



Bridging Networks and Skills: The Moderating Role of Capital Access in Enhancing Post-Migrant SMEs Performance

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Abstract

This study analyses the role of community networks, specifically social capital, human capital investment (HCI), and capital access, in strengthening the impact of both forms of capital on the performance of micro, small, and medium enterprises (MSMEs) established by former Indonesian Migrant Workers (post-PMI). This study employs a quantitative methodology with a causal framework to achieve its objectives. The sample consisted of owners or managers of post-PMI MSMEs guided by the Indonesian Migrant Worker Protection Service Centre (BP3MI) across 23 provinces in Indonesia, totalling 200 MSMEs. The data were analysed using moderated regression analysis. The results demonstrate that community networks, HCI, and capital access have a positive influence on the performance of post-PMI MSMEs. Capital access has a positive moderating effect on the influence of community networks on the performance of MSMEs. Capital access has an adverse moderating effect on the influence of HCI on the performance of post-PMI MSMEs. The results of this study make a significant contribution to the development of social and human capital theories, particularly in the context of post-PMI MSMEs. The availability of financial capital is crucial for leveraging the opportunities that emerge from social networks. The finding that capital access negatively moderates the influence of HCI on MSME performance highlights the importance of limitations in applying skills and knowledge without sufficient financial resources to implement them. This study presents a novel examination of capital access as a moderating variable in the performance of MSMEs particularly among of post-migrant workers, a topic that has not been previously addressed by researchers.

Keywords: *Indonesian Migrant Workers; social capital; human capital; financial access; non-financial*

INTRODUCTION

Indonesian Migrant Workers (PMI) significantly contribute to the national economy, particularly via the remittances they send to their home country. A significant reliance on remittances during overseas employment frequently leads to inadequate preparation for prospects upon return to Indonesia. This condition frequently arises from insufficient access to sustainable employment opportunities, relevant skills, or entrepreneurial support. This results in economic vulnerability for the post- or former PMI and their families. Numerous former PMIs endeavour to establish businesses as a means of economic and social reintegration, specifically through micro, small, and medium enterprises (MSMEs) designed for former PMIs. PMI typically possess work experience and skills gained internationally, which serve as assets for their businesses. They are frequently members of various social groups or communities both in Indonesia and overseas. Nonetheless, this potential is frequently hindered from being maximised due to restricted access to capital.

The Indonesian Migrant Workers Protection Agency (BP2MI), now the Ministry of Indonesian Migrant Workers Protection (KP2MI), has initiated a program designed to prevent migrant workers and their families from being ensnared in a cycle of recurrent life necessity fulfilment, such as unregulated overseas employment. The economic protection of Indonesian

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Migrant Workers was established under Law No. 18 of 2017. KP2MI/BP2MI empowers workers and their families through economic initiatives. This encompasses processes, methods, and efforts aimed at enhancing knowledge, skills, and networks, enabling Indonesian Migrant Workers and their families to achieve independent entrepreneurship ([Republic of Indonesia Law, 2017](#)). KP2MI, via BP2MI, supports Indonesian Migrant Workers in 23 provinces, focusing on empowerment through entrepreneurship and training to build a productive workforce. PERWIRA PMI, the Indonesian Migrant Worker Entrepreneurs Association, serves as a platform for Indonesian Migrant Workers and their families engaged in entrepreneurial endeavours aimed at enhancing knowledge, skills, and networking in entrepreneurship. The family of Indonesian Migrant Workers, henceforth referred to as the family, consists of the husband, wife, child, or parent, including relationships established through court decisions and/or determinations, encompassing both individuals in Indonesia and those residing with Indonesian Migrant Workers overseas.

Previous studies have extensively examined the factors influencing MSME performance; however, research focusing on MSMEs among Indonesian Migrant Workers remains scarce. Previous research done by [Aidoo et al. \(2020\)](#), [Boohene et al. \(2020\)](#), [Jordão and Novas \(2017\)](#), [Kanaan-Jebna et al. \(2022\)](#), [Olamide and Ogbechie \(2021\)](#), [Yang \(2023\)](#), and [Yuliarmi et al. \(2021\)](#) suggests that community networks significantly enhance the performance of MSMEs. Research indicates that community networks significantly impact MSME performance through human capital investment ([Agyabeng-Mensah & Tang, 2021](#); [AlQershshi et al., 2021](#); [Kanaan-Jebna et al., 2022](#); [Mubarik et al., 2020](#); [Penwell & Seeletse, 2024](#); [Sakib et al., 2022](#); [Supriyanto et al., 2022](#)). The performance of MSMEs is significantly affected by capital access, with the ease of obtaining financial resources serving as a critical determinant of success ([Ratnawati, 2020](#); [Yang, 2023](#)).

