

# MSME Export Performance: Do Trade Barriers Matter?

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**Abstract:** Emerging markets depend on MSMEs for innovation and job generation. Despite their prominence, trade policies impact these companies' export potential. These policies have pros and cons, including free trade agreements and government assistance, but also high tariffs and complicated regulations. Understanding how trade policies affect MSME export capacities is crucial to their growth and global competitiveness. The main aim of this research is to determine the most critical trade barriers perceived by MSMEs and measure their contribution to export performance. The research also assesses how market conditions and trade policy influence the success of MSMEs in overseas markets. A formal questionnaire was administered to 394 MSMEs involved in exporting to emerging markets. Data dimension reduction and bundling trade barriers into dominant factors were accomplished through factor analysis. Chi-square tests were utilized to investigate the correlation between identified factors and export performance. Market Access, Market Entry Barriers, Infrastructure Limitations, Regulatory Constraints, External Barriers and Operational Trajectory were the key trade barriers identified from the research. These barriers collectively hinder export activities. However, the Chi-square tests demonstrated an insignificant association between the trade barriers faced by MSMEs and their export performance.

**Keywords:** Export, Market, Performance, Policy and Trade

## Introduction

### **Globalization, Free Trade, and MSMEs in Emerging Markets**

With the development of globalization, the free-trade model, which minimizes government intervention in economic growth and maximizes market forces, has spread to countries. Although free trade has the potential to spur economic growth and create opportunities, this paper argues that governments should still play a central role

in subsidizing domestic economies, especially in developing nations such as Indonesia. Free trade also presents great challenges to industries like micro, small, and medium enterprises (MSMEs), which tend to find it difficult to compete on the international scene. The survival of these MSMEs greatly depends on government intervention in the form of developing supportive policies (Kusumawardhani et al., 2015). With

accelerating globalization, numerous nations, such as post-Soviet bloc countries, are adopting the capitalist business model and seeking to reach international markets. The emphasis has now shifted toward facilitating international trade by creating regional integrations enabling the free flow of goods and services among the member nations. In this regard, MSMEs hold great opportunities but are confronted with great barriers to compete internationally (Ghouse, 2017).

### ***Barriers Confronted by MSMEs in International Markets***

MSMEs in the developing countries face various challenges that hinder their competence to compete internationally. For example, imposing high tariffs and other trade restrictions by importing countries can deter MSME participation in the global market. MSMEs that produce traditional products such as textiles also find it difficult to compete with competitors who utilize advanced technologies and skilled personnel to manufacture synthetic materials, gaining bigger market shares (Mukherjee, 2018). In India, MSMEs have a pivotal position in export performance, as they contribute about 45%-50% of India's exports. Out of them, about 40% are direct exports and another 15% are indirectly exported through merchant exporters and trading houses (Rajput et al., 2012). Though they make significant contributions, MSMEs are affected by internal and external problems that affect their export capacity.

### ***Internal and External Factors Influencing Export Performance***

A number of domestic conditions limit the export potential of MSMEs, including small production capacity, high imported raw material costs, volatile exchange rates, and specialized markets with low price sensitivity. International market hindrances further include high tariffs, complicated import permits, and anti-dumping duties (Jenifer et al., 2024). Moreover, difficulties in obtaining reliable foreign suppliers and unlawful customs control procedures further restrict the export potential of MSMEs. Internal

aspects of MSMEs such as managerial competencies, financial capacity, organizational form, and access to market intelligence have a large impact on export potential. Most MSMEs, particularly micro and small enterprises (MSEs), are constrained by their size and resources, which limit their capacity to compete in international markets. For example, MSMEs with scarce capital tend to be hesitant to risk export failure (Tambunan, 2024). The export orientation of MSMEs is likely to vary from that of large firms. While more established companies usually create high-value products for export to foreign countries, MSMEs mainly manufacture consumption products like textiles, handicraft, and food products that appeal to low-income consumers both domestically and in other countries. Nevertheless, even if they are small, some MSMEs still venture into exports either directly or indirectly through subcontracting and other forms of agreements (Tambunan, 2021).

