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Export Performance in West Java: Investigating the Mediating Role of Competitive Advantage on Male Exporters' Export Capabilities

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ARTICLE INFO	ABSTRACT
	Introduction: This research is motivated by the low contribution of MSMEs to national exports, especially those run by male entrepreneurs, despite West Java Province being the region with the highest export contribution in Indonesia. This study focuses on analyzing the influence of export capability on the export performance of male MSMEs with competitive advantage as a mediating variable. **Objectives**: The purpose of this study is to determine the extent of the positive and significant relationship between market intelligence capability, product innovation capability, pricing capability, marketing communication capability, distribution capability, and product development capability on competitive advantage in export-oriented MSMEs in West Java managed by male entrepreneurs. Additionally, this study aims to analyze the influence of competitive advantage on export performance, as well as the mediating role of competitive advantage in the relationship between each dimension of export capability and export performance. **Methods**: This research is quantitative in nature. The population includes male MSME exporters in West Java who are actively engaged in export activities. The sample was selected using purposive sampling. Data was collected via a questionnaire distributed to 250 respondents using Google Forms and analyzed using Smart PLS 4. **Results**: The results of this study found that market intelligence capability, pricing capability, marketing communication capability, product development capability, and distribution capability have a positive and significant influence on competitive advantage, while product innovation capability does not show a significant influence. Furthermore, competitive advantage significantly enhances MSME's performance and serves as a mediator in the relationship between the five main capabilities (excluding product innovation capability) and the export performance of male MSMEs in West Java. **Conclusions**: In this study, competitive advantage acts as a mediator connecting export capability with the performance of male MSME exporters in West Java, indicating that improving export performance largely depends on the ability of MSMEs to first build competitive advantage. **Keywords:** Export Capability; Competitive Advantage; Export Performance; Male Entrepreneurs; MSMEs; West Java; SEM-PLS

In the era of globalization and free trade, a region's ability to drive export activities has become a crucial indicator of regional economic progress. The role of micro, small, and medium enterprises (MSMEs) in export activities is also receiving increasing attention, considering their vast potential in supporting economic growth and opening access to

international markets. The advancement of digital communication technologies has helped MSMEs expand their market access and foster innovation, ultimately boosting their business performance (Yuldinawati et al., 2018). West Java Province is recorded as the most active export region in Indonesia, with non-oil and gas exports constituting the largest share of the province's total export value in 2023 (*Badan Pusat Statistik Indonesia.* (2025). This fact underpins the selection of West Java as the study site, as the high level of export activity is not only dominated by large businesses but also features significant contributions from micro, small, and medium enterprises (MSMEs). Non-oil and gas exports accounted for the vast majority of West Java's total exports, valued at over US$36 billion. These data indicate that, alongside major industries, MSMEs play a crucial role in driving the growth of export activities in the region (Satu Data Indonesia, 2025). Export ability is understood as a set of capabilities possessed by companies, particularly MSMEs, to support export activity competitively and effectively. It includes strategic aspects that enable businesses to identify international markets, design appropriate products, set competitive prices, and use marketing communications (Falahat et al., 2020). The dimensions of export capability are Product Innovation Capability, or the capacity of MSMEs to develop, design, or enhance products in line with the requirements of foreign markets (Falahat et al., 2020). Market Intelligence Capability, the ability to collect, analyze, and effectively employ market information (Falahat et al., 2020). Pricing Capability, where knowledge of MSMEs is involved in determining competitive prices on goods without affecting profitability (Falahat et al., 2020). Marketing Communication Ability, the ability to communicate marketing messages to international consumers effectively using various communication channels (Falahat et al., 2020). Distribution Capability, export companies' ability to provide better support to export distributors and build tight relationships with them (Zou et al., 2003). Product Development Capability, or a firm's ability to develop and launch new products to meet customer need in overseas markets (Zou et al., 2003).

In line with this, entrepreneurs must possess some capabilities (Anggraeni & Yuldinawati, 2017). In this case, MSME exporters must know export capability theories. Competitive advantage is considered one of the most important concepts in business competition. It is obtained by implementing various strategies created by companies in order to gain high competitiveness and continuously improve their business systems (Rahmawati, D., Purwohedi, U., & Prihatni, R., 2022). The performance of MSMEs is measured by their ability to participate in exports. Export knowledge and skills (for example, knowledge of international marketing, export process, and certification) and the export willingness (motivation to go international) are internal determinants significantly influencing this performance (Ardiyanti & Kahfi, 2023).

Competitive advantage significantly affects the performance of MSMEs. As shown in their research, MSMEs that can maintain and enhance their competitive advantage are capable of improving their performance in terms of sales, profits, productivity, and product quality. Competitive advantage can be achieved through the utilization of existing internal resources and imposition of appropriate strategies such as product innovation, differentiation, quality improvement, and cost management efficiency. In the MSME environment, a strong competitive advantage helps them survive and grow despite some competitive market problem.

With the understanding of how export capacity, competitiveness, and export performance are related, this study aims to provide additional insights on the determinants of world market competitiveness of MSMEs. Women's participation in MSMEs in West Java Province is vast—not only in production but in innovation, marketing, and business establishment as well (Nurlatifah et al., 2023). But some studies reveal that there are differences in business strategies between female and male entrepreneurs. Mandiringana et al. (2023) identified that male entrepreneurs focus more on business growth and profit maximization. There are differences in the educational background, experience, and societal roles influencing the strategies adopted as well. (Sherlywati, Handayani, and Harianti, 2017) added that male entrepreneurs demonstrate higher degrees of independence in addressing business competition and are able to run their businesses with less reliance on others. These considerations lead this research to be especially interested in male MSME exporters in order to determine the manner export capabilities affect competitive advantage and improve their export performance internationally.