This study analyses the role of community networks, specifically social and human capital investment, and the impact of capital access on enhancing the influence of these forms of capital on the performance of post-PMI MSMEs. This study employs capital access as a moderating variable, in contrast to most prior research that has examined capital access as an intervening or mediating variable ([Ali et al., 2025](#); [Pham et al., 2025](#); [Talip et al., 2024](#)). The inclusion of capital access as a moderating variable is crucial, as it elucidates the variations in performance outcomes that arise despite business actors possessing comparable networks and human resource investments. Despite training, international work experience, and social network support, MSME owners who are former migrant workers cannot optimise their potential for sustainable and competitive business performance without adequate access to capital. Most previous research has focused on the overall population of MSMEs or small and medium-sized enterprises (SMEs) in Southeast Asia, Europe, and Africa. No research specifically addresses MSMEs established by former migrant workers, who possess unique human capital derived from their migration experiences and diaspora networks, yet frequently face limitations in accessing formal financing channels. This study addresses existing research gaps by examining community network factors and their impact on MSME performance ([Kanaan-Jebna et al., 2022](#); [Olamide & Ogbechie, 2021](#); [Ratnawati, 2020](#); [Safii & Anom, 2021](#); [Yang, 2023](#)) as well as the role of human capital investment ([Kanaan-Jebna et al., 2022](#); [Penwell & Seeletse, 2024](#); [Sakib et al., 2022](#); [Supriyanto et al., 2022](#)) and capital access ([Mubarok et al., 2022](#); [Ratnawati, 2020](#); [Yang, 2023](#)). It further explored the moderating effect of capital access on the relationship between community networks and social capital, including human capital derived from PMI experience and training. This study focuses on the performance of MSMEs in the context of former Indonesian Migrant Workers, a topic that has not been previously investigated.

The findings of this study are anticipated to enhance the sparse post-migration economic literature, especially regarding diaspora communities, while also offering an empirical foundation for BP3MI in formulating a program aimed at fostering MSMEs for former migrant workers and

promoting policies that improve capital access for these individuals, thereby stimulating MSME growth among former migrant workers, which will positively affect job creation and contribute to Sustainable Development Goals (SDGs).

LITERATURE REVIEW

This research is grounded in the Resource-Based View (RBV) (Barney, 1991), Human Capital Theory (Becker, 1994), and Social Capital Theory (Putnam, 2000). Resources, including information, skills, networks, and financial capital, are essential for establishing a competitive advantage. The efficacy of human capital and community networks in enhancing MSME performance is significantly contingent upon entrepreneurs' ability to access and leverage financial capital for the execution of ideas, innovations, and opportunities arising from these resources. Consequently, access to money serves as a contextual component (moderator) that enhances or constrains the impact of human capital and community networks on MSME performance.

The Effect of Community Networks on the Performance of Post-PMI MSMEs

Social Capital Theory, as articulated by Putnam (2000), demonstrates that social relationships and community networks are crucial in facilitating access to information, social support, and business opportunities. These networks enable MSMEs to acquire market information and form mutually beneficial relationships, thereby enhancing their business performance. Community empowerment involves equipping members with resources, opportunities, knowledge, and skills to enhance their capacity to improve their conditions or their quality of life (Saleh et al., 2023). The community network model emphasises the importance of interaction, collaboration, and resource utilisation within the network in achieving shared objectives, including economic empowerment and social welfare.

The performance of MSMEs can be assessed using both financial and non-financial metrics. Commonly used metrics for financial performance include revenue, profitability, and net profit margin. Moreover, non-financial factors, including brand reputation, customer satisfaction, and organisational performance, may serve as indicators of MSME performance (Allameh, 2018; Safii & Anom, 2021). Incorporating non-financial factors into the assessment of MSME performance is crucial for a comprehensive understanding of the environmental and social impacts of their businesses.

Previous studies by Kanaan-Jebna et al. (2022), Olamide and Ogbechie (2021), Ratnawati (2020), Safii and Anom (2021), and Yang (2023). In further discussion, another study by Jordão and Novas (2017) have indicated that knowledge-based networks enhance the performance of SMEs in Brazil and Aidoo et al. (2020) demonstrate that social capital, contingent on managerial ability, can enhance SME performance in Africa. Additionally, Boohene et al. (2020) assert that emotional intelligence improves the relationship between social capital and SME performance. The initial hypothesis was formulated based on a theory that has been corroborated by previous research.

H1: Community Networks have a positive effect on the Performance of Post-PMI MSMEs

The Effect of Human Capital Investment (HCI) on the Performance of Post-PMI MSMEs

The Human Capital Theory, articulated by Becker (1962), posits that investments in skills and experience, referred to as human capital, directly enhance a business's productivity and competitiveness. In the context of post-PMI MSMEs, skills gained through international experience, including technological adaptability and language proficiency, can confer a competitive advantage. Human capital constitutes a segment of intangible assets. It represents a dimension of intellectual capital that significantly influences a company's strategic decisions, particularly within the context

of micro, small, and medium enterprises. Business professionals often overlook the fact that a business entity serves as a repository of knowledge, abilities, and skills that can distinguish its products from those of competitors. Human capital encompasses employee competence, knowledge, training, skills, innovation, attitude, commitment, wisdom, experience, capabilities, motivation, creativity, entrepreneurial spirit, and leadership ([Gamerschlag, 2013](#); [Supriyanto et al., 2022](#)).

Previous research indicates that investing in human capital can enhance MSME performance ([Kanaan-Jebna et al., 2022](#); [Penwell & Seeletse, 2024](#); [Sakib et al., 2022](#); [Supriyanto et al., 2022](#)). Furthermore, benchmarking to the prior studies, such as [Agyabeng-Mensah and Tang \(2021\)](#) in Ghana, [AlQershi et al. \(2021\)](#) in Yemen, and [Yuliarmi et al. \(2021\)](#), the current research highlights the crucial role that human capital plays in enhancing the performance of SMEs, especially in Indonesia. Mubarak et al. (2020) in Pakistan, which document the role of human capital in enhancing the performance of small and medium enterprises in Indonesia. Knowledge and learning are critical determinants of human capital in MSMEs ([Ferreira & Franco, 2020](#)). The second hypothesis was formulated based on a theory supported by prior research.

