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The Dynamics of Indonesian Migrant Workers: Their Short- and Long-Term Impact

Edy Santoso[1*], Vebry Eka Kusumawardhani[2], Fivien Muslihatinningsih[3]
[1,2,3]Faculty of Economics and Business, University of Jember, Indonesia
E-mail: [1]edysantoso@unej.ac.id, [2]vebrywrdhni@gmail.com, [3]fivien.feb@unej.ac.id
[*]**Corresponding author**

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ABSTRACT

Research Originality: This study integrates factors influencing Indonesian migrant workers into a Panel VECM model that captures both short- and long-term dynamics.

Research Objectives: This study investigates the factors that affect the short- and long-term migration of Indonesian migrant workers.

Research Methods: This study uses the Vector Error Correction Model (VECM) approach. Panel data were analyzed for six provinces on Java Island, covering the period 2008 to 2023.

Empirical Results: This study found significant positive effects of provincial minimum wage, employment opportunity rates, and poverty levels on the short-term migration of Indonesian migrant workers in Java. In the long term, all variables positively influenced Indonesian migrant worker migration, except for poverty, which had a non-significant effect.

Implications: These findings indicate an anomaly in the factors influencing the PMI. Therefore, we assert that policymakers in Indonesia must periodically review and adjust the UMP and implement effective price-control measures to ensure that workers' basic needs are met at a reasonable cost of living.

Keywords:
migrant workers; minimum wage; job opportunities; poverty

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INTRODUCTION

Labor migration is an important indicator of a country's socio-economic development. Reducing unemployment, increasing community welfare, and increasing job availability positively impact labor migration (Sukesi et al., 2022). In addition, globalization has expanded the labor market (Todorov et al., 2018). The emergence of a global labor market with an internationalized workforce is driving international labor migration (Pekarskiene et al., 2016). According to Lee (1966), individuals' decision to migrate is influenced by two factors, namely driving factors and pulling factors. Lee's (1966) theory of international migration posits that individuals' decisions to migrate are influenced by two factors: driving factors and pulling factors.

In the process, Lee described four factors that motivate individuals to migrate internationally: individual factors, factors in the region of origin, factors in the destination area, and obstacles. Driving factors include low minimum wages and uneven development within a country, which can result in limited employment opportunities and reduced social access for the community (Hoffmann et al., 2019). In contrast, pulling factors involve incentives such as higher wages and greater availability of job opportunities in the destination area (Zuhra et al., 2024).

In the theory of international migration (1993), Massey et al. asserted that labor migration would not occur without wage differentials between countries of origin and destination. In other words, people are not encouraged to migrate if the income difference between countries is slight (Santoso et al., 2022). Most workers in low-income countries migrate to countries with relatively higher wages (Parreñas et al., 2019). However, Stark and Bloom (1985), in their New Economics of Migration theory, explain that wages are not the primary reason individuals migrate; rather, migration is driven by family, household, and cultural factors. This means that the most important part of migration is how individuals find work and income to meet their needs, regardless of wages. In other words, poverty is a significant factor driving international migration (Muslihatinningsih et al., 2020).

In addition to poverty and low minimum wages, Nunley et al. (2017) have identified that job opportunities significantly influence individuals' decisions to migrate. They found a negative correlation between the availability of employment opportunities and overseas labor migration. Conversely, research conducted by Husnah et al (2019) indicates that job opportunities positively impact migration and the workforce. Despite an increase in job opportunities, the number of Indonesian migrant workers has continued to rise. According to Kwilinski et al. (2022), other factors, particularly poverty, have also played a positive role in driving international labor migration. Recent data reveal that nearly two-thirds of Indonesian migrant workers originate from districts with relatively high poverty rates, exceeding the national average. Furthermore, Lohmann and Marx (2018) found that poverty tends to decrease the number of Indonesian migrant workers, due to the substantial pre-departure costs involved (Muhammad et al., 2023).