### ***Significance of Government Assistance to MSME Exports***

With these challenges, government intervention is crucial in improving MSME export performance. In India, for instance, the government has enacted different policies to encourage MSME exports, such as streamlining processes, receiving special consideration under market development funds, and granting tax benefits (Rajput et al., 2012). These interventions are critical in helping MSMEs surpass the obstacles that hinder them from engaging in international trade and enhancing their competitiveness in the global market.

### ***Review of Literature***

Trade policies have a major impact on the export potential of Micro, Small, and Medium Enterprises (MSMEs) in developing countries by determining the regulatory environment and access conditions in markets. Trade policies can make it easy or difficult for MSMEs to compete internationally, depending on their design and execution. The interaction between trade policies

and MSME export potential is complex, with elements such as market liberalization, digital facilitation of trade, and support for entrepreneurs. Trade liberalization, for example, cutting tariffs and non-tariff barriers, can increase market access for MSMEs so that they can compete on a more level playing field with large companies. This is especially useful in emerging economies where MSMEs usually have major barriers to entry in foreign markets (Patil & Chavan, 2020). Free trade agreements can grant MSMEs access to new markets, boosting their export opportunities by easing customs procedures and lowering trade costs (Krueger & Tuncer, 1982). The digital economy creates new avenues for MSMEs to bypass old trade barriers. Programs such as the Global Trade Point Network make targeted market information and exporting procedures easier, though in reality, their usefulness is hampered by the digital preparedness of MSMEs (Alade et al., 2024). E-commerce websites can greatly enhance MSME exports by offering access to international markets without the necessity of physical presence, thereby minimizing operational expenses (Krueger & Tuncer, 1982). Entrepreneurial initiatives supported by trade policies can increase MSME competitiveness and global market integration. This encompasses capacity building, stakeholder participation, and adaptive policy flexibility that responds to evolving market conditions (Bhasin, 2010). Export promotion agencies have a significant role in facilitating the support of MSMEs, the effectiveness of which is circumscribed by organizational inefficiencies and the absence of focused support to disadvantaged firms (Haryadi & Hodijah, 2023). While trade policies can unlock MSME export potential, they are also challenging. Emerging economies need to reconcile the attractions of open markets with the imperative of protecting domestic industries and ensuring that MSMEs can compete internationally. This necessitates a sophisticated approach to policy making that takes into account the distinctive needs and capabilities of MSMEs in varied contexts.

## **Theoretical Perspectives on MSME Export Challenges**

### ***Ricardo's Theory of Comparative Advantage***

Ricardo's Comparative Advantage Theory argues that nations benefit from trade by specializing in the production of commodities in which they have a relative efficiency. This concept remains central to international trade theory, with productivity differences as the main force behind trade flows. Recent research confirms that nations export more in industries where they have greater productivity. For example, it was discovered in a study that bilateral exports' elasticity with respect to productivity is around 6.53. The elimination of comparative advantage at the industry level may result in a substantial decrease in trade benefits, estimated at 55% (Costinot et al., 2010). The Ricardian model points out that relative labor productivity determines trade flows, a phenomenon validated by modern studies of U.S. trade patterns (Golub & Hsieh, 2000). Costinot's research expands the Ricardian model to include technology and factor endowments as determinants of international specialization (Costinot, 2009). While the theory of comparative advantage is robust, it has limitations, particularly in predicting specific trade flows. Critics argue that it oversimplifies complex global trade dynamics, suggesting that other factors, such as market structures and government policies, also play crucial roles (Elmslie, 2000).

