality and dependable data. These features enhance transparency and minimize the potential for researcher bias in quantitative research (Singh, 2014). To achieve this, the study employed rigorous methods and measurement techniques that precisely measure the variables relevant to addressing the research questions.

#### 6. Analysis of the Results

##### 6.1 Firm Characteristics

In this study, the response rate represents the total number of questionnaires that were completed and submitted

by the participants. A total of 79 questionnaires were received from the manufacturing SMEs representing 85.9% as shown in table 1.

Table.1: Participants' Response Rate

Sample Size	Actual Response	Response Rate
92	79	85.9%

### 6.2 Descriptive Statistics

As can be seen in Table 2 below, the summary of the findings suggest that, manjority of the manufacturing SMEs are affected variables with mean above 3. The findings also suggest that information/knowledge and financials are key variables affecting SMEs.

Table 2: Descriptive Statistics for Internal Challenges

Variable	Item	Mean	Standard Deviation
Information/Knowledge	The company lacks knowledge of potential export markets.	3.08	1.17
	The company lacks knowledge of how to export to foreign markets	3.09	1.24
	The company lacks information about foreign opportunities for its products/services.	3.24	1.22
Financial	The company lacks funds to finance export-related investments in the required time.	3.16	1.18
	Methods of payment used in international operations are financially high for the company.	2.66	1.30
	The company faces insufficient financial support from local banks.	2.59	1.17
Marketing	The price of our products is higher compared to the prices of substitute products in foreign markets.	2.61	1.30
	Our products cannot reach customers in remote areas of our foreign market.	2.73	1.06
	The <b>quality</b> of our products cannot be compared to those of substitutes in a foreign market.	2.70	1.10
Human Resource	Employees in our company lack skills for managing foreign markets.	2.72	1.27
	Our employees have less education on exports compared to peers in foreign countries.	2.71	1.12
	Our employees cannot easily find solutions for more complex problems that can be faced in export markets.	2.84	1.15

### 6.3 Correlation Coefficients for Internal Challenges and Export Performance

The results of a regression analysis, specifically focusing on the coefficients related to the variable "Information/Knowledge Challenges" and its impact on "Export Performance. Table 3 below addresses model coefficient results that show a significant standardized negative Beta coefficient value of -0.581 in favor of the alternate hypothesis and suggest that export performance can reduce by 0.581 units for every unit increase in information/knowledge challenges. The output is from Table 3, where the model's coefficients are presented along with their associated statistics

Table 3: Coefficients for Information/Knowledge Challenges

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	15.072	.758		19.879	.000	13.562	16.582
	Information/Knowledge	-.480	.077	-.581	-6.261	.000	-.633	-.327

a. Dependent Variable: Export Performance

### 6.4 Coefficients for Finance Challenges

The coefficient results in table 4 supports the alternate hypothesis since the standardized coefficient Beta coefficient -0.706 is negative and significant at a 0.05 significance level suggesting that export performance can reduce by 0.706 units for every increase in financial challenge.

Table 4: Coefficients for Finance Challenges

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
2	(Constant)	15.394	.588		26.158	.000	14.222	16.565
	Financial	-.575	.066	-.706	-8.760	.000	-.705	-.444
a. Dependent Variable: Export Performance								

### 6.5 Coefficients for Marketing Challenges

Table 5 shows the coefficient result for marketing challenge as the predictor variable. The standardized beta coefficient for marketing is -0.716 which supports the results of the hypothesis that marketing challenge can have a negative effect on the export performance of manufacturing SMEs and that, export performance can reduce by 0.716 units for every unit increase in marketing challenge.

Table 5: Coefficients for Marketing Challenges

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
3	(Constant)	15.494	.584		26.549	.000	14.332	16.656
	Marketing	-.614	.068	-.716	-9.009	.000	-.750	-.478
a. Dependent Variable: Export Performance								

### 6.6. Coefficients for Finance Challenges

The coefficient results in table 6 show a negative standardized Beta coefficient equal to -0.590 for the human resource variable which supports the hypothesis test result that human resource challenges can have a negative effect on the export performance of manufacturing SMEs. According to the coefficient result, the export performance of manufacturing SMEs can reduce by 0.590 units for every unit increase in human resource challenges.

Table 6: Coefficients for Human Resource Challenges

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	14.895	.716		20.814	.000	13.470	16.320
	Human resource	-.524	.082	-.590	-6.409	.000	-.687	-.361
a. Dependent Variable: Export Performance								

### 6.7. Coefficients for Competition Challenges

The coefficients results in table 7 show a negative standardized Beta coefficient equal to -0.540 for the competition challenge variable which supports the results from the hypothesis that competition challenges can have a negative effect on export performance. Thus, the export performance of manufacturing SMEs can reduce by 0.540 units for every unit increase in competition challenges.