Figure 1 illustrates that Indonesian migrant workers predominantly originate from Java, with the Island consistently ranking as the largest contributor to the shipment of

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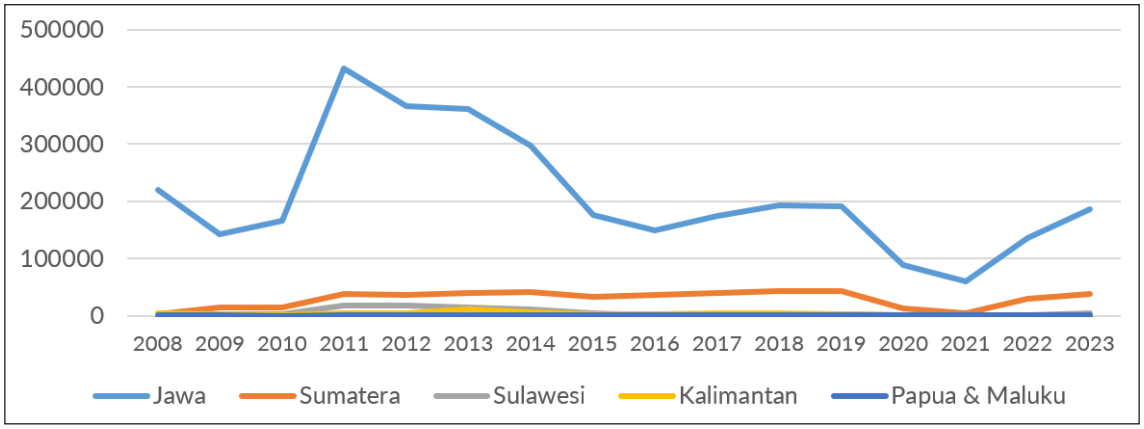
Indonesian Migrant Workers. In 2023, Indonesian migrant workers from Java are projected to comprise 67.7% of the total Indonesian migrant workers (BP2MI, 2023). Java Island stands out as the most populous and economically and infrastructure-wise significant island in Indonesia, characterized by its relatively advanced economy and infrastructure compared to other regions. It is well-known as Indonesia's primary centre for industrial and trade activities (Ifa et al., 2024). However, the high population density leads to a shortage of available jobs, intensifying competition among job seekers on the island. Consequently, many individuals face challenges in securing employment, prompting them to seek work abroad. This situation highlights the need for further research to identify the factors influencing the migration of Javanese workers abroad, both in the short and long term.

Figure 1. Number of Indonesian Migrant Workers (PMI) by Island (Soul)



Source: Badan Pusat Statistik

Several studies yield conflicting results on the relationship between minimum wages and international labor migration. An empirical study by Yagura (2024) in Cambodia, using the VECM approach, found a negative and significant relationship between minimum wages and international labor migration. Specifically, high wages in the country of origin tend to reduce international migration (Edo, 2019). Additionally, Cedillo et al. (2019) and Wright and Clibborn (2019) indicated that, in addition to factors such as limited language skills, work experience, and the complexity of work procedures, minimum wages also influence workers' interest in seeking employment abroad (Purna & Sulistian, 2019). Conversely, a study by Sy and Hosoe (2023) found that labor migration abroad continues to increase even with rising minimum wages. This trend is attributed to higher wages and strong labor demand in destination countries (Pholphirul, 2019; Tabuga et al., 2021; Susanto & Sulaiman, 2022).

Ayanie et al. (2020) and Schewel and Asmamaw (2021) explain that population drives international migration in Ethiopia, highlighting a labor surplus and a lack of job opportunities within the country. Nunley et al. (2017) note that the abundant availability of jobs abroad significantly influences this migration trend. For instance, Afghanistan has implemented managed labor migration to channel excess labor into the international

market (Holzmann, 2018). Similarly, Husnah et al. (2019) observed a positive relationship between job opportunities and overseas labor migration in various cases in Indonesia. The disconnect between public interest and available job opportunities leads many individuals to prefer to remain as Indonesian migrant workers (Rabbani et al., 2022). Moreover, the creation of untargeted job opportunities increases unemployment, which in turn affects individuals' ability to meet their needs and contributes to rising poverty rates (Hellgren & Serrano, 2019; Kwilinski et al., 2022).

Stark & Bloom (1985) in the New Economics of Migration theory argue that migration often arises from a person's aspirations to fulfill basic necessities of life. The decision to migrate is considered integral to a family's strategy to enhance income and mitigate financial risk (Hia et al., 2024). Key factors such as family dynamics, household conditions, and cultural aspects must be taken into account, with the expectation that migration can diversify household income and ultimately improve family welfare. Research by Purna and Sulistian (2019), and Muslihatinningsih et al. (2020) indicates that poverty has a significant positive impact on labor migration abroad; specifically, higher poverty rates are associated with greater labor migration in the global labor market. Conversely, research by Mangara et al. (2024) presents differing findings, asserting that poverty levels do not influence the number of migrant workers. Furthermore, Robot et al. (2023) note that limitations and complexities in processing paperwork required to become a migrant worker contribute to these issues (Hikmawati & Pierewan, 2020).