### ***The Infant Industry Argument***

The argument for protecting nascent industries, particularly MSMEs, rests upon the infant industry doctrine, which presumes that these industries require transient protection from foreign competition in order to develop their competitive ability. This theory, advocated by economists like Alexander Hamilton and Friedrich List, posits that new industries have high initial costs and cannot compete at free-trade levels. Hence, short-term protection is needed to encourage their development and help them attain competitiveness in the long run (Martinez,

2024). List emphasized selective protection, advocating for targeted support rather than blanket measures, to foster industrialization and eventual free trade(Shafaeddin, 2000). Research on Turkish industries indicated that protection did not lead to the expected increases in efficiency, suggesting that the effectiveness of such protection is contingent on the right incentives and trade regimes(Martinez, 2024). The dynamic model proposed by Mayer supports the idea that subsidization of infant-exporters can be justified, particularly when market qualities are not yet established. However, it is crucial to implement protection selectively and gradually to avoid the pitfalls of premature liberalization(Shafaeddin, 2000). While the infant industry argument remains relevant, critics argue that indiscriminate protection can lead to inefficiencies and dependency, highlighting the need for a balanced approach that encourages innovation while fostering competitiveness in the global market.

### ***Michael Porter's Diamond Model***

Michael Porter's Diamond Model elucidates how nations achieve competitive advantage through four interrelated factors: firm strategy, demand conditions, supporting industries, and government policies. This framework has been pivotal in understanding national competitiveness across various industries. The model emphasizes that the way firms are structured and managed significantly influences their competitive edge. For instance, the automotive industry exemplifies how strategic management can enhance national competitiveness. A strong domestic market drives firms to innovate and improve quality. Countries with sophisticated consumers tend to foster industries that can compete globally. The presence of competitive suppliers and related industries enhances innovation and efficiency. For example, Saudi Arabia's industrial diversification illustrates the importance of supporting industries in achieving competitive advantage(Jasimuddin, 2001). Effective government policies can create a conducive

environment for competition. The role of government in shaping industry standards and regulations is crucial for fostering competitiveness(Haryadi & Hodijah, 2023). While Porter's model provides a robust framework, it is essential to recognize that global competitiveness also involves international factors, as highlighted by the interaction between national and international determinants. Despite intensive research into trade policy and MSME exports, little is understood about how individual trade barriers particularly affect emerging market MSMEs by industry sector. Although literature emphasizes general inhibitions such as tariffs and bureaucratic barriers, the interrelationship among government interventions, digital facilitation of trade, and sectoral-specific obstacles has received little attention. Moreover, empirical research connecting such trade barriers with actual export performance based on statistical testing, for instance, factor analysis and chi-square tests, are still rare. Filling such gaps will enhance the comprehensiveness of MSME export potential in emerging economies.

### **Objectives of the Study**

1. To identify the most critical trade barriers perceived by MSMEs and evaluate their impact on export performance.
  2. To assess the influence of market conditions and trade policies on the success of MSMEs in overseas markets.
- ### **Hypotheses of the Research Work**

**Null Hypothesis (H0):** There is no significant association between trade barriers and export performance outcomes.

**Alternative Hypothesis (H1):** There is a significant association between trade barriers and export performance outcomes.

## Research Method

The research adopted a quantitative approach using a structured questionnaire administered to 394 MSMEs involved in exports to emerging markets. The sampling technique used was stratified random sampling, ensuring representation across

different MSME sizes and sectors. Trade barriers were measured using 31 Likert-scale items, and export performance was assessed via a categorical question. Data analysis involved Exploratory Factor Analysis (EFA) to identify dominant barrier factors and Chi-square tests to examine the association between these factors and export outcomes.

## Analysis & Results

### *Factor Analysis of Trade Barriers Affecting MSME Export Potential*

**Table 1: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.705
Bartlett's Test of Sphericity	Approx. Chi-Square	16857.663
	df	465
	Sig.	.000

*Source: Field Survey*

Table 1 shows a KMO value of 0.705, indicating that the sample size is adequate for factor analysis, with moderate correlations among the variables. Bartlett's Test of Sphericity, yielding a high Chi-square value of 16,857.663 and a highly significant p-value of 0.000, confirms that the corre-

lation matrix is not an identity matrix, meaning the variables are sufficiently related. Together, these results confirm that the data is suitable for factor analysis, as there are enough interrelationships between the variables to identify underlying factors.

