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From employees to entrepreneurs: Does migration matter in blue-collar workers' transition?

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ABSTRACT

Transitioning into entrepreneurship can offer a viable path for former blue-collar workers to reenter the workforce following widespread job losses during the COVID-19 pandemic. This study investigates the critical roles of adaptability and resilience in facilitating this transition, with particular attention to how migration status influences success in becoming either formal or informal entrepreneurs. Utilizing detailed microdata from the August 2021 Labor Force Survey (Survei Angkatan Kerja Nasional - SAKERNAS), the study applies a multinomial logistic regression model to examine the transition patterns of these former workers. The findings indicate that former migrant blue-collar workers are more inclined to shift towards formal entrepreneurship rather than informal ventures. This suggests the importance of implementing supportive policies aimed at fostering entrepreneurial initiatives among blue-collar workers. Such policies could mitigate the risks associated with job losses, particularly in times of crisis, and provide a safety net by encouraging entrepreneurship. By facilitating entrepreneurial activity, these policies would not only bolster economic resilience but also offer alternative routes for workforce recovery, ultimately contributing to job security, financial stability, and long-term economic sustainability in the face of ongoing uncertainties.

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INTRODUCTION

The COVID-19 pandemic has impacted job occupations unevenly, with blue-collar workers experiencing significant challenges requiring greater efforts to recover (Deng et al., 2023; Vyas, 2022). The pandemic's restrictions on production have intensified the difficulties these workers face, who often rely on manual tasks and direct contact. In addition, the acceleration of digital transformation during Industry 4.0 has compounded these issues. Arbeláez-Rendón et al., (2023) have found that the effects of digital acceleration on workers lacking digital skills could persist for up to five years. In other words, this rise of machine automation, while boosting productivity, poses long-term risks for workers lacking digital expertise (Koch et al., 2021; Waschull et al., 2022).

Blue-collar employees experience job insecurity due to their limited control over hiring decisions (Klotz et al., 2021; Lee, 2021; Sorgner & Fritsch, 2018). These workers often face fewer opportunities for career advancement and skill development than their white-collar counterparts, restricting their employment prospects and impacting their long-term employment stability.

BPS's 2021 Labor Force Survey (Survei Angkatan Kerja Nasional - SAKERNAS) revealed that 2.7 million blue-collar workers, or about 43%, remained unemployed or out of the labor force after job losses between February 2020 and August 2021. Bredemeier et al. (2023) stated that economic development must expand the types of jobs available, rather than simply increasing the number of workers, in order to mitigate the effects of the pandemic on the labor market. Furthermore, dependence on employers remains a significant barrier to recovery for blue-collar workers. This reliance often results in limited autonomy and restricted opportunities for skill development beyond immediate job needs, impeding their ability to adapt to shifting economic conditions. When these workers face job loss, their reliance on employers for income and benefits hinders their ability to secure new employment or start businesses. This difficulty is exacerbated by notable gaps in financial knowledge and access to capital, which are essential for initiating and growing a business.

One potential solution to mitigate job loss impacts is encouraging blue-collar workers to become entrepreneurs, which aligns with the 8.3 SDGs' emphasis on entrepreneurship for economic growth (Bappenas, 2018). Entrepreneurship, particularly informal, offers lower barriers to entry and a more direct route to recovery than seeking new employment.

Adaptability is crucial for such transitions, and migration status can be a key indicator of this adaptability. Migrant workers, having already demonstrated their willingness to move and adapt, may have a better chance of succeeding in the labor market in the destination area compared to those who remain in their original locales and rely on the local labor market (Schmutz et al., 2021). As a result, migration is considered a promising and effective solution to the problems of unemployment and low income (Balgova et al., 2020).

This research investigates former blue-collar migrants, a distinct group characterized by resilience and flexibility crucial for transitioning to entrepreneurship. They refer to people who previously worked in blue-collar jobs and have since relocated to different areas with the reasons not necessarily job-related ones, so their residence now differs from theirs 5 (five) years ago. By examining these traits, the study aims to inform more effective policies and interventions that support individual recovery while fostering broader economic stability and growth. Addressing the long-term impacts of the COVID-19 pandemic, this research offers viable pathways to economic security and independence for blue-collar workers.