Numerous studies on international migration have produced mixed results, highlighting a literature gap, particularly concerning the impact of minimum wages, employment opportunities, and poverty. This study helps address this gap by offering deeper insights into the dynamic interactions among factors that influence overseas labor migration. Unlike previous studies on Indonesian migrant workers, which mainly used static regression analysis, this study employs a dynamic framework by integrating determinants of Indonesian migrant worker migration into a panel-data Vector Error Correction Model (VECM). Additionally, the focus is placed on six provinces in Java, the largest source of migrant workers in Indonesia. The objective of this study is to capture both the short- and long-term effects of provincial minimum wages, employment opportunities, and poverty on migration of Indonesian migrant workers. Consequently, this research aims to serve as a valuable reference for policymakers and to contribute to the empirical literature on factors influencing Indonesian migrant worker migration.

METHODS

This study uses secondary data from a panel dataset collected over 16 years, spanning 2008 to 2023. The data was sourced from various official entities, including the Central Statistics Agency (BPS), the Indonesian Migrant Workers Protection Agency (BP2MI), and additional literature from institutions and websites pertinent to the research topic. The analysis focuses on six provinces on the island of Java: DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Java, and Banten. Java was selected as the study area because

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it is the origin of the majority (67%) of Indonesian migrant workers. The dependent variable in this research is Indonesian Migrant Workers (PMI). while the independent variables consist of the Provincial Minimum Wage (UMP), Employment Opportunity Rate (TKK), and Poverty Rate (KMS). To analyze the panel data, this study employs the Vector Error Correction Model (VECM) approach.

This research employs the Vector Error Correction Model (VECM) to analyze the relationship between interdependent or cointegrated variables and to explain short- and long-term economic phenomena using panel data. The VECM is a variant of the VAR model, constrained by the fact that the data are not stationary at the level but are cointegrated (Az-Zahra & Widarjono, 2022). In this context, VECM is viewed as a multivariate time-series model in which all variables are treated as endogenous, reflecting uncertainty about their exogenous status. This approach allows for a more accurate representation of real-world dynamics. It also helps mitigate parameter bias that can occur when relevant variables are overlooked and alleviates limitations often encountered in various economic theories.

VECM provides methodological advantages over traditional regression analysis by identifying causal relationships, assessing long-term equilibrium, and capturing short-term adjustment dynamics simultaneously. As a result, this method is particularly pertinent for addressing gaps in the previous research that have not thoroughly explored the determinants of Indonesian labor migration, especially regarding migrant workers from Java. The analysis within this framework also uses an impulse response function (IRF) to assess how a variable responds to shocks to other variables in the model (Az-Zahra & Widarjono, 2022

The VECM methodology treats all variables as endogenous and incorporates lagged values for each variable. This research model is represented in equations (1)-(5), where delta denotes changes at the first-different level of a variable. Here, PMI is the Indonesian Migrant Workers, measured in individuals; TKK indicates the level of job opportunities, expressed as a percentage; KMS reflects the percentage of the population living in poverty. The coefficients β0, β1, β2, β3, and β4 denote the intercepts. Additionally, ECT denotes the error-correction term, which measures the speed at which the short-term model adjusts toward a long-term equilibrium point.

$$PMI_{it} = \beta_0 + \beta_1 UMP_{it} + \beta_2 TKK_{it} + \beta_3 KMS_{it} + \mu_{it} \quad (1)$$

$$\begin{aligned}\Delta PMI_{it} = {} & \beta_{10} + \sum_{i=1}^{m}\beta_{111}\Delta PMI_{it-1} + \sum_{i=1}^{m}\beta_{112}\Delta PMI_{it-2} + \sum_{i=1}^{m}\beta_{121}\Delta UMP_{it-1} + \\ & \sum_{i=1}^{m}\beta_{122}\Delta UMP_{it-2} + \sum_{i=1}^{m}\beta_{131}\Delta TKK_{it-1} + \sum_{i=1}^{m}\beta_{132}\Delta TKK_{it-2} + \\ & \sum_{i=1}^{m}\beta_{141}\Delta KMS_{it-1} + \sum_{i=1}^{m}\beta_{142}\Delta KMS_{it-2} + \theta ECT + \mu_{it}\end{aligned} \quad (2)$$