**Table 2: Communalities of Trade Barriers**

Communalities of Trade Barriers	Initial	Extraction
Tariff rates in emerging markets are too high for MSMEs.	1.000	.838
Non-tariff barriers, such as quotas and import licensing, hinder our export operations.	1.000	.734
Inefficient and corrupt customs clearance processes in emerging markets delay exports.	1.000	.862
Regulatory and tax complexities create challenges for our MSME exports.	1.000	.808
Language barriers limit our ability to communicate and negotiate efficiently.	1.000	.822
Currency fluctuations negatively impact our pricing strategies for exports.	1.000	.800
Meeting the quality standards required in emerging markets is difficult for our MSME.	1.000	.840
High shipping costs reduce the profitability of our exports.	1.000	.784
Export documentation requirements and licensing are burdensome for our operations.	1.000	.798
Market entry procedures are unclear, making it difficult to navigate emerging markets.	1.000	.858
Limited access to trade finance restricts our export capacity.	1.000	.872
Import tariffs reduce the competitiveness of our products in emerging markets.	1.000	.784
Inadequate intellectual property protection puts our business at risk in foreign markets.	1.000	.792
Foreign exchange control regulations restrict our ability to manage payments effectively.	1.000	.842
Local competition in emerging markets poses significant challenges to our exports.	1.000	.784
Trade embargoes or sanctions cause delays and restrict our operations.	1.000	.807
Export subsidies and trade promotion schemes are not readily accessible to our MSME.	1.000	.875
Political instability in emerging markets deters us from pursuing exports.	1.000	.793

Frequent changes in trade policies create uncertainty in export planning.	1.000	.794
High insurance costs for export shipments add to the financial burden on our business.	1.000	.800
Foreign trade policies favor larger firms, putting MSMEs like ours at a disadvantage.	1.000	.888
Adhering to health and safety standards in emerging markets is costly and difficult.	1.000	.724
Limited access to trade-related technology restricts our export potential.	1.000	.833
Visa restrictions for business travel impact our ability to explore foreign markets.	1.000	.703
Restrictions on digital trade limit our penetration into emerging markets.	1.000	.767
Lack of bilateral trade agreements with key markets reduces our export opportunities.	1.000	.674
High tariffs on raw materials increase our production costs and reduce competitiveness.	1.000	.837
Limited infrastructure in emerging markets delays delivery and increases costs.	1.000	.836
Obtaining market intelligence on emerging markets is challenging.	1.000	.781
Environmental regulations in emerging markets increase compliance costs.	1.000	.803
Limited access to logistics services affects the timeliness of our export deliveries.	1.000	.730
Extraction Method: Principal Component Analysis.		

**Source:** Field Survey

Table 2 shows that the initial communality for each variable is always 1.000 before extraction, as it reflects the total variance in each variable. Extraction Communality represents the portion of variance in each variable that is explained by the extracted factors in Principal Component Analysis (PCA). Higher values indicate that a larger proportion of the variable's variance is captured by the factor solution. After extraction, the communalities suggest that PCA has

successfully captured a significant portion of the variance for most variables, demonstrating a good fit for the data. The high communalities for many items indicate that the factor solution strongly represents the underlying constructs measured by the survey, particularly regarding the key trade barriers perceived by MSMEs. The extracted values range from 0.888 to 0.674, meaning the maximum variance explained by a factor post-extraction is 88.8%, while the minimum is 67.4%.

**Table 3: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.262	36.327	36.327	11.262	36.327	36.327	4.706	15.179	15.179
2	4.807	15.505	51.833	4.807	15.505	51.833	4.645	14.983	30.162
3	3.017	9.731	61.564	3.017	9.731	61.564	4.539	14.644	44.806
4	2.648	8.541	70.105	2.648	8.541	70.105	4.226	13.634	58.439
5	1.781	5.746	75.851	1.781	5.746	75.851	3.743	12.073	70.512
6	1.349	4.351	80.201	1.349	4.351	80.201	3.004	9.689	80.201
7	.901	2.905	83.107						
8	.762	2.458	85.565						
9	.693	2.237	87.802						
10	.628	2.027	89.828						
11	.507	1.636	91.464						
12	.440	1.419	92.883						