H2: Human Capital Investment has a positive effect on post-PMI MSMEs, performance.

The Effect of Capital Access on the Performance of Post-PMI MSMEs

Capital access highlights the importance of entrepreneurs' ability to secure the financial resources necessary for business operations and growth. Access to capital through bank loans, investors, or financial institutions enables entrepreneurs to execute their business ideas, enhance production capacity, and expand their market reach. Chauvet and Ehrhart (2018) demonstrated that access to external credit significantly enhances sales growth and overall company growth.

Capital access for MSMEs or entrepreneurs in the post-PMI context can be categorized into several key factors. These include business feasibility, a strong credit history, well-defined business plans, product innovation and differentiation, a robust financial technology infrastructure, and positive relationships with the business community, banks, and financial institutions, all of which facilitate capital access. Numerous studies, such as [Mubarak et al. \(2022\)](#), [Ratnawati \(2020\)](#) and [Yang \(2023\)](#). [Ali et al. \(2020\)](#) and [Pardiman et al. \(2022\)](#) indicate that access to finance improves the financial and non-financial performance of SMEs. The third hypothesis was formulated based on a theory supported by prior research.

H3: Access to capital has a positive effect on post-PMI MSMEs performance.

The Role of Capital Access in Moderating the Influence of Community Networks on the Performance of Post-PMI MSMEs

Social capital theory examines the social relationships that constitute the resources available to individuals or groups in the context of entrepreneurship. According to [Putnam \(2000\)](#), community networks offer essential information, confidence in work abilities, and support to MSME actors. Although social networks offer opportunities and information, access to capital is essential for leveraging these opportunities through actual investments.

In the post-PMI context, capital access is believed to enhance the impact of community networks on the performance of post-PMI MSMEs. Access to financial resources can enhance the effectiveness of community networks in improving the performance of MSMEs. This phenomenon arises from the structural and functional characteristics of community networks, which facilitate productive economic activities, thereby ensuring that the capital accessed is effectively employed within the network collaboration framework. [Safii and Anom \(2021\)](#) demonstrate that financial

access enhances the impact of social capital on the performance of MSMEs. The fourth hypothesis was formulated based on a theory supported by previous research.

H4: The role of capital access in moderating the influence of community networks on the performance of post-PMI MSMEs

The Role of Capital Access in Moderating the Effect of Human Capital Investment (HCI) on the Performance of Post-PMI MSMEs

Human Capital Theory, as articulated by [Becker \(1962\)](#), posits that investments in human skills and experience enhance entrepreneurial capacity and innovation, subsequently yielding positive impacts on business performance. Despite possessing robust human capital, MSME actors struggle to optimise investment outcomes in their business operations without sufficient capital support. However, the findings from [Safii and Anom \(2021\)](#) indicate that financial access does not enhance the impact of human capital investment on MSME performance. The fifth hypothesis was formulated based on a theory supported by previous research.

H5: Capital access moderates the influence of human capital investment on post-PMI MSMEs performance.

RESEARCH METHOD

This study employed a quantitative methodology that utilises an explanatory framework. The study population consisted of all former Indonesian Migrant Workers (post-PMI) and their families, supported by BP3MI, across 23 provinces. This study employed purposive sampling, focusing on Indonesian Migrant Workers and their families as co-owners whom BP3MI had supported, documented sustainable empowerment activities, and possessed complete supporting evidence. This research utilised the [Hair et al. \(2019\)](#) and [Wati \(2021\)](#) approach, necessitating a minimum sample size of five times the number of research indicators, which resulted in a minimum sample size of 180 (5×36). This study involved 200 MSMEs, comprising retired PMI members distributed throughout 23 provinces. The research data were collected using a survey utilising a questionnaire with a Likert scale, ranging from strongly disagree to strongly agree, with a scoring system from 1 to 4 (1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree).

This study identifies the performance of post-PMI MSMEs as the dependent variable, with community networks and human capital investments serving as independent variables. Capital access is designated as a moderating variable. MSME performance is assessed through profitability, sales growth, customer satisfaction, product innovation, and capacity development ([Boohene et al., 2020](#); [Efendi et al., 2023](#); [Sakib et al., 2022](#); [Sudrajat et al., 2024](#); [Susanti et al., 2023](#)). Community networks are evaluated based on social connectedness, information exchange, market access, and collaboration ([Boohene et al., 2020](#); [Mubarak et al., 2022](#); [Talip et al., 2024](#)). The Human Capital Investment variable was assessed using indicators such as education, experience, training, intelligence, having good stamina at work (energy), work habits, and confidence in work abilities ([Pham et al., 2025](#); [Supriyanto et al., 2022](#); [Talip et al., 2024](#)). Capital access is assessed using various sources, including ease of acquisition, associated costs, support from financial institutions, SME loan initiatives, microcredit programs, and venture capital funds ([Efendi et al., 2023](#); [Ratnawati, 2020](#); [Talip et al., 2024](#); [Yuliarmi et al., 2021](#)).