$$\begin{aligned}\Delta UMP_{it} = {} & \beta_{20} + \sum_{i=1}^{m}\beta_{211}\Delta UMP_{it-1} + \sum_{i=1}^{m}\beta_{212}\Delta UMP_{it-2} + \sum_{i=1}^{m}\beta_{221}\Delta PMI_{it-1} + \\ & \sum_{i=1}^{m}\beta_{222}\Delta PMI_{it-2} + \sum_{i=1}^{m}\beta_{231}\Delta TKK_{it-1} + \sum_{i=1}^{m}\beta_{232}\Delta TKK_{it-2} + \\ & \sum_{i=1}^{m}\beta_{241}\Delta KMS_{it-1} + \sum_{i=1}^{m}\beta_{242}\Delta KMS_{it-2} + \theta ECT + \mu_{it}\end{aligned} \quad (3)$$

$$\begin{aligned}\Delta TKK_{it} = {} & \beta_{30} + \sum_{i=1}^{m}\beta_{311}\Delta TKK_{it-1} + \sum_{i=1}^{m}\beta_{312}\Delta TKK_{it-2} + \sum_{i=1}^{m}\beta_{321}\Delta PMI_{it-1} + \\ & \sum_{i=1}^{m}\beta_{322}\Delta PMI_{it-2} + \sum_{i=1}^{m}\beta_{331}\Delta UMP_{it-1} + \sum_{i=1}^{m}\beta_{332}\Delta UMP_{it-2} + \\ & \sum_{i=1}^{m}\beta_{341}\Delta KMS_{it-1} + \sum_{i=1}^{m}\beta_{342}\Delta KMS_{it-2} + \theta ECT + \mu_{it}\end{aligned} \quad (4)$$

$$\Delta KMS_{it} = \beta_{40} + \sum_{i=1}^{m}\beta_{411}\Delta KMS_{it-1} + \sum_{i=1}^{m}\beta_{412}\Delta KMS_{it-2} + \sum_{i=1}^{m}\beta_{421}\Delta PMI_{it-1} + \sum_{i=1}^{m}\beta_{422}\Delta PMI_{it-2} + \sum_{i=1}^{m}\beta_{431}\Delta UMP_{it-1} + \sum_{i=1}^{m}\beta_{432}\Delta UMP_{it-2} + \sum_{i=1}^{m}\beta_{441}\Delta TKK_{it-1} + \sum_{i=1}^{m}\beta_{442}\Delta TKK_{it-2} + \theta ECT + \mu_{it} \quad (5)$$

RESULTS AND DISCUSSION

The unit root test conducted in this study revealed that all variables were non-stationary at the level but demonstrated relative stationarity at the first difference level. The analysis employed the Augmented Dicky Fuller (ADF) method. As shown in Table 1, the P-value at the level exceeded 0.05. Conversely, at the First Difference level, the P-value for all variables fell below the alpha threshold of 0.05, indicating that all variables are stationary at this level.

Table 1. Unit Root Test

Variable	*Level*			*First Difference*		
	T-Statistic	*Prob*	Description	T-Statistic	*Prob*	Description
PMI	183.384	0.1058	Not Stationary	412.727	0.0000	Stasionary
UMP	538.739	0.9438	Not Stationary	212.371	0.0470	Stasionary
TKK	177.389	0.1239	Not Stationary	305.752	0.0023	Stasionary
KMS	158.075	0.2002	Not Stationary	262.641	0.0098	Stasionary

Source: Data Processing Results

According to Table 2, the optimal lag, as determined by the FPE, AIC, and HQ criteria, is lag 2. In contrast, the SC criterion suggests lag 1, whereas the LR criterion points to lag 4. Consequently, this study identifies lag 2 as the optimal lag. This indicates that the response of one variable to changes in other variables occurs within two years following the initial shock.