OBJECTIVES

This study attempts to investigate extensively the influence of various export competences i.e., market intelligence capability, product innovation capability, pricing capability, marketing communication capability, distribution capability, and product development capability on competitive advantage among export-oriented MSMEs in West

Research Article

Java Province with male managers. Through its focus on male entrepreneurs, this research tries to investigate the role such skills take in generating sustainable competitive advantage in the midst of increasingly narrowing and dynamic global market competition.

Further, the study also aims to examine the effect of the competitive advantage on export performance and, in the process, better understand the strategic role of the competitiveness in enhancing the overall export performance. Contrary to mere examination of the direct impact of export capabilities on the export performance, this study also examines the mediating role of competitive advantage in connecting the two variables. This approach is intended to identify the internal mechanisms by which export capabilities can improve performance through the development and strengthening of competitive advantage.

In addition, this study aims to assess the relative contribution of each export capability dimension in building competitive advantage, thereby offering insights for entrepreneurs and policymakers regarding which strategic aspects need to be strengthened. The findings are expected to serve as a foundation for formulating more effective export capability development strategies and well-targeted policy support, particularly in enhancing the competitiveness of male-led MSMEs at both regional and national levels. Consequently, this research contributes not only to academic understanding through deeper theoretical insight but also to practical applications for promoting the growth and sustainability of export-oriented MSMEs in West Java Province.

METHODS

This study employs a quantitative method with a causal approach. According to Sugiyono (2023), quantitative research is grounded in the philosophy of positivism and has long been used, thus often referred to as a traditional method. This method investigates specific populations or samples using data collection instruments, yielding numerical results. Causal relationships, as defined by Sugiyono (2023), indicate an influence between two variables, where one variable acts as the cause (independent) and the other as the effect (dependent).

Data for this study were collected through questionnaires distributed via Google Forms. As noted by Sugiyono (2023), a questionnaire is a data collection technique that involves providing respondents with a set of written questions or statements to be answered. The measurement scale used in this research is a five-point Likert scale, which, according to Sugiyono (2023), is designed to assess individuals' or groups' attitudes, opinions, or perceptions toward specific social phenomena formulated as research variables.

The population in this study consists of male, export-oriented MSME (micro, small, and medium enterprises) owners in West Java who meet the characteristics relevant to the research focus. According to Sugiyono (2023), a population is defined as the entirety of subjects or objects with specific characteristics that are the focus of the research. Given the large population size and limited resources, a sample of 250 respondents was selected using purposive sampling—a technique of deliberately choosing respondents based on specific characteristics relevant to the study, as explained by Iba and Wardhana (2023). For the purpose of ensuring the research instrument's validity and reliability, the research instrument was pilot-tested among 30 respondents. Sugiyono (2023) asserts that validity is what assesses to what degree data precisely depict the true state of the object being studied, whereas reliability refers to consistency of data over time. This study thus ensures data validity and reliability to be used for further analysis.
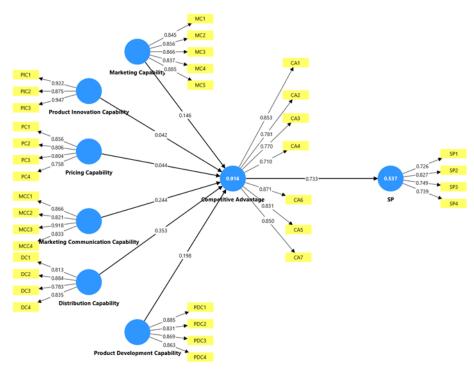
RESULTS

A. Measurement Model Assessment (Outer Model)

The outer model, as suggested by Ghozali (2023), illustrates the way observable variables (manifest variables) indicate latent variables that are unmeasurable directly. That is, the outer model represents the link between each indicator and the construct it measures in a latent manner.

Research Article

Figure 1 Outer Model Testing

By the outer model results, all the indicators for all constructs had loading factor measures above 0.7, meaning that each indicator has good convergent validity. This means that the indicators accurately measure latent variables and hence are fit for further analysis.

Convergent Validity Testing

The ideal loading factor for confirmatory research is higher than 0.7, while for exploratory research, values higher than 0.7, as well as 0.6 and 0.7, are also sufficient. In addition, the average variance extracted (AVE) needs to be higher than 0.5 in order to satisfy the convergent validity criteria. However, with regard to preliminary measurement development, values ranging from 0.5 to 0.6 are considered adequate (Chin, 1998, as quoted in Ghozali, 2021).

Table 1 Convergent Validity Test Results

Variable		Indicator	Loading Factor	AVE	Conclusion
Market Intelligence Capability		MIC1	0.806	0.683	Valid
(X)		MIC 2	0.844	0.683	Valid
		MIC 3	0.813	0.683	Valid
		MIC 4	0.794	0.683	Valid
		MIC 5	0.871	0.683	Valid
Product Innovation Capability		PIC 1	0.882	0.763	Valid
(X)		PIC 2	0.823	0.763	Valid
		PIC 3	0.913	0.763	Valid
Pricing Capability		PC 1	0.869	0.678	Valid