13	.364	1.175	94.058						
14	.274	.884	94.941						
15	.266	.857	95.798						
16	.231	.745	96.543						
17	.189	.610	97.153						
18	.169	.546	97.699						
19	.119	.385	98.084						
20	.110	.355	98.439						
21	.099	.319	98.758						
22	.084	.272	99.030						
23	.064	.208	99.237						
24	.056	.181	99.418						
25	.038	.124	99.542						
26	.035	.114	99.656						
27	.031	.100	99.756						
28	.028	.090	99.846						
29	.024	.078	99.924						
30	.014	.045	99.969						
31	.010	.031	100.000						
Extraction Method: Principal Component Analysis.									

**Source:** Field Survey

Table 3 reveals that six components account for a significant portion of the total variance in the dataset. Initially, the eigenvalues show that the first component explains 36.327% of the variance, with the second through sixth components contributing 15.505%, 9.731%, 8.541%, 5.746%, and 4.351% respectively. Together, these six components explain 80.201% of the total variance, indicating that they capture the majority of the data's variability. After extraction, the variance explained by each component remains largely unchanged, reflecting strong retention of the original variance. This suggests that the extracted components still provide a robust representation of the underlying structure. The application of Varimax rotation redistributes the variance more evenly across the components, improving interpretability. Post-rotation, the first component accounts for 15.179%, the second for 14.983%, the third for 14.644%, the fourth for 13.634%, the fifth for 12.073%, and the sixth for 9.689%. Overall, the PCA results show that these six components collectively explain a substantial 80.201% of the total variance, with the rotated solution providing a more balanced and interpretable factor structure.

This indicates a well-fitting model that captures the most meaningful patterns in the data, particularly when it comes to understanding the key trade barriers perceived by MSMEs.

Figure 1 shows the scree plot displaying the eigenvalues associated with each component in the factor analysis. The steep slope from Component 1 to 4 indicates that these components explain a significant amount of the variance in the dataset. After the fourth component, the curve starts to flatten, suggesting that the subsequent components explain considerably less variance. Based on the "elbow" rule, where the plot flattens, it appears that the most meaningful components are the first 4 to 6 components. These components should be retained for analysis, as they capture the majority of the variance, while the remaining components contribute minimally and can be excluded from further analysis.