The data analysis in this study employed Smart Partial Least Squares (Smart PLS) software version 4.1.1.4. The assessment of the framework model (inner model) and the measurement model (outer model) represents the evaluation of the models in Partial Least Squares analysis. The validity of the model is assessed by a measuring model, referred to as the outer model. [Wati \(2021\)](#)

stated that in Smart PLS, the convergent validity of a measurement model with reflective indicators is determined by the connection between item scores and construct scores. To assess the feasibility of a reflective indicator-based measurement model, the correlation between items or indicators and construct scores can be examined. An indicator correlation value exceeding 0.70 signified that the indicator was reliable. Hair et al. (2019) indicated that outer loading values ranging from 0.50 to 0.60 are acceptable for the growth stage of the research scale. The following figure illustrates the research model after evaluating the outer model. Reliability testing was conducted by examining Cronbach's alpha and composite reliability values. Cronbach's alpha and composite reliability indicate that a construct is deemed reliable if the value exceeds 0.70 (Wati, 2021). The hypothesis was tested using moderated regression analysis (MRA) for data analysis with Smart PLS 4.1.1.4. The proposed research model for hypothesis testing is as follows.

$$MSMEs_{perf} = \beta_1 CN + \beta_2 HCI + \beta_3 AC + \beta_4 CA * CN + \beta_5 CA * HCI + \varepsilon$$

Figure 1 provides a visual representation of the research model for the performance of post-Indonesian Migrant Worker MSMEs.

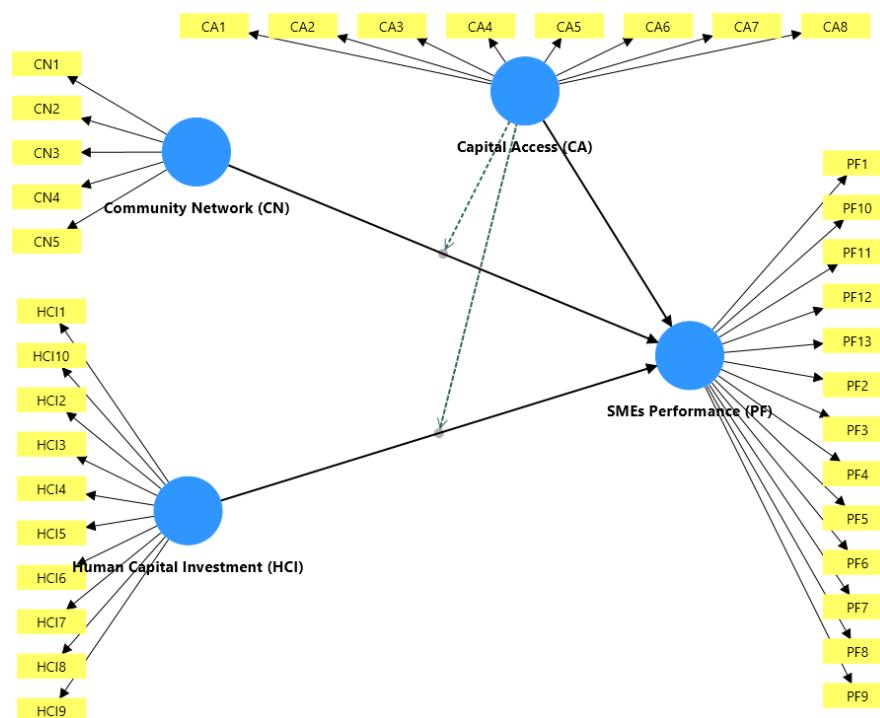


Figure 1. Research Model of Performance of Post-PMI MSMEs

Notes: To test the research hypothesis, significance Levels were set at the 1%, 5%, and 10% (p-values).

FINDINGS AND DISCUSSION

Table 1 presents the characteristics of the respondents, specifically the owners or managers of the post-PMI MSMEs.

Table 1. Characteristics of Respondents of post-PMI MSMEs

Characteristics	Amount	Percentage	Characteristics	Amount	Percentage
PMI Destination Countries			Gender		

Characteristics	Amount	Percentage	Characteristics	Amount	Percentage
Malaysia	55	28%	Man	59	29%
Singapore	36	18%	Women	141	71%
Taiwan	35	18%			
Hongkong	23	12%	Education		
Japan	8	4%	SD	7	4%
South Korea	10	5%	Junior High School	62	31%
Saudi Arabia	15	8%	High School	103	52%
Turkey	9	5%	Diploma	10	5%
Australia	1	1%	Masters	18	9%
deer	1	1%			
Dubai	1	1%	Types of MSMEs		
Other	6	3%	Fashion	22	11%
			Beauty	10	5%
Length of Work			Culinary	90	45%
≤ 1 year	33	17%	Service Industry	16	8%
1-3 years	122	61%	Tourism Industry	1	1%
4-7 years	26	13%	Manufacturing	2	1%
≥ 7 years	19	10%	Other	59	30%

Source: Author's calculation (2025)

According to Table 1, Malaysia had the highest number of respondents, totalling 55, constituting 28% of the overall sample. In contrast, the countries with the fewest respondents were Australia, the USA, and Dubai, each represented by only one respondent, accounting for 1% of the total. The majority of MSME owners in this study, comprising 70% (141 out of 200), were women who were former PMI. In contrast, 29% or 59 owners or managers of post-PMI MSMEs are male. Further, 103 individuals or 52% of the total, attained their highest level of education at the high school or vocational school level.