Research Article

(X)	PC 2	0.828	0.678	Valid
	PC 3	0.827	0.678	Valid
	PC 4	0.767	0.678	Valid
Marketing Communication Capability	MCC 1	0.873	0.735	Valid
	MCC 2	0.839	0.735	Valid
(X)	MCC 3	0.885	0.735	Valid
	MCC 4	0.831	0.735	Valid
Distribution Capability	DC 1	0.82	0.681	Valid
(X)	DC 2	0.857	0.681	Valid
	DC 3	0.788	0.681	Valid
	DC 4	0.835	0.681	Valid
Product Development Capabilityc	PDC 1	0.885	0.73	Valid
(X)	PDC 2	0.828	0.73	Valid
	PDC 3	0.84	0.73	Valid
	PDC 4	0.864	0.73	Valid
Competitive Advantage	CA 1	0.864	0.619	Valid
(Z)	CA 2	0.737	0.619	Valid
	CA 3	0.74	0.619	Valid
	CA 4	0.736	0.619	Valid
	CA 5	0.78	0.619	Valid
	CA 6	0.833	0.619	Valid
	CA 7	0.806	0.619	Valid
MSME's Performance	SP 1	0.751	0.604	Valid
(Y)	SP 2	0.828	0.604	Valid
	SP 3	0.762	0.604	Valid
	SP 4	0.765	0.604	Valid

As per Table 1, the analysis results indicate that all the variables tested have indicators that meet the convergent validity requirements. This is indicated by both the values of the loading factor, all of which exceed the minimum requirement of 0.70, as well as the Average Variance Extracted (AVE) values, all of which exceed 0.50. These values illustrate that each indicator explains the latent variable it measures significantly and adequately. Therefore, in summation, the measurement model in this study is adequate insofar as validity is concerned, i.e., the tools are dependable for measuring accurately and relevantly the constructs in the research setting.

Discriminant Validity Testing

Discriminant validity is a concept in which it is assumed that various measures for various constructs will not be highly correlated (Abdillah & Jogiyanto, 2015). For the purpose of testing discriminant validity for reflective

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indicators, values of cross-loading should be inspected for every indicator. An indicator is reported to possess discriminant validity if its cross-load on the construct it is intended to measure is greater than 0.70 and higher than its cross-loads on other constructs (Chin, 1998, as cited in Ghozali, 2021).

Table 2 Cross Loading Test Results

	CA	DC	SP	MIC	MCC	PC	PDC	PIC
CA1	**0.864**	0.788	0.665	0.676	0.782	0.698	0.784	0.695
CA2	**0.737**	0.689	0.544	0.528	0.564	0.555	0.632	0.521
CA3	**0.74**	0.611	0.531	0.668	0.652	0.66	0.576	0.635
CA4	**0.736**	0.679	0.555	0.665	0.571	0.495	0.642	0.634
CA5	**0.78**	0.712	0.55	0.653	0.774	0.778	0.707	0.7
CA6	**0.833**	0.758	0.641	0.718	0.781	0.69	0.758	0.769
CA7	**0.806**	0.702	0.626	0.675	0.706	0.691	0.662	0.581
DC1	0.78	**0.82**	0.625	0.723	0.766	0.775	0.718	0.681
DC2	0.758	**0.857**	0.657	0.606	0.704	0.676	0.707	0.626
DC3	0.701	**0.788**	0.541	0.709	0.641	0.546	0.672	0.64
DC4	0.725	**0.835**	0.639	0.57	0.637	0.612	0.643	0.606
SP1	0.616	0.59	**0.751**	0.566	0.541	0.54	0.539	0.534
SP2	0.624	0.613	**0.828**	0.548	0.545	0.504	0.614	0.508
SP3	0.527	0.548	**0.762**	0.441	0.479	0.466	0.513	0.406
SP4	0.552	0.567	**0.765**	0.456	0.559	0.523	0.542	0.541
MC1	0.642	0.592	0.493	**0.806**	0.656	0.649	0.575	0.631
MC2	0.706	0.653	0.52	**0.844**	0.722	0.723	0.693	0.729
MC3	0.647	0.641	0.577	**0.813**	0.565	0.535	0.568	0.571
MC4	0.752	0.705	0.495	**0.794**	0.736	0.685	0.703	0.73
MC5	0.68	0.661	0.609	**0.871**	0.62	0.587	0.647	0.642
MCC1	0.776	0.75	0.602	0.696	**0.873**	0.789	0.726	0.694
MCC2	0.729	0.681	0.547	0.7	**0.839**	0.744	0.675	0.758
MCC3	0.778	0.721	0.572	0.708	**0.885**	0.773	0.761	0.731
MCC4	0.741	0.707	0.625	0.649	**0.831**	0.673	0.735	0.691
PC1	0.749	0.724	0.617	0.699	0.765	**0.869**	0.659	0.702
PC2	0.637	0.603	0.518	0.579	0.702	**0.828**	0.58	0.632
PC3	0.667	0.623	0.503	0.599	0.688	**0.827**	0.623	0.695
PC4	0.679	0.655	0.509	0.661	0.703	**0.767**	0.572	0.564
PDC1	0.78	0.742	0.582	0.705	0.774	0.695	**0.885**	0.733

44

Research Article

PDC2	0.732	0.685	0.575	0.703	0.678	0.581	**0.828**	0.704
PDC3	0.701	0.689	0.637	0.617	0.674	0.586	**0.84**	0.632
PDC4	0.752	0.721	0.643	0.625	0.758	0.664	**0.864**	0.742
PIC1	0.741	0.667	0.575	0.664	0.751	0.734	0.748	**0.882**
PIC2	0.627	0.621	0.508	0.719	0.634	0.565	0.63	**0.823**
PIC3	0.786	0.735	0.596	0.731	0.797	0.751	0.769	**0.913**

Based on the results of the cross-loading analysis presented in the table above, all indicators show the highest loading values on the constructs corresponding to the latent variables they measure. For example, the Competitive Advantage indicators (CA1 – CA7) have the highest loadings on the CA construct, likewise the Distribution Capability indicators (DC1 – DC4) have the highest loadings on the DC construct, and similarly for other constructs such as Market Intelligence Capability (MIC), Marketing Communication Capability (MCC), Pricing Capability (PC), Product Development Capability (PDC), and Product Innovation Capability (PIC). This indicates that each indicator has good discriminative ability in distinguishing between different constructs.