Table 2. Lag Optimum Test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-2253058	NA	1.42E-05	0.189487	0.322193*	0.241925
1	1.775.767	3.698.953	1.26E-05	0.067949	0.731481	0.330142
2	4.713.329	5.073.969	8.44e-06*	-0.337372*	0.856985	0.134575*
3	5.457.380	1.194.991	1.11E-05	-0.077994	1.647.189	0.603708
4	7.415.178	2.907.034*	1.02e-05	-0.186418	2.069.590	0.705038

Source: Data Processing Results

The cointegration test revealed that all variables are cointegrated, indicating a long-term relationship among them. According to Table 3, the Johansen test indicates that the t-statistics for all variables exceed the critical value, with the probability values below 0.05. This confirms the cointegration of the variables, supporting the use of the VECM model.

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Table 3. Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob**	Description
None*	0.559573	1.127.837	4.785.613	0.0000	Co-integrated
At most 1*	0.313428	5.374.299	2.979.707	0.0000	Co-integrated
At most 2*	0.182036	2.666.778	1.549.471	0.0007	Co-integrated
At most 3*	0.155870	1.220.035	3.841.465	0.0005	Co-integrated

Source: Data Processing Results

The next step is to assess the model's stability. The results from the optimum lag test suggest that the model in this study is stable. As indicated in Table 4, the model exhibits a modulus value of less than one. A model is typically regarded as stable when the Root of the Characteristic Polynomial Modulus is below 1.

Table 5 presents the findings of the Granger Causality test, which is employed to evaluate the existence of a reciprocal relationship between variables. This test assesses whether the variables exhibit a one-way or two-way relationship. The estimated results shown in Table 5 indicate a one-way causal effect at the 10% significance level: UMP affects PMI, and KMS affects PMI. Additionally, at a significance level of 5%, a one-way relationship is observed between the TKK variable and PMI, with a probability value of 0.0214. This indicates that the TKK variable is particularly influential in affecting PMI. In summary, all variables display a one-way relationship with Indonesian migrant workers. Conversely, a two-way relationship is identified at the 5% significance level between KMS and TKK, indicating that KMS influences TKK and that TKK likewise impacts KMS.

Table 4. Lag Optimum

Root	Modulus
0.156838 - 0.652442i	0.6671028
0.156838 + 0.652442i	0.671028
0.475977 - 0.252676i	0.538887
0.475977 + 0.252676i	0.538887
-0.446919 - 0.160013i	0.474701
-0.446919 - 0.160013i	0.474701
-0.162722 - 0.389004i	0.421666
-0.162722 + 0.389004i	0.421666

Source: Data Processing Results

The short-term estimates derived from the VECM indicate that all variables significantly influence the positive coefficients for Indonesian migrant workers. The provincial minimum wage variables, lagged one and lagged two, have coefficients of 2.125547 and 1.344757, respectively. This suggests that a 1% increase in the minimum

wage (UMP) will result in a 2.12% rise in the number of Indonesian migrant workers in lag 1 and a 1.34% rise in lag 2.

Table 5. Granger Causality Test

Null Hypothesis:	F-Statistic	Obs	Prob.
UMP does not Granger-cause PMI	273.471	78	0.0711*
PMI does not Granger-cause UMP	0.22794	78	0.7967
TKK does not Granger-cause PMI	403.998	78	0.0214**
PMI does not Granger-cause TKK	0.20064	78	0.8186
KMS does not Granger-cause PMI	274.670	78	0.0703*
PMI does not Granger-cause KMS	0.88878	78	0.4152
TKK does not Granger-cause UMP	0.92433	78	0.4010
UMP does not Granger-cause TKK	158.369	78	0.2177
KMS does not Granger-cause UMP	275.854	78	0.0695*
UMP does not Granger-cause KMS	128.053	78	0.2836
KMS does not Granger-cause TKK	436.281	78	0.0160**
TKK does not Granger-cause KMS	483.917	78	0.0104**

Source: Data Processing Results

Additionally, the employment opportunity rate indicates that an increase in the previous year's TKK will raise the number of Indonesian Migrant Workers by 7.86688, while an increase in TKK from two years prior will raise the number of migrant workers by 3.78756. Furthermore, a rise in poverty levels from the previous year is associated with a 2.08700 increase in Indonesian Migrant Workers, and the increase in KMS from two years ago will result in a 2.76358 increase in the number of migrant workers. In contrast, the long-term VECM estimates indicate that only the poverty variable does not significantly affect the number of Indonesian migrant workers.