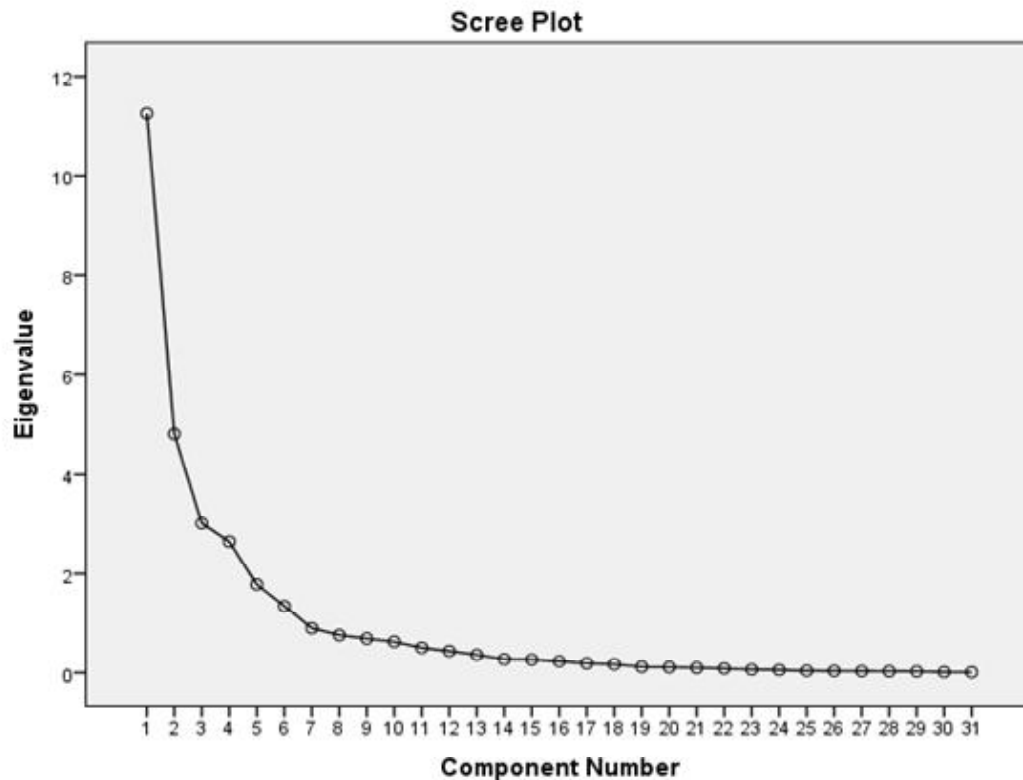


Figure 1: Scree Plot of the underlying factors

Barriers	Component					
	1	2	3	4	5	6
Export subsidies and trade promotion schemes are not readily accessible to our MSME.	.818					
Import tariffs reduce the competitiveness of our products in emerging markets.	.770					
Trade embargoes or sanctions cause delays and restrict our operations.	.747					
Inadequate intellectual property protection puts our business at risk in foreign markets.	.637					
Limited access to trade-related technology restricts our export potential.	.625				.625	
Political instability in emerging markets deters us from pursuing exports.	.594				.526	
Lack of bilateral trade agreements with key markets reduces our export opportunities.		.770				
Foreign trade policies favor larger firms, putting MSMEs like ours at a disadvantage.	.523	.757				
Limited access to logistics services affects the timeliness of our export deliveries.		.718				
Tariff rates in emerging markets are too high for MSMEs.		.709		.506		
Limited access to trade finance restricts our export capacity.		.696				



Non-tariff barriers, such as quotas and import licensing, hinder our export operations.		.610		.595		
Adhering to health and safety standards in emerging markets is costly and difficult.	.547	.583				
Restrictions on digital trade limit our penetration into emerging markets.			.809			
Market entry procedures are unclear, making it difficult to navigate emerging markets.			.808			
Language barriers limit our ability to communicate and negotiate efficiently.			.796			
Environmental regulations in emerging markets increase compliance costs			.778			
High insurance costs for export shipments add to the financial burden on our business.			.777			
Local competition in emerging markets poses significant challenges to our exports.			.745			
Inefficient and corrupt customs clearance processes in emerging markets delay exports.				.876		
High shipping costs reduce the profitability of our exports.				.796		
Meeting the quality standards required in emerging markets is difficult for our MSME.				.775		
Regulatory and tax complexities create challenges for our MSME exports.				.667		
Currency fluctuations negatively impact our pricing strategies for exports.				.621		
Limited infrastructure in emerging markets delays delivery and increases costs.					.798	
Obtaining market intelligence on emerging markets is challenging.					.778	
Visa restrictions for business travel impact our ability to explore foreign markets.					.605	
High tariffs on raw materials increase our production costs and reduce competitiveness.					.593	
Foreign exchange control regulations restrict our ability to manage payments effectively.						.786
Export documentation requirements and licensing are burdensome for our operations.						.709
Frequent changes in trade policies create uncertainty in export planning.						.629
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 18 iterations.						

**Source:** Field Survey

Table 5 shows the Eigenvalue for Factor I is 11.262, explaining 36.327% of the variance. These variables are associated with External Barriers. Factor I exhibits strong loading on the variables: “Export subsidies and trade promotion schemes are not readily accessible to our MSME” (0.818), “Import tariffs reduce the competitiveness of our products in emerging markets” (0.770), “Trade

embargoes or sanctions cause delays and restrict our operations” (0.747), “Inadequate intellectual property protection puts our business at risk in foreign markets” (0.637), “Limited access to trade-related technology restricts our export potential” (0.625) and “Political instability in emerging markets deters us from pursuing exports” (0.594).