This condition strengthens the fulfillment of discriminant validity in the measurement model, in accordance with Ghozali's (2023) guideline stating that an indicator is considered discriminantly valid if its loading is highest on the construct it is intended to measure compared to other constructs. Therefore, it can be concluded that the instruments used in this study accurately measure the constructs and clearly differentiate the latent variables, resulting in a measurement model with good reliability and validity in the context of this research.

Reliability Testing

Reliability testing in PLS can be conducted using two methods: Cronbach's alpha and composite reliability. Cronbach's alpha measures the lower bound of a construct's reliability, whereas composite reliability measures the actual reliability value of the construct (Abdi Abdillah, W., & Jogiyanto, 2015). A good composite reliability value in confirmatory research is above 0.7. Meanwhile, for exploratory research, values between 0.6 and 0.7 are still acceptable as indicators of adequate construct reliability (Ghozali, 2021). Cronbach's alpha tends to produce lower values when measuring construct reliability. Therefore, it is recommended to use composite reliability because it is considered more accurate in assessing the internal consistency of a construct (Ghozali, 2021).

Reliability Testing Results

Table 3 Reliability Test Results

Variable	Composite Realibity	Cronbcah Alpha	Conclusion
Competitive Advantage	0.919	0.897	Valid
Distribution Capability	0.895	0.844	Valid
MSMEs Performance	0.859	0.781	Valid
Marketing Capability	0.915	0.883	Valid
Marketing Communication Capability	0.917	0.879	Valid
Pricing Capability	0.894	0.841	Valid

Research Article

Product Development Capability	0.915	0.877	Valid
Product Innovation Capability	0.906	0.845	Valid
Competitive Advantage	0.919	0.897	Valid

Based on the reliability test results, all variables in this study show Composite Reliability (CR) and Cronbach's Alpha (CA) values above the minimum threshold of 0.70. This indicates that each construct in the model has a good level of internal consistency and can be considered reliable. Therefore, the instruments used in this study meet adequate reliability criteria to consistently and stably measure the variables under investigation.

B. Structural Model Assessment (Inner Model)

The structural model, or inner model, explains the relationships or influences among latent variables (constructs) within a model, which is built based on existing theory (substantive theory). In other words, the inner model is used to assess the strength of the relationships between one construct and another (Ghozali, 2023).

Coefficient of Determination (R²)

R-Square values of 0.75, 0.50, and 0.25 indicate that the model has strong, moderate, and weak predictive power, respectively. The R-Square value in PLS analysis reflects the proportion of variance in the endogenous construct that can be explained by the structural model (Ghozali, 2021).

Table 4 Coefficient of Determination

Variable	R-square	Adjusted R-square
Competitive Advantage	0.89	0.887
MSMEs Performance	0.561	0.56

Based on the R-square test results, the Competitive Advantage variable has a value of 0.89, indicating that the model is able to explain 89% of its variability, which reflects a very strong explanatory power. Meanwhile, the MSMEs Performance variable has an R-square value of 0.561, meaning the model explains 56.1% of its variability, which falls into the moderate category. These results demonstrate that the structural model has good explanatory power for the dependent variables.

Effect Size (f²) Testing

The f² values of 0.02, 0.15, and 0.35 are used as benchmarks for defining the strength of effects in multiple regression analysis, representing small, medium, and large effects, respectively (Cohen, 1988 in Ghozali, 2021).

Table 5 Effect Size (f²) Testing

Variable	F-square	Conclusion
Competitive Advantage -> MSMEs Performance	1.28	Large
Distribution Capability -> Competitive Advantage	0.263	Medium
Marketing Capability -> Competitive Advantage	0.042	Small

Research Article

Marketing Communication Capability -> Competitive Advantage	0.037	Small
Pricing Capability -> Competitive Advantage	0.023	Small
Product Development Capability -> Competitive Advantage	0.077	Small
Product Innovation Capability -> Competitive Advantage	0.003	Small

The f-square test results show that Competitive Advantage has a large effect on MSMEs performance with a value of 1.28, indicating a very significant role in enhancing business performance. Distribution Capability exerts a moderate effect on Competitive Advantage with a value of 0.263, while other variables such as Product Development Capability, Marketing Capability, Marketing Communication Capability, and Pricing Capability only have a small effect. Conversely, Product Innovation Capability has a very small effect, indicating its weak contribution to the formation of competitive advantage in the context of male export MSMEs in West Java.

Q-Square Testing

A Q² value greater than 0 indicates that the model has predictive relevance, whereas a Q² value less than 0 suggests that the model lacks adequate predictive capability (Ghozali, 2021).

Table 6 Q-Square Testing

Variable	Q²predictive	Conclusion
Competitive Advantage	0.88	Predictive Relevance
MSMEs Performance	0.569	Predictive Relevance

The results of the Q-Square test indicate that both variables—Competitive Advantage and MSMEs Performance—possess predictive relevance. The Q² value for Competitive Advantage is at a very high level, suggesting that the model has a strong predictive power for this variable. Meanwhile, the Q² value for MSMEs Performance also demonstrates good predictive ability, indicating that the model is capable of explaining MSME performance in a relevant and accurate manner. These findings imply that the model employed in this study has an adequate predictive quality for both key variables.