Although existing studies, such as those by Clays et al., (2020), Decius et al., (2021), Rombaut & Guerry (2021), and Torre (2019), have explored blue-collar workers' resilience during economic crises, there is a gap in research specifically focusing on the transition from employment to entrepreneurship, particularly concerning blue-collar labor status. This study fills that gap by examining how migration influences the shift from employees to entrepreneurs, considering various sociodemographic and economic factors at individual levels and macroeconomic situations at provincial levels to discuss the topic comprehensively.

The findings are expected to be valuable for policymakers, especially amid economic uncertainty and potential economic shocks. This research aims to provide a safety net against job loss and contribute to a more adaptable, stable workforce by highlighting the need for interventions that enhance entrepreneurial skills among blue-collar workers. Ultimately, promoting entrepreneurship within this group of workers may support individual workers and contribute to overall economic stability and growth by fostering a dynamic and diverse entrepreneurial environment.

RESEARCH METHOD

Badan Pusat Statistik (BPS), Indonesia's central statistics office, conducts the Survei Angkatan Kerja Nasional (SAKERNAS) biannually—in February and August. This nationally representative survey, estimated at the municipality level, collects comprehensive data on labor market variables such as employment, unemployment, and worker characteristics throughout the country. This present study utilized the August 2021 SAKERNAS dataset, which provides extensive information on various aspects of the labor market in Indonesia, including demographic details, educational attainment, occupational categories, employment status, and income. The richness of this dataset makes it particularly valuable for examining labor market trends and entrepreneurial tendencies among former blue-collar workers. By leveraging these robust secondary data, the study aims to accurately evaluate

employment patterns and career transitions, especially among blue-collar workers, offering insights into the socioeconomic factors that influence these shifts. To add, the use of SAKERNAS data enhances the accuracy and reliability of the findings, making it a crucial resource for informing policymaking related to the Indonesian labor market.

This research sample comprised 11,098 former blue-collar employees who ceased employment between February 2020 and August 2021. These individuals either transitioned to entrepreneurship or remained unemployed or inactive. The study used data from the August 2021 SAKERNAS survey, chosen for its relevance at the onset of the pandemic recovery phase, a period marked by increased labor market transitions due to the easing of pandemic-related restrictions on activities and mobility.

Blue-collar employees in this study were categorized based on the Eurofound (2022) classifications; they occupied positions coded with the first digits of 6, 7, 8, and 9 in the International Standard Classification of Occupations (ISCO) or Klasifikasi Baku Jabatan Indonesia (KBJI). The roles considered included machine and assembly operators, warehousing officers, and personnel involved in packing and distribution.

To identify former blue-collar employees, the study used a specific question from SAKERNAS regarding employment cessation during the COVID-19 pandemic (February 2020 to August 2021). Further refinement was based on the KBJI code of the last job held before cessation and the employment status of this last position. For a comprehensive analysis, macro-level variables at the provincial level were included, such as digital ecosystem conditions (measured by the digital literacy index) and economic conditions (indicated by the economic growth rate). The impact of migration status on the transition from blue-collar employment to entrepreneurship was analyzed using a multinomial logistic regression model. This method is appropriate for examining nominal-scale response variables with three or more categories (Gujarati & Porter, 2013). The results of the multinomial logistic regression were interpreted through marginal effects, which illustrate the impact of each independent variable on the dependent variable while holding other variables constant (Greene, 2003). The regression equations employed in this analysis are detailed in equations (1) and (2).

$$\ln\left(\frac{p1}{p0}\right) = \beta_{10} + \beta_{1i}X_i + \varepsilon_1 \ldots \quad (1)$$

$$\ln\left(\frac{p2}{p0}\right) = \beta_{20} + \beta_{2i}X_i + \varepsilon_2 \quad (2)$$

where $\frac{p1}{p0}$ is probability of transitioning to an informal entrepreneur, compared to remaining unemployed or inactive, $\frac{p2}{p0}$ is probability of transitioning to a formal entrepreneur, compared to remaining unemployed or inactive, and i is 1,2,…,11.