Table 7: Coefficients for Competition Challenges

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
5	(Constant)	13.338	.550		24.256	.000	12.243	14.433
	Competition	-.463	.082	-.540	-5.632	.000	-.627	-.300
a. Dependent Variable: Export Performance								

## 7. Discussion

The findings in this research provides valuable insights into the challenges faced by manufacturing SMEs in relation to their export performance in international markets. The study explored three main objectives, namely assessing the state of export performance, identifying challenges of internationalization that affect export performance, and examining the effect of internationalization challenges on export performance. Regarding the demographic information of the participants, the majority were middle managers, and the experience of the manufacturing SMEs varied. The study encompassed various sectors, with the beverage sector being the most prominent. Furthermore, a significant portion of the SMEs had no export experience, indicating a need for understanding the challenges they face in entering foreign markets.

The findings related to Objective 1 revealed that internationalization challenges had a significant impact on export performance. Challenges such as information/knowledge, financial, marketing, and human resource challenges were perceived to hinder export ventures. These challenges are crucial factors to address, as they can affect market export position, product purchases, and revenue generation for manufacturing SMEs in international markets. The study aligns with existing literature on challenges faced by SMEs in internationalization and exporting, emphasizing the importance of overcoming these obstacles. This finding is consistent with the works of Leonidou (1995) and OECD (2009) which categorize challenges as internal and external to firms, and Malhotra et al. (2003) who highlight the significance of strategies like joint ventures and foreign direct investment in facilitating exports.

Objective 2 focused on identifying specific challenges that affect export performance. Participants agreed on challenges such as technological advancements in foreign companies, pricing competitiveness, customs procedures, lack of financial aid from the home government, and variations in exchange rates. These challenges highlight the complex nature of internationalization and the need for SMEs to address various procedural, governmental, and external challenges to enhance their export performance. This is in line with the research of Safari & Saleh (2020) and Fernando & Samarakoon (2020) who identified factors such as government support and legal requirements as crucial in the internationalization process.

Finally, Objective 3 examined the effect of internationalization challenges on export performance. The findings indicated that challenges such as financial, marketing, government, competition, and exogenous challenges negatively influenced export performance. The regression analyses provided insight into the relationships between these challenges and export performance, emphasizing the significance of each challenge in impacting SMEs' success in foreign markets. These results correspond with the work of Reza et al. (2021), Safari & Saleh (2020), and Karedza & Govender (2019), all of whom explored the negative impact of various challenges on the export performance of manufacturing SMEs in different countries.

Overall, the study's findings validate the importance of understanding and addressing the challenges faced by manufacturing SMEs in their internationalization efforts. By linking these findings back to the relevant literature, the study reinforces the significance of existing research and contributes to a deeper understanding of the challenges and opportunities in the context of export performance for manufacturing SMEs in international markets.

## 8. Conclusion

The research questions that were proposed were answered by the evidence gathered through the data collected and analyzed. The results of various F-tests indicate the significance of different challenges affecting the export performance of manufacturing SMEs. These findings align with the objectives of the research study. The F-test  $(1,77) = 67.532$  was significant at the 0.05 level of significance, leading to the rejection of the null hypothesis. As a result, it was concluded that exogenous challenges have a negative impact on the export performance of manufacturing SMEs. Similarly, the F-test  $(1,77) = 91.829$  was significant at the 0.05 significance level, leading to the rejection of the null hypothesis, and it was concluded that government challenges also negatively affect export performance.

The F-test result  $(1,77) = 45.348$  indicated significance at the 0.05 level of significance. This outcome led to the rejection of the null hypothesis, and it was concluded that procedural challenges negatively affect export performance. Likewise, based on ANOVA analysis, the F-test  $(1,77) = 31.725$  was significant at the 0.05 level of significance, leading to the rejection of the null hypothesis. As a result, it was concluded that competition challenges negatively affect export performance. Similarly, the F-test  $(1,77) = 81.170$  was significant at the 0.05 level of significance, resulting in the rejection of the null hypothesis. This led to the conclusion that marketing challenges negatively impact the export performance of manufacturing SMEs.

The research study recommends several actions based on its findings. It is evident that various challenges, both exogenous and internal, have a negative impact on the export performance of manufacturing SMEs. These challenges encompass exogenous challenges, government challenges, procedural challenges, competition challenges, human resource challenges, marketing challenges, financial challenges, and information/knowledge challenges.

To address these challenges and improve export performance, the research suggests the following recommendations:

- Governments should collaborate closely with SMEs and industry stakeholders to understand their unique challenges. Developing targeted policies and support mechanisms can greatly assist SMEs in overcoming these challenges.
- SMEs can benefit from specialized market entry support services, such as market research, market validation, and localization strategies. These measures can help SMEs navigate procedural and market-specific challenges.
- Encouraging SMEs to invest in research and development can lead to the creation of innovative products and services. This innovation can give SMEs a competitive advantage in the international market.
- SMEs can form export consortia to pool their resources and jointly address challenges related to export logistics, distribution, and marketing. Collaboration can lead to more effective solutions and improved export performance.

These recommendations reflect the research's achievement in uncovering the challenges that hinder export performance for manufacturing SMEs and providing practical suggestions for overcoming these obstacles. The study's findings and recommendations contribute to addressing the research objectives and enhancing the understanding of the factors influencing export performance in the context of manufacturing SMEs.

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