Hypothesis Testing Results

A hypothesis is a predictive statement regarding the relationship between certain variables. Specifically, a hypothesis presents a prediction about the form of the relationship among those variables. Meanwhile, hypothesis testing is the decision-making process in which the researcher evaluates the research results based on predetermined objectives or goals (Abdillah, W., & Jogiyanto, 2015).

Hypothesis Testing Results of Direct Effects

Table 7 Direct Effect Hypothesis

Direct Effect Hypothesis	Path Koefisien	T Statistics	P Values	Conclucion
Competitive Advantage -> MSMEs Performance	0.749	26.172	0.000	Accepted

Research Article

Distribution Capability -> Competitive Advantage	0.363	8.518	0.000	Accepted
Marketing Capability -> Competitive Advantage	0.132	3.515	0.000	Accepted
Marketing Communication Capability -> Competitive Advantage	0.169	2.277	0.011	Accepted
Pricing Capability -> Competitive Advantage	0.109	1.859	0.032	Accepted
Product Development Capability -> Competitive Advantage	0.206	3.664	0.000	Accepted
Product Innovation Capability -> Competitive Advantage	0.042	0.985	0.162	Rejected

The direct effect hypothesis testing in this study aims to analyze the direct relationships between variables within the structural model. Based on statistical analysis using the SEM-PLS method, most of the paths between variables show significant results. This is evident from the T-statistics values, most of which exceed 1.96—the minimum significance threshold at a 95% confidence level—and p-values below 0.05. Therefore, it can be concluded that the independent variables in this study have a significant influence on the related dependent variables. These findings demonstrate that the research model effectively explains the relationships among constructs in the context of export-oriented MSMEs in West Java.

H1: Marketing Intelligence Capability → Competitive Advantage

This hypothesis has a coefficient of 0.132, a T-statistic of 3.515, and a p-value of 0.000. Findings indicate that marketing intelligence capability does contribute to enhancing the competitive standing of MSMEs. What it suggests is that MSMEs who are able to efficiently gather, analyze, and utilize marketing information will be competitive in the market. This attests to the work by Falahat et al. (2020), Gómez-Prado et al. (2022), and Paramita et al. (2023).

H2: Product Innovation Capability → Competitive Advantage

This hypothesis demonstrates a coefficient of 0.042, T-statistic of 0.985, and p-value of 0.162, depicting an insignificant effect. This suggests that product innovation is yet to play a major role in contributing to the development of competitive advantage in the investigated export MSMEs context. Although product innovation could be considered key, in this case, it has not significantly contributed to MSMEs' competitiveness.

H3: Pricing Capability → Competitive Advantage

This hypothesis has a coefficient of 0.109, T-statistic of 1.859, and p-value of 0.032, showing a significant effect, but close to the border. This implies that appropriate pricing strategies play a positive contribution to enhancing the competitive advantage of MSMEs. Competitive and value-based pricing allows MSMEs to compete in rigorous export markets. This finding is consistent with the work of Falahat et al. (2020), Zou et al. (2003), and Gómez-Prado et al. (2022), indicating the contribution of pricing capability towards competitive advantage.

H4: Marketing Communication Capability → Competitive Advantage

This hypothesis has a coefficient of 0.169, a T-statistic of 2.277, and a p-value of 0.011, and displays substantial influence. It suggests that capable and effective marketing communication capability is able to reinforce MSMEs' competitive power. Marketing communication strategy increases MSMEs' brand awareness, market

Research Article

network expansion, and loyalty of customers. These results are in line with Zou et al. (2003), who emphasize the pivotal role played by marketing communication in creating and maintaining competitive advantage.

H5: Distribution Capability → Competitive Advantage

The hypothesis itself has a coefficient of 0.363, T-statistic of 8.518, and p-value of 0.000, meaning the competitive advantage is greatly influenced. Therefore, effective and efficient distribution capacity is a crucial determinant for maximizing MSMEs' competitive advantage. Efficient distribution ensures products reach the market on time in good condition, contributing to high customer satisfaction and improved competitive advantage for MSMEs in export markets. This agrees with Zou et al. (2003), who stress distribution as an essential competitive step.

H6: Product Development Capability → Competitive Advantage

This hypothesis has a coefficient of 0.206, a T-statistic of 3.664, and a p-value of 0.000, showing a significant effect. This suggests that the ability of MSMEs to develop new or improve existing products is crucial to the creation of competitive advantage. Constant product development helps MSMEs meet changing customer needs and improve competitiveness. This result supports Zou et al. (2003), who attest to the role of product development in improving competitive positions.

H7: Competitive Advantage → MSMEs Performance

The hypothesis has a coefficient of 0.749, T-statistic of 26.172, and p-value of 0.000. Since the T-statistic is far greater than the minimum required (1.96) and the p-value is below 0.05, the effect is significant. This indicates competitive advantage has a strong, direct, positive impact on MSMEs' performance. That is, MSMEs that can build and maintain competitive advantage will significantly improve their business performance, e.g., sales, profitability, and market development. The findings are in line with research conducted by Falahat et al. (2020), Gómez-Prado et al. (2022), and Zou et al. (2003), which also found a high-positive relation between firm performance and competitive advantage.