In contrast, the education level with the fewest respondents was elementary school, attended by only seven individuals, representing 3% of the total. The majority of respondents, 122 individuals or 61% of the total, have work experience ranging from 1 to 3 years. The duration of employment among the respondents with the least representation, specifically those with 7 years or more of experience, constituted 10% of the total sample. Ninety respondents (45%) were identified as having culinary MSMEs. By contrast, the tourism sector represents the category of MSME with the lowest respondent count, comprising only 1% of the total. To interpret the results of the descriptive analysis, the Likert scale categories (strongly disagree, disagree, agree, and strongly agree) were used with the following interval formula:

$$Interval = \frac{Highest\ Score - Lowest\ Score}{Number\ of\ Classes\ or\ Groups} = \frac{4 - 1}{4} = 0.75$$

Table 2 outlines the upper and lower limits of the questionnaire interval and the results of interpreting the average value of each research variable.

Table 2. Questionnaire Measurement Values

Group	Lower Limit	Interval	Upper Limit	Description
1	1.00	0.75	1.74	Strongly disagree
2	1.75	0.75	2.49	Disagree
3	2.5	0.75	3.24	Agree
4	3.25	0.75	4.00	Strongly agree

Table 3 explains the results of the descriptive analysis of the four research variables: average value, minimum value, maximum value, and standard deviation.

Table 3. Questionnaire Measurement Values

Variables	Mean	Min	Max	St. Deviation	Result
Community Networks	3.15	1	4	0.5296	Agree
Human Capital Investment	2.71	1	4	0.6818	Agree
Capital Access	2.72	1	4	0.658875	Agree
SME's Performance	2.86	1	4	0.636692	Agree
SME's Sustainability	2.82	1	4	0.559625	Agree

The descriptive analysis of the four analysed factors revealed that all variables had average scores within the "Agree" category, indicating that respondents typically provided a favourable evaluation of the assessed characteristics. The Community Networks variable achieved the highest average score of 3.15, indicating that community networks significantly supported the activities of MSMEs established by former Indonesian Migrant Workers (PMI). This indicates that business owners perceive support and have confidence in the social backing of community members including PMI officers.

Simultaneously, the two factors with the lowest mean scores were Human Capital Investment (2.71) and Capital Access (2.72), indicating that investments in energy and confidence, along with capital accessibility, remain minimal and require enhancement. The Human Capital Investment measure exhibited the largest standard deviation (0.6818), signifying variability in perceptions among respondents. This may result from differing backgrounds, experiences, education, and psychological preparedness among former PMI.

The mean performance of MSMEs was 2.86, indicating that business owners regarded their enterprises as relatively stable and favourable. This finding suggests that enhancing community networks has been effective; however, additional efforts are required to augment human capital investment and broaden access to capital to further optimize the performance and sustainability of MSMEs that reintegrate migrant workers.

Evaluation of Measurement Model (Outer Model)

In this study, the outer model assessment was performed using four measurement criteria. The four criteria are convergent validity, discriminant validity, composite reliability, and Cronbach's alpha. To assess the feasibility of a reflective indicator-based measurement model, the correlation between items or indicators and construct scores can be examined. The following figure illustrates the research model after evaluating the outer model.