The dependent variable in this study is a categorical variable with three categories namely unemployed or inactive (reference category), transitioning to an informal entrepreneur (including self-employment and assisted by unpaid workers), and transitioning to a formal entrepreneurs (with assistance from paid workers). The independent variables in this study include individual characteristics and regional factors at the provincial level for former blue-collar workers. These variables were categorized into primary and control variables. The primary independent variable is migration status, which was determined by comparing the blue-collar employee's residence at the time of the deployment and their location five years prior. Individuals were classified as migrants if they changed their residence up to the district or city level within this five-year timeframe, with non-migrants as the reference category.

Control variables include: (i) gender, with categories of female (reference category) and male; (ii) age, treated as a continuous variable; (iii) age squared, also a continuous variable; (iv) marital status, categorized as unmarried/divorced (reference category) and married; (v) highest educational attainment, divided into below elementary school (reference category), elementary school, junior high school, high school, and university; (vi) participation in job training, with categories of never participated (reference category) and participated/currently participating; (vii) involvement in the Program Kartu Prakerja, categorized as not aware/not applied/not passed (reference category) and participated. Kartu Prakerja is an Indonesian government initiative aimed at improving job skills and employability. It provides financial assistance for training and education programs to help unemployed or underemployed individuals gain new skills. Participants receive a stipend to use on various courses and are able to access other support services; (viii) previous employment sector, classified into agriculture

(reference category), industry/manufacturing, and service sectors; (ix) the digitalization index at the provincial level (the province where the former blue-collar employees reside), reflecting the population's digital skills and knowledge, as well as digital business opportunities; and (x) the economic growth rate in the province where the former blue-collar employees reside.

RESULT AND DISCUSSION

Characteristics of Former Blue-Collar Employees

Table 1 shows that most former blue-collar workers remained unemployed or inactive, regardless of their transition type. This persistent unemployment highlights a significant long-term impact on former blue-collar employees. These findings align with Harumi et al. (2022) and Putranto et al. (2022) who observed that the pandemic's effects on blue-collar workers were particularly severe, leading to prolonged recovery times, especially for those with previous employment status.

The profile of those remaining unemployed or inactive included non-migrants, women, individuals with an average age of 34, married persons, those with senior high educational attainment, individuals who did not receive job training, those who did not participate in the Program Kartu Prakerja, and those previously employed in the service sector. In contrast, the characteristics of blue-collar workers transitioning to informal entrepreneurship were predominantly non-migrants, males, individuals with an average age of 38, married, with high school or equivalent education, with no job training, non-participant of Program Kartu Prakerja, and came from the service sector. Furthermore, the characteristics of blue-collar workers transitioning to formal entrepreneurship were predominantly non-migrants, males, individuals with an average age of 41, married, with lower level of education, with no job training, non-participant of Program Kartu Prakerja, and came from the manufacture/industry sector.

Migration and Blue-Collar Worker's Transition

Table 2 presents the multinomial logistic regression results, interpreted through marginal effect values. The primary independent variable, migration status, reveals significant trends. Former blue-collar migrant workers showed a higher likelihood of transitioning to formal entrepreneurship. Formal entrepreneurship encompasses a wide range of job categories. These types of jobs are found in all sectors of the economy, with the exception of entrepreneurship, which is assisted by paid workers.