Testing the Hypothesis of Indirect Effects

Table 8 Indirect Effect Hypothesis

Indirect Effect Hypothesis	Path Koefisien	T Statistics	P Values	Conclution
Distribution Capability -> Competitive Advantage -> MSMEs Performance	0.272	7.71	0.000	Accepted
Marketing Capability -> Competitive Advantage -> MSMEs Performance	0.099	3.466	0.000	Accepted
Marketing Communication Capability -> Competitive Advantage -> MSMEs Performance	0.127	2.263	0.012	Accepted
Pricing Capability -> Competitive Advantage -> MSMEs Performance	0.082	1.852	0.032	Accepted

Research Article

Product Development Capability -> Competitive Advantage -> MSMEs Performance	0.154	3.669	0.000	Accepted
Product Innovation Capability -> Competitive Advantage -> MSMEs Performance	0.031	0.982	0.163	Rejected

The test of indirect effect hypothesis is aimed at verifying the indirect effect of capability variables on MSMEs performance through the intervening variable, Competitive Advantage. Based on the analysis results, most of the indirect effect paths show strong influence as their T-statistics values are above 1.96 and p-values less than 0.05. This suggests that competitive advantage plays a crucial role as an intervening factor improving the connection between MSMEs' capabilities and export performance.

H8: Marketing Intelligence Capability → Competitive Advantage → MSMEs Performance

The findings of the test recognize that this hypothesis has a significant indirect effect with a path coefficient of 0.099, t-statistics of 3.466, and p-value of 0.000. This means that the ability of MSMEs to read and effectively cope with market information can enhance competitive advantage, and thereby positively influence export performance. This confirms the reality that marketing intelligence not only has a direct influence on but also enhances performance through competitive advantage.

H9: Product Innovation Capability → Competitive Advantage → MSMEs Performance

The path coefficient of this hypothesis is 0.031 with t-statistics 0.982 and p-value 0.163, which is an insignificant indirect effect. It implies the indirect influence of product innovation on export performance through competitive advantage is not supported. It infers that product innovation has not yet been a determining factor in improving competitive advantage or developing MSMEs' export performance in this research context.

H10: Pricing Capability → Competitive Advantage → MSMEs Performance

The concerned hypothesis has a path coefficient of 0.082, t-statistics of 1.852, and p-value of 0.032. Though the value is short of the mark, the effect still holds good. This confirms the finding that an effective pricing policy can strengthen the competitiveness of MSMEs and indirectly improve export performance.

H11: Marketing Communication Capability → Competitive Advantage → MSMEs Performance

It shows that the path coefficient is 0.127, t-statistics is 2.263, and p-value is 0.012, and there is a significant indirect effect. This signifies that effective marketing communication can support MSMEs' competitive advantage and contribute positively to improving export performance. That is to say, well-performing MSMEs in marketing communication will gain advantages resulting in more opportunities for export success.

H12: Distribution Capability → Competitive Advantage → MSMEs Performance

This hypothesis obtains a path coefficient of 0.272, t-statistics of 7.710, and p-value of 0.000. This is a very significant indirect effect, showing that efficient and reliable distribution capability not only directly contributes to competitive advantage but also indirectly enhances MSMEs export performance through the improved competitiveness gained.

H13: Product Development Capability → Competitive Advantage → MSMEs Performance

The results for this hypothesis show a path coefficient of 0.154, t-statistics of 3.669, and p-value of 0.000, indicating a significant indirect effect. This means that the capability to develop new products or improve existing ones significantly strengthens competitive advantage and positively impacts MSMEs' export performance. These findings confirm the importance of product innovation in sustainable business development to win competition in the global market.

Research Article

DISCUSSION

This study reveals that most export capability variables play a crucial role in shaping the competitive advantage of export-oriented MSMEs operated by male entrepreneurs in West Java. These findings underscore the importance of specific functional capabilities in supporting a company's competitiveness in export markets.

An interesting finding of this study is that Product Innovation Capability does not show a significant effect on Competitive Advantage. This conclusion opposes previous research indicating to a great extent product innovation as a main driver in international competition success. The insignificance of the effect of product innovation in this research is strongly suspected to result from the nature of innovations undertaken by MSMEs, which is not radical and even possibly irrelevant to what international markets require and anticipate. This means that incremental innovation by itself may not be sufficient to drive competitive advantage in the highly competitive export market. This finding is consistent with research by Ahmad and Wahyuni (2023), which also showed that product innovation capability does not contribute significantly to competitive advantage in MSMEs, implying that product uniqueness without detailed knowledge of the market may not achieve a superior market position.

Market Intelligence Capability, on the other hand, is revealed to have a strong and significant positive effect on competitive advantage. This is in support of previous research findings by Falahat et al. (2020), Gómez-Prado et al. (2022), and Paramita et al. (2023), which all persistently emphasize the significance of market intelligence in supporting competitive advantage, especially for export-oriented MSMEs. This capacity enables owners to understand market trends accurately and in time, thus more efficient in targeting strategies.

Moreover, Pricing Capability also reveals excellent influence on competitive advantage. It is also advocated by Falahat et al. (2020), Zou et al. (2003), and Gómez-Prado et al. (2022), who state that competitive pricing capability is one of the major drivers in constituting MSMEs' competitive advantage in global markets. Hence, it can be understood that there is excellent and positive correlation between pricing capability and competitive advantage.

Other capabilities such as Marketing Communication Capability, Distribution Capability, and Product Development Capability are also indicated to have significant positive effects on competitive advantage. The results corroborate empirical evidence of past research, particularly by Zou et al. (2003), which assert that these capabilities significantly contribute towards strengthening a firm's competitive standing in export markets.

Competitive advantage within the research within this study is also shown to be a significant mediating variable between most export capabilities and export performance of MSMEs. This suggests that functional capabilities of MSMEs do not necessarily lead to improved export performance but first need to be handled strategically and utilized in order to create competitive advantage. Competitive advantage in this regard serves as a bridge of strategy linking internal resources and capabilities with superior performance in export markets. This concurs with the view enumerated by Falahat et al. (2020), who further observed that competitive advantage serves a critical mediating role between internal capabilities and export performance outcomes.