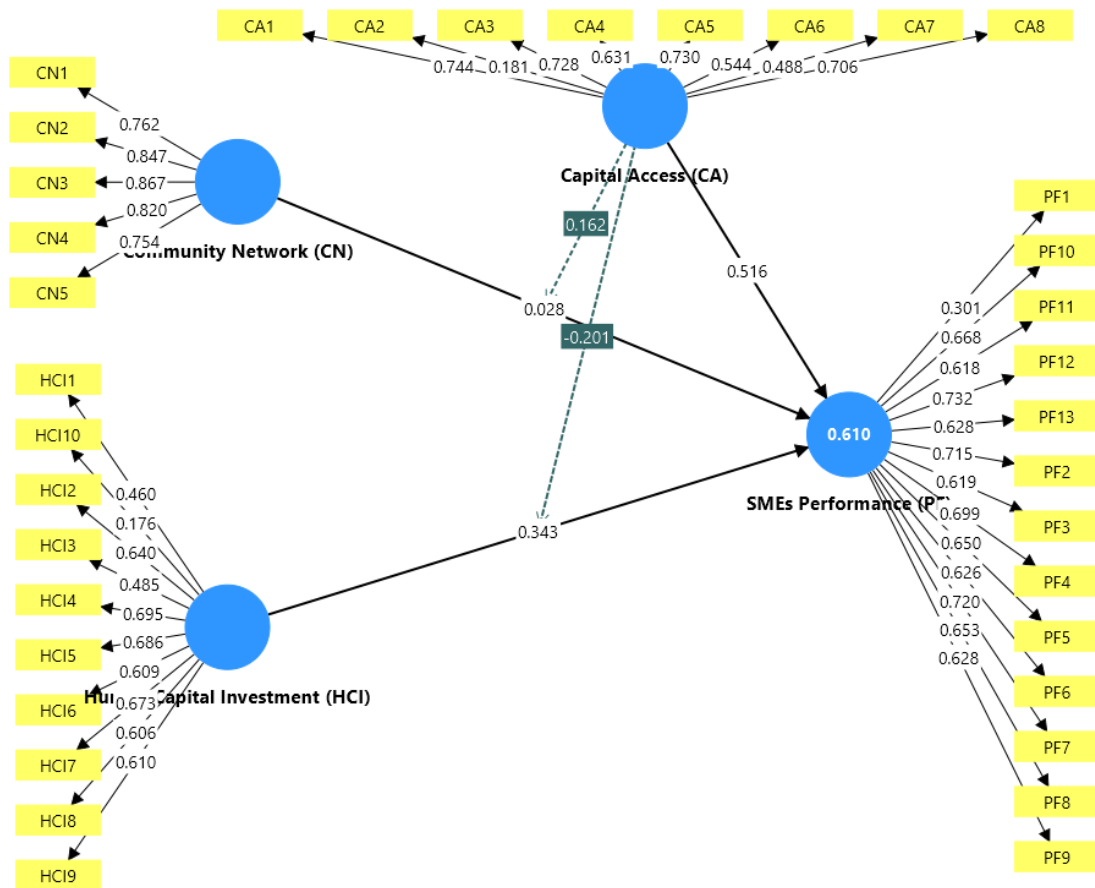


Figure 2. Outer Loading Results

The validity test results indicated that the seven research indicators were invalid because they possessed outer loading values below 0.6. The indicators used were HCI1, HCI3, HCI10, PF1, CA2, CA7, and PF1. Consequently, these indicators were excluded from the study. Table 4 presents the Smart PLS output for outer loading adjusted according to a standard of 0.6.

Table 4. Outer Loading Research Indicators

Variables	Indicator	Outer Loading	Result
Community Network (CN)	CN1	0.76	Valid
	CN2	0.846	Valid
	CN3	0.868	Valid
	CN4	0.821	Valid
	CN5	0.755	Valid
Human Capital Investment (HCI)	HCI2	0.667	Valid
	HCI4	0.66	Valid
	HCI5	0.73	Valid
	HCI6	0.649	Valid
	HCI7	0.721	Valid
	HCI8	0.619	Valid
	HCI9	0.624	Valid
Capital Access (CA)	CA1	0.757	Valid
	CA3	0.697	Valid
	CA4	0.707	Valid
	CA5	0.749	Valid
	CA6	0.611	Valid

Variables	Indicator	Outer Loading	Result
	CA8	0.725	Valid
MSMEs Performance (PF)	PF10	0.662	Valid
	PF11	0.606	Valid
	PF12	0.724	Valid
	PF13	0.619	Valid
	PF2	0.718	Valid
	PF3	0.627	Valid
	PF4	0.706	Valid
	PF5	0.657	Valid
	PF6	0.635	Valid
	PF7	0.725	Valid
	PF8	0.658	Valid
	PF9	0.627	Valid

Source: Author's calculation (2025)

A discriminant validity test was conducted using a cross-loading analysis. If the cross-loading value for a variable's indicator surpasses that of another variable's indicator, the research variable has strong convergent validity (Wati, 2021).

The comparative test results indicated that the outer loading values for the research variables, including community networks, HCI, capital access, and MSME performance, were the highest among these variables. These statistics demonstrate that the indicators employed to formulate the research variables exhibit strong convergent validity. Table 5 presents the results of the reliability analysis.

Table 5. Composite Reliability and Cronbach's Alpha

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Capital Access (CA)	0.808	0.827	0.858
Community Network (CN)	0.87	0.881	0.906
Human Capital Investment (HCI)	0.794	0.792	0.849
SMEs Performance (PF)	0.885	0.888	0.905

Source: Author's calculation (2025)

The assessment of composite reliability for each construct exhibited an outer model loading above 0.7 (Table 5), indicating that all research variables—dependent variables (MSME performance), moderating variables (capital access), and independent variables (community networks and HCI)—demonstrated reliability by meeting the specified value criteria of Cronbach's alpha.

Structural Model Evaluation (Inner Model)

The evaluation of hypothesized relationships among latent constructs is central to the assessment of the internal model. The following equation represents the research model:

$$MSMEs_{Perf} = 0.095 CN + 0.313 HCI + 0.501 CA + 0.174CA * CN - 0.232 CA * HCI + \varepsilon$$

networks have a significant influence on the performance of post-PMI MSMEs at the 10% significance level. Additionally, HCI and access to capital exerted a significant positive impact on the performance of post-PMI MSMEs at the 1% significance level. Capital access positively moderated the influence of community networks on the performance of post-PMI MSMEs. Capital access negatively moderates the influence of HCI on the performance of post-PMI MSMEs'.

The F-square test indicates the extent of influence the exogenous latent variable exerts on the endogenous latent variable, and the F-square metric indicates the strength of influence. An influence was classified as weak if the result was less than 0.02, small if greater than 0.02, medium if greater than 0.15, and large if greater than 0.35. The R-squared value of 59.2% indicates that the research model demonstrates a reasonably good level of variation. The performance of post-PMI MSMEs is affected by community networks, HCI, and capital access, accounting for 59.2%, while the remaining 30.8% is attributed to factors not included in this research model.

Discussion

The Effect of Community Networks on the Performance of post-PMI MSMEs (Hypothesis 1)

The initial hypothesis test indicated that the community network had a significant influence on the performance of post-PMI MSMEs at the 10% significance level. Community networks are critical for enhancing the performance of post-PMI MSMEs. The findings of this study corroborate Social Capital Theory ([Putnam, 1993](#)), which posits that social networks, including community networks, serve as vital assets for enhancing business performance by promoting the exchange of market information, facilitating resource access, and cultivating trust and collaboration. Social networks and communities have a significant impact on business performance, particularly when leveraged effectively within a business framework. This allows for the contextualization of social capital theory, indicating that in the PMI veteran group, PERWIRA serves not only as a community network providing social support, but also as a mechanism for economic development. This suggests that social capital is both contextual and economic. Entrepreneurial social capital is formed by the accumulation of resources obtained from an entrepreneur's social connections. These resources are essential for entrepreneurial success, facilitating access to financial, marketing, and human resources and fostering innovation ([Lee & Hallak, 2020](#)).