Table 1. Summary of the Statistics of Blue-Collar Employees

Variable	Remaining Unemployed or Inactive		Transition to Informal Entrepreneurship		Transition to Formal Entrepreneurship	
	Mean	St.Dev.	Mean	St.Dev.	Mean	St.Dev.
Primary Variable						
Migrant	0.0589	0.2355	0.0640	0.2449	0.0811	0.2731
Control Variable						
Male	0.4857	0.4998	0.7506	0.4328	0.7946	0.4042
Age	33.95	13.96	38.24	11.97	41.50	11.50
Age-Squared	1347.79	1137.24	1605.65	979.43	1854.79	1003.30
Married	0.5117	0.4999	0.7017	0.4576	0.8513	0.3559
Education						
Below Elementary	0.2497	0.4329	0.3493	0.4769	0.3865	0.4872
Elementary	0.1748	0.3799	0.2418	0.4283	0.2495	0.4329
Junior High	0.1721	0.3775	0.1908	0.3930	0.2234	0.4167
Senior High	0.5280	0.4992	0.4044	0.4909	0.3396	0.4738
University	0.0500	0.2180	0.0555	0.2291	0.0504	0.2190
Training	0.1418	0.3489	0.1523	0.3594	0.1378	0.3449
Kartu Prakerja	0.0327	0.1780	0.0390	0.1935	0.0234	0.1513
Previous Working Sector						
Agriculture	0.0750	0.2635	0.1312	0.3377	0.1955	0.3968
Manufacture/ Industry	0.3424	0.4745	0.3932	0.4886	0.4081	0.4917
Services	0.5826	0.4932	0.4756	0.4995	0.3964	0.4894
Digitalization Index	3.4987	0.0788	3.5059	0.0790	3.5066	0.0750
Economic Growth	3.4860	2.1383	3.4839	2.0723	3.1626	2.2594

Source: Sakernas 2021, processed; Observation 7755

Table 2. Factors Affecting Transition Status of Former Blue-Collar Employee

Variable	Remaining Unemployed or Inactive	Transition to Informal Entrepreneurship	Transition to Formal Entrepreneurship
Primary Variable			
Migrant	-0.0210 (0.0163)	-0.0016 (0.0151)	0.0226** (0.0103)
Control Variable			
Male	-0.2291*** (0.0079)	0.1429*** (0.0080)	0.0862*** (0.0065)
Age	-0.0377*** (0.0020)	0.0244*** (0.0020)	0.0133*** (0.0016)
Age-Squared	0.0004*** (0.0000)	-0.0003*** (0.0000)	-0.0001*** (0.0000)
Married	-0.1161*** (0.0100)	0.0346*** (0.0093)	0.0815*** (0.0082)
Education			
Elementary	0.0564*** (0.0171)	-0.0272* (0.0164)	-0.0292** (0.0115)
Junior High	0.0762*** (0.0178)	-0.0563*** (0.0168)	-0.0199 (0.0015)
Senior High	0.1219*** (0.0169)	-0.0748*** (0.0160)	-0.0471*** (0.0115)
University	0.0965*** (0.0236)	-0.0581*** (0.0221)	-0.0384** (0.0161)
Training	-0.0293** (0.0119)	0.0214** (0.0109)	0.0079 (0.0084)
Kartu Prakerja	-0.0361 (0.0228)	0.0439** (0.0200)	-0.0078 (0.0178)
Previous Working Sector			
Manufacture/Industry	0.0767*** (0.0144)	-0.0281** (0.0131)	-0.0486*** (0.0101)
Services	0.0806*** (0.0144)	-0.0235* (0.0132)	-0.0571*** (0.0103)
Digitalization Index	-0.2034*** (0.0510)	0.1399*** (0.0467)	0.0635* (0.0360)
Economic Growth	0.0030 (0.0019)	0.0035** (0.0017)	-0.0065*** (0.0014)
Pseudo R^2		0.1185	
Observations		11,098	

Source: Sakernas 2021 (processed); *p<0.1 **p<0.05 ***p<0.01; standard error in parentheses.

The pandemic has accelerated this trend by disrupting traditional employment and pushing individuals to seek alternative income sources (ILO, 2023). Common financial supports for these new ventures include community lending, microfinance, and government subsidies (Bossaviea et al., 2023). Additionally, the entrepreneurial drive and resilience of migrants, who often view business ownership as a pathway to economic stability and growth, contribute to this trend (Gagliardi & Sorenson, 2023).

On the other hand, migration did not significantly affect the transition to informal entrepreneurship, as can be seen from the negative influence. Schmutz et al. (2021) suggest that the costs associated with migration discourage individuals from moving if the prospective employment in the destination area is a blue-collar job. This finding indicates that former blue-collar workers who migrate tend to be willing to take on significant risks or possess specialized skills, enabling them to secure higher-quality jobs and wages even if they continue in blue-collar roles at their new location.