However, the fact that there is no significant connection of product innovation capacity to competitive advantage or export performance—direct and indirect—opens up avenues for future research. Future studies could explore whether some in some manner certain features of innovation used (incremental versus radical), R&D intensity investment, or firm market orientation can be used as moderating factors that augment the relationship between product innovation and competitive advantage.

Overall, the findings emphasize the importance for MSMEs to build a foundation of functional capabilities that are not only strategic and well-planned but also relevant to market needs. Additionally, it is crucial to ensure that these capabilities truly create tangible competitive value before they can translate into significant improvements in export performance.

CONCLUSION

Most export capabilities, such as market intelligence capability, pricing capability, marketing communication capability, distribution capability, and product development capability, have been proven to have a positive and significant impact on achieving competitive advantage among male-led exporting SMEs in West Java Province. These

findings confirm that these capabilities are strategic elements that support SMEs in strengthening their position in competitive export markets.

On the other hand, product innovation capability does not have a significant effect on either competitive advantage or export performance, whether directly or through mediation. This condition indicates that the product innovations carried out by SMEs are not yet fully relevant to international market needs or may not be profound enough to provide strong differential value. Therefore, relying solely on product innovation is insufficient to guarantee competitive advantage at the global level.

The analysis also shows that competitive advantage functions as an important mediating variable in the relationship between export capabilities and export performance. In other words, internal capabilities will not automatically improve export performance unless they first manifest as real and sustainable competitive advantages. Competitive advantage becomes a key component that bridges internal resources with achieving superior results in global markets.

With significant R^2 and Q^2 values, the research model has proven to be robust in explaining and predicting the relationships between variables, thus serving as a theoretical basis for developing SME export strategies. These findings contribute to the development of literature in strategic management and export capabilities, as well as provide practical implications for business practitioners and policymakers in designing more targeted programs to enhance SME competitiveness.

Overall, this study emphasizes the need to strengthen functional capabilities that are relevant to the global market context and the importance of ensuring that these capabilities genuinely create competitive added value before they can be expected to contribute to improved export performance. By understanding this relationship, efforts to enhance SME competitiveness can be carried out more strategically and effectively.

Based on the findings of this study, it is recommended that male exporting SMEs in West Java focus more on developing capabilities that have been proven to significantly contribute to achieving competitive advantage, such as distribution capability, marketing communication, pricing, product development, and market intelligence. Business actors need to adopt a strategic approach in building competitive advantage, not only relying on product innovation alone but also strengthening efficient distribution systems, adaptive communication strategies to international markets, and market analysis capabilities that are responsive to changes. Furthermore, it is important for SMEs to receive support in the form of training, access to market information, and strategic mentoring, which can be facilitated by the government and business support institutions.

For future researchers, it is recommended to broaden the scope of research by involving female entrepreneurs or conducting comparisons across different regions and industry sectors to obtain a more comprehensive picture of the dynamics of export capabilities. Further studies may also consider external factors such as policy support, macroeconomic conditions, and digital infrastructure as moderating or enhancing variables in the relationship between internal capabilities and export performance. Additionally, a longitudinal approach can be used to observe changes in the impact of export capabilities on business performance over a certain period, thereby providing more dynamic and realistic insights into the development of SME competitiveness in global markets.

REFRENCES

[1] Ardiyanti, S. T., & Kahfi, A. S. (2023). *Faktor-Faktor Internal dan Eksternal Yang Mempengaruhi Kinerja Ekspor UMKM Indonesia. Cendekia Niaga, 7*(1), 13–22. Retrieved from https://jurnal.kemendag.go.id/index.php/JCN/article/view/776

[2] Abdillah, W., & Jogiyanto. (2015). Partial least square (PLS): Alternatif structural equation modeling (SEM) *dalam penelitian bisnis*. Yogyakarta: Andi.

[3] Ahmad, A. R., & Wahyuni, L. K. (2023). *Pengaruh inovasi produk dan inovasi proses terhadap keunggulan bersaing dan kinerja pemasaran UMKM produk camilan. Majalah Ilmiah DIAN ILMU, 23*(1).

[4] Angraeni, C., & Yuldinawati, L. (2017). *Pengaruh kompetensi kewirausahaan terhadap kesuksesan wirausaha pada usaha mikro dengan lingkungan bisnis sebagai variabel moderasi (Studi pada wirausaha binaan Dinas Pertanian dan Ketahanan Pangan Kota Bandung 2017)*.

[5] Ardiyanti, S. T., Kahfi, A. S., Kebijakan, P., & Perdagangan, P. (2023). *Faktor-faktor internal dan eksternal yang mempengaruhi kinerja ekspor UMKM Indonesia*. Cendekia Niaga: Journal of Trade Development and Studies.

[6] *Badan Pusat Statistik Indonesia*. (2025). *Ekspor menurut provinsi asal barang* 2023. https://www.bps.go.id/id/publication/2024/10/07/732704e9bcd651e8975ecf06/export-by-province-of-origin-of-goods-2023.

[7] *Badan Pusat Statistik. (2025). Banyaknya Usaha Mikro dan Kecil menurut Kabupaten/Kota (Unit),* 2021-2023. https://jabar.bps.go.id/id/statistics-table/2/NzUyIzI=/banyaknya-usaha-mikro-dan-kecil-menurut-kabupaten-kota.html

[8] David, F. R., David, F. R., & David, M. E. (2023). Strategic Management: A Competitive Advantage Approach, Concepts and Cases 17th Edition. Pearson.