**Table 5: Factor I – External Barriers**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>External Barriers</i>	Export subsidies and trade promotion schemes are not readily accessible to our MSME.	.818	36.327	11.262
	Import tariffs reduce the competitiveness of our products in emerging markets.	.770		
	Trade embargoes or sanctions cause de lays and restrict our operations.	.747		
	Inadequate intellectual property protection puts our business at risk in foreign markets.	.637		
	Limited access to trade -related technology restricts our export potential.	.625		
	Political instability in emerg ing markets deters us from pursuing exports.	.594		

*Source: Field Survey*

**Table 6: Factor II – Market Access Barriers**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>Market Access Barriers</i>	Lack of bilateral trade agreements with key markets reduces our export opportunities.	.770	15.505	4.807
	Foreign trade policies favor larger firms, putting MSMEs like ours at a disadvantage.	.757		
	Limited access to logistics services affects the timeliness of our export deliveries.	.718		
	Tariff rates in emerging markets are too high for MSMEs.	.709		
	Limited access to trade finance restricts our export capacity.	.696		
	Non-tariff barriers, such as quotas and import licensing, hinder our export operations.	.610		
	Adhering to health and safety standards in emerging markets is costly and difficult.	.583		

*Source: Field Survey*

Table 6 shows the Eigenvalue for Factor II is 4.807, explaining 15.505% of the variance. These variables are associated with Market Access Barriers. Factor II exhibits strong loading on the variables: “Lack of bilateral trade agreements with key markets reduces our export opportunities” (0.770), “Foreign trade policies favor larger firms, putting MSMEs like ours at a disadvantage” (0.757), “Limited access to logistics services

affects the timeliness of our export deliveries” (0.718), “Tariff rates in emerging markets are too high for MSMEs” (0.709), “Limited access to trade finance restricts our export capacity” (0.696), “Non-tariff barriers, such as quotas and import licensing, hinder our export operations” (0.610) and “Adhering to health and safety standards in emerging markets is costly and difficult” (0.583).

**Table 7: Factor III – Market Entry Barriers**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>Market Entry Barriers</i>	Restrictions on digital trade limit our penetration into emerging markets.	.809	9.731	3.017
	Market entry procedures are unclear, making it difficult to navigate emerging markets.	.808		
	Language barriers limit our ability to communicate and negotiate efficiently.	.796		
	Environmental regulations in emerging markets increase compliance costs.	.778		
	High insurance costs for export shipments add to the financial burden on our business.	.777		
	Local competition in emerging markets poses significant challenges to our exports.	.745		

**Source:** Field Survey

Table 7 shows the Eigenvalue for Factor III is 3.017, explaining 9.731% of the variance. These variables are associated with Market Entry Barriers. Factor III exhibits strong loading on the variables: “Restrictions on digital trade limit our penetration into emerging markets” (0.809), “Market entry procedures are unclear, making it difficult to navigate emerging markets” (0.808),

“Language barriers limit our ability to communicate and negotiate efficiently” (0.796), “Environmental regulations in emerging markets increase compliance costs” (0.778), “High insurance costs for export shipments add to the financial burden on our business” (0.777) and “Local competition in emerging markets poses significant challenges to our exports” (0.745).

**Table 8: Factor IV – Operational Trajectory**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>Operational Trajectory</i>	Inefficient and corrupt customs clearance processes in emerging markets delay exports.	.876	8.541	2.648
	High shipping costs reduce the profitability of our exports.	.796		
	Meeting the quality standards required in emerging markets is difficult for our MSME.	.775		
	Regulatory and tax complexities create challenges for our MSME exports.	.667		
	Currency fluctuations negatively impact our pricing strategies for exports.	.621		

**Source:** Field Survey

Table 8 shows the Eigenvalue for Factor IV is 2.648, explaining 8.541% of the variance. These variables are associated with Operational Trajectory. Factor IV exhibits strong loading on the variables: “Inefficient and corrupt customs clearance processes in emerging markets delay exports” (0.876), “High shipping costs reduce the

profitability of our exports” (0.796), “Meeting the quality standards required in emerging markets is difficult for our MSME” (0.775), “Regulatory and tax complexities create challenges for our MSME exports” (0.667) and “Currency fluctuations negatively impact our pricing strategies for exports” (0.621).