Former blue-collar workers often demonstrate high adaptability and resilience, essential for managing the uncertainties of migration and job transitions. Their willingness to relocate reflects a proactive approach to improving economic conditions by seeking regions or sectors with better employment opportunities and potentially higher earnings. Additionally, these former blue-collar migrants may gain unique experiences and skills from previous jobs, making them more competitive in the labor market. Employers value various competencies, such as technical skills, problem-solving abilities, and a strong work ethic. Migration can also broaden perspectives and enhance innovative thinking, improving job prospects.

These findings align with those of Arman (2023), Bahar (2021), and Lerpold et al. (2023), who found that migrants generally adapt better to new work environments, including entrepreneurial ventures, thereby increasing their chances of success. Nguyen (2022) also highlighted that migrants turning into entrepreneurs in Vietnam earn more than those in labor positions, reinforcing the incentive for migrants to transition from blue-collar jobs to entrepreneurship.

Table 3 presents a confusion matrix to evaluate the accuracy of the multinomial logistic regression model in this study. The overall accuracy rate is 70.82%, which indicates that the model performs satisfactorily in predicting transitions.

Table 3. Confusion Matrix

Observed	Predicted			Percentage Correct
	Remaining Unemployed or Inactive	Transition to Informal Entrepreneurship	Transition to Formal Entrepreneurship	
				%
Remaining Unemployed or Inactive	7602	133	20	72.37
Transition to Informal Entrepreneurship	1982	222	29	43.53
Transition to Formal Entrepreneurship	920	155	35	41.67
Overall Percentage Correct				70.82

Control Variables Affecting the Transition of Blue-Collar Workers

Several control variables reveal important patterns in the transition of former blue-collar workers. Most control variables show consistent trends regarding shifts to formal or informal entrepreneurship. However, migration patterns and provincial economic growth rates exhibit differing effects.

In contrast to their female counterparts, male former blue-collar workers were more likely to transition into entrepreneurship, spanning both formal and informal sectors. This trend is supported by numerous studies, which reveal that women often left the workforce during the pandemic primarily due to increased household caregiving responsibilities (Profeta et al., 2021 and Illing et al., 2021). As a result, many women reduced their working hours, took unpaid leave, or exited their jobs entirely. These adjustments have significant long-term implications, as prolonged unemployment can lead to skill erosion, making it challenging for women to re-enter the labor market at their previous level or find roles that match their qualifications. Additionally, employment gaps often result in a wage penalty, reducing lifetime earnings and affecting retirement savings.

The relationship between age and the likelihood of former blue-collar workers transitioning into formal or informal entrepreneurship was linear. Specifically, their propensity to become entrepreneurs increased as these individuals age. However, a significant nonlinear effect emerged when examining the squared age variable. This suggests that while older former blue-collar workers initially have a higher likelihood of entering entrepreneurship, this trend may reverse at very advanced ages. The shift can be attributed to several factors, including accumulated work experience, capital, and industry expertise, which enhance their confidence and ability to start businesses. As their family responsibilities diminish—such as when their children become independent—entrepreneurship may become a more appealing option. Additionally, older workers might seek the flexible work arrangements that entrepreneurship offers, aligning better with their lifestyle preferences and health considerations. This phase often reflects a desire for personal fulfillment and pursuing interests previously set aside for more secure career paths.

Previous research, including studies by Deelen et al. (2018) and Pratomo et al. (2023), has documented linear and nonlinear age-related trends in employment. Specifically, opportunities for informal entrepreneurship increase around age 42, while those for formal entrepreneurship rise around age 44. This suggests that older workers are more drawn to formal sector roles because younger workers are more inclined to explore informal sector opportunities.

Marital status also positively correlates with the likelihood of former blue-collar employees transitioning into formal and informal entrepreneurship. Married individuals often have a stronger motivation to return to work to support their families, leading them to prefer formal employment for its stability and reliability (Sostero et al., 2020) to the potentially unstable nature of freelance or informal work. In other words, married former blue-collar workers are more likely to seek formal jobs due to the consistent income and benefits, such as retirement plans and paid time off, which are crucial for managing family responsibilities.