[9] Expósito, A., Sanchis-Llopis, A., & Sanchis-Llopis, J. A. (2023). Entrepreneur's Gender and SMEs Performance: the Mediating Effect of Innovations. Journal of the Knowledge Economy. https://doi.org/10.1007/s13132-023-01555-8

[10] Falahat, M., Ramayah, T., Soto-Acosta, P., & Lee, Y. Y. (2020). SMEs internationalization: The role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance. Technological Forecasting and Social Change, *152*, 119908. https://doi.org/10.1016/j.techfore.2020.119908

[11] Ghozali, I. (2021). Partial least squares: *Konsep, teknik dan aplikasi menggunakan program SmartPLS 3.2.9 untuk penelitian empiris*. Semarang: Badan Penerbit UNDIP.

[12] Ghozali, I., & Kusumadewi, K. A. (2023). Partial least square Smart PLS 4.0. Yoga Pratama.

[13] Gómez-Prado, R., et al. (2022). Product innovation, market intelligence and pricing capability as a competitive advantage in the international performance of startups: Case of Peru. *Sustainability (Switzerland), 14*(17). https://doi.org/10.3390/su141710703

[14] Hendratmoko. (2021). Faktor-faktor yang mempengaruhi kinerja UMKM di Indonesia. Jurnal Orientasi Bisnis dan Entrepreneurship (JOBS), 2(1), 50–65. https://doi.org/10.33476/jobs.v2i1.1782

[15] Iba, Z., & Wardhana, A. (2023). *Metode Penelitian*.

[16] Keskin, H., Ayar Şentürk, H., Tatoglu, E., Gölgeci, I., Kalaycioglu, O., & Etlioglu, H. T. (2021). The simultaneous effect of firm capabilities and competitive strategies on export performance: the role of competitive advantages and competitive intensity. International Marketing Review, 38(6), 1242–1266. https://doi.org/10.1108/IMR-09-2019-0227

[17] Mandiringana, M., Nkowane, B. J., & Ncube, M. (2023). Comparative analysis on male versus female entrepreneurial performance. *European Journal of Science, Innovation and Technology (EJSIT), 3*, 188. www.ejsit-journal.com

[18] Nurlatifah, H., Saefuddin, A., Marimin, M., & Suwarsinah, H. K. (2023). *Model keunggulan kompetitif berbasis kapabilitas pemasaran untuk meningkatkan performa usaha mikro kecil perempuan mirin*.

[19] Ortigueira-Sánchez, L. C., Welsh, D. H. B., & Stein, W. C. (2022). Innovation drivers for export performance. Sustainable Technology and Entrepreneurship, 1(2). https://doi.org/10.1016/j.stae.2022.100013

[20] Paramita, D., Riorini, S. V., & Khodijah, M. (2023). *Pengaruh product innovation capability, market intelligence capability, price capability terhadap startup international performance dengan competitive advantage sebagai mediator pada startup di DKI Jakarta. Jurnal Multidisiplin Indonesia, 2*(2), 255–267. https://doi.org/10.58344/jmi.v2i2.173

[21] Philip, K., & Armstrong, G. (2018). Principles of marketing (17th ed.). Cincinnati: Pearson Higher Education.

[22] Rahmawati, D., Purwohedi, U., & Prihatni, R. (n.d.). *Pengaruh TQM terhadap kinerja UMKM dengan mediasi keunggulan bersaing*. http://pub.unj.ac.id/journal/index.php/japa

[23] Riyanto, S., & Hatmawan, A. A. (2020). *Metode riset: Penelitian kuantitatif penelitian di bidang manajemen, teknik, pendidikan, dan eksperimen*. Deepublish

[24] *Satu Data Kemendag RI. (2025). Perkembangan Ekspor Non Migas (Provinsi Asal Barang)*. https://satudata.kemendag.go.id/data-informasi/perdagangan-luar-negeri/ekspor-non-migas-provinsi

[25] Sherlywati, S., Handayani, R., & Harianti, A. (2017). *Analisis perbandingan kemampuan kewirausahaan pengusaha perempuan dan laki-laki: Studi pada UMKM di Kota Bandung*. *Jurnal Manajemen Maranatha, 16*(2), 155. https://doi.org/10.28932/jmm.v16i2.386

[26] Sugiyono. (2020). *Metode penelitian kualitatif*. Alfabeta.

[27] Sugiyono. (2023). *Metode penelitian kualitatif*. Alfabeta.

[28] Yuldinawati, L., Tricahyono, D., Anggadwita, G., & Turipanam Alamanda, D. (2018). Towards a framework for ICT-based entrepreneurship development through business incubation processes: case study of a techno park. In Int. J. Business and Globalisation (Vol. 21, Issue 1).

[29] Yusuf, S., Seftiana, E., Lidyah, R., Lidyah Soufran Yusuf, R., Studi Magister Ekonomi Syariah, P., Ekonomi dan Bisnis Islam, F., Islam Negeri Raden Fatah Palembang, U., Jalan Jenderal Sudirman, K. A., Pahlawan Kecamatan Kemuning Kota Palembang, K., Jalan Pangeran Ratu Kelurahan, K. B., & Kecamatan Seberang UluI Kota Palembang Sumatera Selatan, U. (2022). Usaha Mikro Kecil dan Menengah Sebagai Sendi Perekonomian Indonesia. http://jurnal.unmer.ac.id/index.php/jrei/

[30] Zou, S., Fang, E., & Zhao, S. (2003). The Effect of Export Marketing Capabilities on Export Performance: An Investigation of Chinese Exporters. Journal of International Marketing, 11(4), 32–55. https://doi.org/10.1509/jimk.11.4.32.20145.