**Table 9: Factor V – Infrastructure Limitations**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>Infrastructure Limitations</i>	Limited infrastructure in emerging markets delays delivery and increases costs.	.798	5.746	1.781
	Obtaining market intelligence on emerging markets is challenging.	.778		
	Visa restrictions for business travel impact our ability to explore foreign markets.	.605		
	High tariffs on raw materials increase our production costs and reduce competitiveness.	.593		

*Source: Field Survey*

Table 9 shows the Eigenvalue for Factor V is 1.781, explaining 5.746% of the variance. These variables are associated with Infrastructure Limitations. Factor V exhibits strong loading on the variables: “Limited infrastructure in emerging markets delays delivery and increases costs” (0.798),

“Obtaining market intelligence on emerging markets is challenging” (0.778), “Visa restrictions for business travel impact our ability to explore foreign markets” (0.605) and “High tariffs on raw materials increase our production costs and reduce competitiveness” (0.593).

**Table 10: Factor VI – Regulatory Constraints**

Factor	Variable	Rotated Loading	% of Variance	Eigen Value
<i>Regulatory Constraints</i>	Foreign exchange control regulations restrict our ability to manage payments effectively.	.786	4.351	1.349
	Export documentation requirements and licensing are burdensome for our operations.	.709		
	Frequent changes in trade policies create uncertainty in export planning.	.629		

*Source: Field Survey*

Table 10 shows the Eigenvalue for Factor VI is 1.349, explaining 4.351% of the variance. These variables are associated with Regulatory Constraints. Factor VI exhibits strong loading on the variables: “Foreign exchange control regulations restrict our ability to manage payments effectively” (0.786), “Export documentation requirements and licensing are burdensome for our operations” (0.709) and “Frequent changes in trade policies create uncertainty in export planning” (0.629).

#### ***Analysis of the Association between Trade Barriers and Export Performance using Chi-Square Tests***

This analysis aims to examine the association between perceived trade barriers and export performance among Micro, Small, and Medium Enterprises (MSMEs). By employing Chi-Square Tests, the study seeks to determine whether a significant relationship exists between the identified trade barriers and the outcomes of export performance.

**Table 11: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	334.437 <sup>a</sup>	216	.000
Likelihood Ratio	277.110	216	.003
Linear-by-Linear Association	.217	1	.642
N of Valid Cases	384		

a. 248 cells (90.2%) have expected count less than 5. The minimum expected count is .10.

**Source:** Field Survey

Table 11 shows that the Pearson Chi-Square value is 334.437, with an associated p-value of .000, allowing us to reject the null hypothesis (H<sub>0</sub>), which posits that there is no significant association between the two variables. This strong statistical significance indicates that the perceived trade barriers do indeed affect the export performance of Micro, Small, and Medium Enterprises (MSMEs).

### Conclusion and Implications

Trade policies are central to determining the export potential of MSMEs in emerging economies. With a positive regulatory setup, minimizing trade barriers, and encouraging international collaborations, governments can make MSMEs globally competitive. Nevertheless, ongoing trade barriers like tariffs, non-tariff barriers, and bureaucratic issues heavily restrain MSME export performance. For maximization of export potential, it is important for policymakers to counter these issues with the help of focused interventions and support programs. Ultimately, it will not only help MSMEs but will also drive overall economic growth of emerging markets. Policymakers need to be aware that removing trade restrictions by itself could not improve MSME export results. Rather, a more all-encompassing approach that includes improving digital infrastructure, financial access, and capacity-building is required. To promote long-term competitiveness and sustainability in international markets, trade policies should be flexible, inclusive, and adapted to the demands of MSMEs.

### Scope for Future Research

1. Future research might examine how technical preparedness and digital adoption can mediate the negative impact of trade barriers on MSME export performance.
2. Industry-specific trade issues may be identified via cross-sector comparisons (textiles vs. food processing, for example).
3. The effects of enduring or changing trade policies on MSME export results over time may be assessed using longitudinal study.

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