Table 6. VECM Result

Variables	Coefficient	T-Statistic	Description
Short Run Result			
D(UMP(-1))	2.125.647	330.928	Significant
D(UMP(-2))	1.344.757	231.153	Significant
D(TKK(-1))	0.001823	786.688	Significant
D(TKK(-2))	0.000850	378.756	Significant
D(KMS(-1))	0.091155	208.700	Significant
D(KMS(-2))	0.119892	276.358	Significant
Long Run Result			
D(UMP(-1))	1.880.321	204.834	Significant
D(TKK(-1))	0.001077	340.006	Significant
D(KMS(-1))	0.069469	172.882	Insignificant

Source: Data Processing Results

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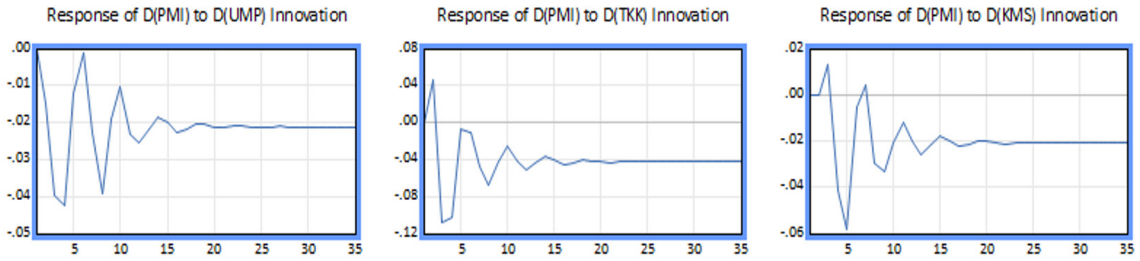
The UMP variable exhibits a positive impact on the PMI, suggesting that a 1% increase in the provincial minimum wage will lead to a 1.88% rise in the PMI over the long term. This finding aligns with research by Sy & Hosoe (2023) and Tabuga et al. (2021), which indicates that the rate of labor migration abroad continues to grow despite increases in the minimum wage. The employment opportunity variable also shows a significant positive effect. Specifically, a 1% increase in the TKK is associated with a 0.001077 increase in the PMI. This result is reinforced by a study from Husnah et al. (2019)and De Haas et al. (2019) which demonstrates that enhanced employment opportunities contribute to a rise in the number of labor migrants. On the other hand, while the poverty variable has a positive coefficient, it does not significantly influence the number of Indonesian migrant workers. This finding is consistent with research by Muslihatinningsih et al. (2020) and Tabuga et al. (2021) which suggests that the inability to meet family needs drives individuals toward international migration, as they seek higher wages to improve their welfare.

The Impulse Response Function shows the response of a variable over time to shocks in other variables. Figure 2 shows the response described by PMI to changes or shocks in other variables, including the provincial minimum wage, employment opportunity rate, and poverty. PMI's response to the shocks caused by UMP changes is negative, fluctuating until the 15th period. PMI began to decline in the 20th period. On the other hand, PMI's response to changes in employment opportunities and poverty was different: at the beginning of the period, PMI gave a positive response, though it lasted only a very short time. PMI's response to the TKK shock continued to move negatively, fluctuating, until in the 20th period, PMI showed a stable response. Meanwhile, PMI's response to the poverty shock was positive in the 8th period, then negative, and stabilized in the 25th period.

Figure 2. Impulse Response Function



Source: Data Processing Results

According to Table 7, the PMI variable exhibits self-influences from the first to the tenth period. In the second period, PMI declined by 93.69%, gradually falling to 54.91% by the tenth period. Meanwhile, the contribution of the provincial minimum wage to PMI tends to increase from the beginning to the tenth period. In the second period, it contributed 0.62%, and in the fourth period, it increased to 4.65%. This contribution continued to increase until in the tenth period, UMP contributed 5.88%. The employment opportunity rate variable contributing to the PMI tends to fluctuate. In

the second period, TKK had an effect of 5.67% and continued to rise, reaching 31.62% by the fourth period. In the fifth period, it decreased to 28%, but in the tenth period, TKK's contribution became 31.9%. Then, the contribution of poverty variables to PMI fluctuates. In the third period, it was 0.26% and continued to fluctuate until the tenth period; the influence of poverty on PMI was 7.29%.