The results of this study corroborate those of previous research, indicating that community networks or social capital significantly influence MSME performance ([Kanaan-Jebna et al., 2022](#); [Olamide & Ogbechie, 2021](#); [Ratnawati, 2020](#); [Yang, 2023](#); [Jordão & Novas, 2017](#)), indicating that knowledge-based networks can enhance the performance of SMEs in Brazil, while [Aidoo et al. \(2020\)](#) noted similar effects in Africa; effective social relations within the PMI Returning Community, marketing references about community networks, market development data, collaboration among MSMEs, and government support mechanisms have been demonstrated to enhance the performance of post-PMI MSMEs in Indonesia. This empirical evidence suggests that the presence of a community network is sufficiently robust, productive, and conducive to achieving specific business objectives, thereby enhancing the performance of post-PMI SMEs. The community network established by post-PMI serves not only social-emotional purposes but can also be strategically employed for collective business development and as an economic resource.

The Effect of Human Capital Investment (HCI) on the Performance of Post-PMI MSMEs (Hypothesis 2)

Testing the second hypothesis reveals that Human Capital Investment (HCI) has a significant and positive impact on the performance of post-PMI MSMEs. The findings of this study corroborate Human Capital Theory ([Becker, 1962](#)), indicating that investment in individuals via education, training, and experience enhances productivity and performance. Post-PMIs with entrepreneurship or business training, international work experience, and participation in development programs

(such as exhibitions and bazaars) under KP2MI guidance exhibit enhanced managerial and technical capabilities in managing MSMEs.

The findings of this study corroborate the conclusions of previous research ([Kanaan-Jebna et al., 2022](#); [Penwell & Seeletse, 2024](#); [Sakib et al., 2022](#); [Supriyanto et al., 2022](#)), indicating that investing in human capital significantly enhances the performance of MSMEs. The findings of this study align with the research conducted by [Agyabeng-Mensah and Tang \(2021\)](#) in Ghana, [AlQershi et al. \(2021\)](#) in Yemen, and [Yuliarmi et al. \(2021\)](#), which highlights the significance of human capital in enhancing the performance of small and medium enterprises in Indonesia. Empirical evidence suggests that individual capital, fostered through training, capacity building, active participation in entrepreneurial forums, effective time management, the appropriate allocation of training and development budgets, and health insurance, can enhance the performance of post-PMI MSMEs. This improvement is evident in various metrics, including revenue or sales turnover, net profit, increased sales, enhanced service quality, greater customer satisfaction, an expanded customer base, positive customer feedback, product/service innovation, and improved adaptability to market trends.

Human Capital Investment (HCI) serves as a critical foundation for business success by facilitating informed decision-making, fostering product innovation, enhancing financial management, and optimising marketing strategies. In micro-businesses, human capabilities, encompassing both soft and hard skills acquired through PMI from abroad, can be converted into competitive advantages. Viewing the context of post-migration economic reintegration from a capital building perspective is becoming increasingly important.

The Effect of Capital Access on the Performance of Post-PMI MSMEs (Hypothesis 3)

The findings of the third hypothesis test indicate that capital access has a significant impact on the performance of post-PMI MSMEs. This finding theoretically reinforces the significance of the Resource-Based View ([Barney, 1991](#)) and classical theory of MSME development, which identifies financial capital as a key resource that enhances productivity, operational efficiency, and business competitiveness in post-PMI MSMEs. In the context of the RBV framework, capital access enables business entities to enhance their resources, such as labour, technology, and product innovation, thereby positively influencing business performance. This finding aligns with the existing literature, indicating that limited capital is a prevalent obstacle for MSMEs and that enhancing capital access can promote business growth and stability.

The findings of this study corroborate the conclusions of previous research conducted by [Mubarok et al. \(2022\)](#), [Ratnawati \(2020\)](#), and [Yang \(2023\)](#), indicating that capital access has a significant impact on the performance of MSMEs. The findings of this study corroborate those of [Ali et al. \(2020\)](#) and [Pardiman et al. \(2022\)](#), who demonstrate that financing enhances both the financial and non-financial performance of small and medium enterprises. This empirical evidence suggests that access to capital, financing, and funding programs, as well as venture capital, can enhance sales, service quality, customer satisfaction, and innovation, thereby directly contributing to the profits of post-PMI MSMEs.

The findings of this study suggest that prioritizing capital access is crucial for the economic empowerment strategies of former migrant workers. Furthermore, supporting institutions, such as KP2MI and the Department of Cooperatives and MSMEs, should offer training in financial management and optimal capital utilization. This approach ensures that acquired funds are not solely expended on consumptive needs, but also effectively promote turnover growth, production efficiency, and business expansion.

Capital Access Moderates the Effect of Community Networks on the Performance of Post-PMI MSMEs (Hypothesis 4)

The findings of the fourth hypothesis test suggest that access to capital can moderate the effect of community networks on the performance of post-PMI MSMEs. The findings of this study have significant implications in both the theoretical and practical contexts. These findings contribute to the development of Social Capital Theory (Coleman, 1988; Putnam, 1993), which posits that community networks, as a form of social capital, can enhance business performance, particularly when complemented by sufficient financial capital. In a post-PMI context, capital access can enhance the impact of community networks on the performance of post-PMI MSMEs. The existence of capital optimizes the role of community networks in enhancing the performance of MSMEs. The structure and function of the community network facilitate productive economic activities, with capital access effectively utilized within the framework of network collaboration.