Educated former blue-collar employees were less likely to transition into formal or informal entrepreneurship than those without such background. This trend suggests that educated individuals may not immediately pursue entrepreneurship after leaving their previous roles. This is consistent with the findings of Skees & Yusuf (2021) and Pratomo (2016). One possible explanation is that educated former blue-collar workers are accustomed to structured, skill-specific manual tasks,

which can make the shift to the less predictable nature of entrepreneurship more challenging.

Years of experience in structured roles can shape an individual's mindset and habits, making it challenging to transition into the unpredictable in entrepreneurship. The stability and predictability of previous job contexts contrast sharply with the dynamic and often unforeseen challenges entrepreneurs face. This disparity can hinder the acceptance of the risks and innovative approaches necessary for successful business operations. Additionally, educated former blue-collar workers might find greater comfort and competence in roles that utilize their specific skills and training rather than entrepreneurial activities that demand a broader skill set, including strategic planning, financial management, and marketing. Additionally, the job security typically associated with blue-collar positions may discourage these individuals from pursuing the less stable option of entrepreneurship (Lee, 2021).

Participation in Program Kartu Prakerja increased the likelihood of former blue-collar workers transitioning into informal entrepreneurship compared to remaining unemployed or inactive. However, this program's impact on formal entrepreneurship is statistically insignificant and shows a negative trend, aligning with findings from Chakravarty et al. (2017).

The rise in informal entrepreneurship among participants suggests that Program Kartu Prakerja primarily supports smaller-scale entrepreneurial efforts. The program's relatively recent introduction in 2021, as noted by Tasmilah et al. (2023), may explain its limited effect on fostering more secure entrepreneurial ventures. Nevertheless, the training provided through Program Kartu Prakerja and other programs is crucial for enhancing skills and competencies and encouraging individuals to start their businesses. These initiatives offer practical training in digital marketing, financial management, and business planning, equipping participants with the confidence and tools needed for entrepreneurial success.

Furthermore, the networking opportunities available through these programs further support aspiring entrepreneurs by connecting them with mentors, peers, and potential investors. The flexibility of nonformal education allows participants to learn at their own pace, which is beneficial for those still doing their jobs.

The prior employment sector also influenced entrepreneurial transitions. Workers from the manufacturing and services sectors were less likely to become entrepreneurs compared to those from agriculture, likely due to the greater disruptions faced by the former two sectors. Conversely, an increase in the digitization index within the province where former blue-collar employees reside improved their chances of transitioning into formal or informal entrepreneurship, with a greater effect observed in the informal sector. Enhanced digital access and literacy in these regions expanded opportunities for digital-enabled employment. This digital transformation facilitated reemployment pathways for former blue-collar workers, particularly in informal entrepreneurship. Studies by Amankwah-Amoah et al. (2021) and Yáñez-Valdés & Guerrero (2024) highlighted how digitalization during the pandemic has created new entrepreneurial opportunities and promoted resilient and sustainable entrepreneurial endeavors.

Economic growth within the province where former blue-collar employees reside was associated with an increased likelihood of transitioning into informal entrepreneurship than formal entrepreneurship; this suggests that growing economies are better at accommodating labor into the informal sector because the informal sector has fewer entry barriers than the formal sector. In the post-pandemic recovery of 2021, the informal sector is more accessible for those seeking reemployment due to its flexibility and lower entry requirements. Informal work allows individuals to use their skills to earn income and manage post-pandemic uncertainties. Additionally, it can provide the financial capital and experience needed for a future shift to formal business opportunities or more secure jobs.

Research Implication

The condition where former blue-collar migrant workers are more likely to engage in formal entrepreneurship reveals significant implications for policymakers and other stakeholders. In addition, recognizing these workers' innate motivation, competitive nature, and resilience of former blue-collar workers transitioning into entrepreneurship—who often transition or migrate due to a willingness to take risks or possess specialized skills—can help the government tailor policies that capitalize on these attributes to foster innovative and dynamic business

ventures. It is then recommended that the government take steps to help this group thrive effectively. These steps can be elaborated into three primary areas as follows: (1) creating a supporting environment and inclusive entrepreneurial ecosystem; (2) offering targeted assistance programs, training, and mentorship; and (3) building collaboration with educational institutions or organizations.