Table 7. Variance Decomposition of D(PMI)

Period	S.E.	D(PMI)	D(UMP)	D(TKK)	D(KMS)
1	0.181636	1.000.000	0.000000	0.000000	0.000000
2	0.190498	9.369.783	0.628982	5.673.007	0.000178
3	0.247769	7.432.410	2.907.954	2.250.579	0.262161
4	0.277097	6.125.746	4.655.376	3.162.275	2.464.417
5	0.294726	6.162.210	4.282.753	2.800.101	6.094.140
6	0.298189	6.234.262	4.185.348	2.748.493	5.987.103
7	0.304457	6.082.758	4.562.060	2.884.587	5.764.485
8	0.31613	5.676.017	5.759.424	3.128.186	6.198.551
9	0.322298	5.525.006	5.884.015	3.184.623	7.019.702
10	0.325168	5.491.987	5.882.692	3.190.063	7.296.808

Source: Data Processing Results

Based on the results of all data tests, our findings align with those of Khan (2021), who stated that wages positively affect overseas labor migration in both the short and long term. Increasing the minimum wage can raise migrant worker (PMI) due to a significant wage gap between origin and destination regions (Husnah et al., 2019). Wages in destination countries remain higher than in the origin country (Pholphirul, 2019; Tabuga et al., 2021). Therefore, even if wages in the country of origin increase, they remain insufficient to cover living costs (Husnah et al., 2019; Trisetiyo & Haviz, 2020). Furthermore, the high cost of living on Java, especially in the larger provinces, means that wage increases are still insufficient to meet these needs. Central Java is one of the provinces with the lowest minimum wage levels on the island. Although the minimum wage in Central Java Province increases annually, this does not reduce the number of migrant workers from Central Java. In fact, according to data from the Indonesian Migrant Workers Association (BP2MI), Central Java is one of the provinces on Java Island with the highest number of migrant workers (PMI) dispatched. Furthermore, minimum wage increases are usually accompanied by rising regional costs of living. Suppose minimum wage increases are disproportionate to the overall increase in the cost of living. In that case, it can make it difficult for workers to meet their living expenses on local income (Müller, 2023). People tend to migrate to wealthier or higher-income areas.

The employment opportunity variable was found to have a positive effect in both the short- and long-term. This finding aligns with Husnah et al. (2019) and De Haas et al. (2019), who found that increased employment opportunities will still increase the number of labor migrants. Furthermore, when job opportunities are abundant in the region of

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origin but do not align with the local community's interests, it will ultimately encourage people to become migrant workers (Rabbani et al., 2022). Many job opportunities are available in the region of origin, such as farm laborers, livestock breeders, and construction workers. These jobs tend to be low-paying and barely sufficient to meet daily needs. Therefore, people tend to work abroad as migrant workers to improve their families' economic situations and secure more adequate incomes (Husnah et al., 2019).

The findings on the poverty variable indicate a positive effect in the short term. This is in line with research by Muslihatinningsih et al. (2020) and Tabuga et al. (2021) that the inability to meet family needs makes international migration the best solution, and that individuals tend to seek higher-paying jobs to improve their well-being. Meanwhile, poverty has a positive but insignificant effect in the long term. These results align with research by Nugraha et al. (2023) and Hikmawati and Pierewan (2020), which state that underprivileged conditions make it difficult for them to establish relationships by participating in activities that require spending money. Other triggering factors include pre-departure costs and the complex, time-consuming processing of various administrative or document-related matters (Robot et al., 2023). Furthermore, training costs, which are relatively expensive and must be borne by the individual, are also a consideration in deciding to become a migrant worker (Spaan & van Naerssen, 2017).

CONCLUSIONS

This study reveals that, in the short term, provincial minimum wages, employment opportunities, and poverty levels have a positive impact on the number of Indonesian migrant workers. Over the long term, although all variables also exhibit a positive trend, the influence of poverty became insignificant. There are anomalies observed in both the short and long term, where increases in provincial minimum wages and employment levels drive labor migration abroad due to suboptimal domestic job opportunities and consistently high wage disparities with destination countries. Consequently, these findings highlight the importance for policymakers in Indonesia of periodically reviewing and adjusting provincial minimum wages, alongside implementing effective price control measures, to ensure that workers' living needs are met at a reasonable cost of living. Failure to manage price controls effectively may lead to inflationary pressures following minimum wage increases. The ultimate goal is to ensure that such wage adjustments truly enhance workers' ability to achieve a decent standard of living.

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