The findings of this study corroborate the research conducted by Safii and Anom (2021), which indicates that financial access can enhance the impact of social networks and social capital on the performance of MSMEs. The results indicate that access to capital is crucial as it significantly enhances business performance when effectively integrated into community networks. Government initiatives that provide financing for post-PMI MSMEs, along with the enhancement of community capacity to manage and optimize shared resources, will yield optimal outcomes. This suggests that financing programs should be complemented by strengthening business community institutions, promoting financial literacy education, developing group management skills, and establishing cooperatives or joint business entities.

Capital Access Moderates the Effect of Human Capital Investment on the Performance of Post-PMI MSMEs (Hypothesis 5)

The results indicate that capital access has a positive and significant effect on the performance of post-PMI MSMEs; however, in moderation, capital access negatively moderates this influence. Investment in human capital (HCI) and its impact on the performance of micro, small, and medium enterprises (MSMEs). This suggests that, while capital access is crucial for enhancing business performance, an abundance of capital can divert MSME actors from leveraging their knowledge and skills (human capital) towards an excessive emphasis on capital expansion. Enhancing access to capital is crucial for the operation and growth of post-PMI MSMEs. However, acquired capital may not be utilized effectively without requisite management skills and human capital. This occurs when business actors prioritise financial resources by leveraging their work experience, knowledge, and training to maximise their value. Consequently, financial institutions, governments, and NGOs must ensure that programs aimed at improving capital access are complemented by mentoring initiatives and enhancing capacity, thereby ensuring that investments in human capital effectively contribute to business performance (Fatoki, 2011). The findings of this study corroborate the research by Safii and Anom (2021), which indicates that capital access does not enhance the impact of human capital on the performance of MSMEs.

These results make a significant contribution to theoretical development. The Resource-Based View (Barney, 1991) and the Human Capital Theory (Becker, 1962) emphasise that integrating human and financial capital enhances performance. In the post-PMI context, this result highlights the limitations of the theoretical assumption that capital access alone is sufficient without adequate managerial capacity and business control. This finding aligns with Fatoki's (2011) study, which indicates that capital access without corresponding managerial capabilities increases the risk of small business failures.

This finding indicates that when high capital access is not effectively integrated with human resource capacity, it may fail to produce a synergistic relationship and could be counterproductive.

This highlights the significance of entrepreneurship training interventions that integrate financial management with the effective use of human resource capacity, rather than solely focusing on enhancing access to financial capital. Consequently, financial institutions, governments, and NGOs must ensure that programs aimed at improving capital access are complemented by mentoring initiatives and the enhancement of managerial capacity, thereby ensuring that investments in human capital yield tangible benefits for business performance (Fatoki, 2011).

CONCLUSION

The results of this study make a significant contribution to the advancement of social and human capital theories, particularly about MSMEs comprising post-migrant workers. This study theoretically establishes that capital access serves as both an independent and a moderating variable, enhancing the impact of community networks on business performance. This finding confirms the crucial role of financial capital in capitalising on the opportunities offered by social networks. The finding that capital access negatively moderates the effect of Human Capital Investment (HCI) on MSME performance highlights the limitations of applying skills and knowledge without sufficient financial resources. This finding highlights the importance of adequate capital access for post-PMI MSMEs, as it amplifies the positive effects of community networks and addresses the challenges of investing in human capital. Consequently, policies that facilitate easier and more affordable capital access for post-PMI MSMEs are essential for enhancing their market competitiveness and performance.

Based on the results of this study, several practical suggestions can be given to the Ministry of Indonesian Migrant Workers Protection (KP2MI) and other stakeholders, namely (1) strengthening capital access for post-PMI MSMEs, KP2MI needs to work with financial institutions and banks to facilitate capital access for post-PMI MSMEs by providing special financing programs with low interest rates and more flexible requirements; (2) development of community networks, mentoring programs, community-based training, and business networks can be introduced to increase collaboration between entrepreneurs who are post-migrant workers, strengthen social support, and create wider market opportunities; (3) increasing human capital investment programs, training that is more focused on market needs, followed by access to working capital, can increase the effectiveness of HCI; (4) integrated policies, KP2MI together with other related ministries, need to design policies that integrate capital access, development of social networks, and investment in human capital as the main pillars for empowering post-PMI MSMEs. A holistic approach offers more comprehensive and sustainable support for businesses operated by post-migrant workers.

LIMITATION & FURTHER RESEARCH

This study had several limitations. It did not further investigate respondents' perceptions through in-depth interviews with stakeholders. Additionally, the research failed to classify indicators into dimensions, which could allow for a more focused analysis of the dimensions that significantly contribute to the performance and development variables (sustainability) of post-PMI MSMEs. Future research should employ in-depth interviews to thoroughly investigate the challenges and obstacles encountered by post-PMI MSMEs, particularly regarding community networks, capital access, and human capital investments. This approach aims to enhance the performance and sustainability of the post-PMI MSMEs. Future research should employ a second-order confirmatory analysis to identify the dimensions that most significantly contribute to the construction of variables, particularly those related to HCI, performance, and MSME development.

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