First, the government should focus on creating a supportive environment and an inclusive entrepreneurial ecosystem for former blue-collar migrant workers transitioning into entrepreneurship. This step can be done by minimizing bureaucratic obstacles and ensuring equitable access to resources for all, which will encourage more former blue-collar migrants to pursue entrepreneurial ventures. This approach enhances individual economic opportunities and fortifies the community's cultural and social fabric, which finally leads to enhanced individual and community economic outcomes and strengthening the community's cultural and social fabric, ultimately resulting in substantial economic benefits for individuals and society as a whole (Fujimoto & Uddin, 2022).

Second, alongside creating a supportive entrepreneurial ecosystem, it is crucial to develop tailored assistance programs for former blue-collar workers transitioning into entrepreneurship. Tailoring assistance programs could stimulate substantial economic growth. Financial incentives, including grants and low-interest loans, can aid these individuals in establishing and maintaining their newly-opened businesses. This approach not only benefits the entrepreneurs themselves but also positively impacts the broader economic landscape of the country. In addition to financial support, training and resource provision are essential components. The government can establish specific training programs designed to impart critical skills necessary for entrepreneurship, including financial management, marketing strategies, regulatory compliance, and others relevant to entrepreneurship. Additionally, offering mentoring and networking opportunities can further enhance former blue-collar migrants' entrepreneurial skills and success rates (Papademetriou et al., 2019). Such comprehensive support systems can significantly boost the success rates of migrant-led businesses, fostering economic diversification and resilience.

Finally, collaboration with educational institutions is vital for equipping former blue-collar workers transitioning into entrepreneurship with essential skills. Specialized training programs in business management, financial literacy, and market analysis can prepare them to tackle the challenges of entrepreneurship. Urbano et al. (2019) emphasized the importance of entrepreneurship education in enhancing migrants' skills and confidence, which in turn increases business success rates. The government and other stakeholders can play a pivotal role in fostering collaboration between educational institutions and migrant communities. Cheng & Smyth (2021) asserted that such collaborations facilitate migrant integration and economic contribution, which will further enrich local economies. In short, partnering with educational institutions is key to empowering former blue-collar workers and boosting their entrepreneurial success.

In summary, addressing the needs of former blue-collar workers transitioning into entrepreneurship through tailored assistance programs, supporting an inclusive entrepreneurial ecosystem, and collaborating with educational institutions can significantly enhance their potential and drive both economic growth and social inclusion. Providing targeted assistance and creating a supportive environment for migrant entrepreneurs allows them to harness their resilience and potential, driving economic growth, innovation, and social inclusion within their communities. Extensive support systems, such as mentorship and networking, are crucial in helping former blue-collar workers navigate the complexities of the business landscape. These systems not only aid in overcoming initial hurdles but also ensure long-term business success. By focusing on these key areas, the government can create a more dynamic and innovative economic environment that leverages the unique strengths of former blue-collar migrants.

However, it is also important to note that migrants are often reluctant to move for blue-collar jobs due to the high costs involved. Enhancing the quality of these job roles by offering better wages and working conditions in destination areas could make these jobs more attractive and address the economic disparities driving migration. According to Dustmann & Görlach (2016), improved working conditions significantly influence workers' decisions to remain in a region, thereby contributing to workforce stability. By making blue-collar positions more appealing, it may be possible to alleviate the economic pressures on migrants and achieve more balanced labor market.

CONCLUSION AND SUGGESTION

The findings of this study underscore the significant ability of former blue-collar workers to transition into formal entrepreneurship. The analysis indicates that all control variables significantly impact the transition to informal entrepreneurship. However, regarding formal entrepreneurship, almost all control variables are significant, except for participation in Program Kartu Prakerja. This distinction highlights the need for tailored policy interventions.

Several policy recommendations emerge to support former blue-collar employees transitioning to formal entrepreneurship. First, targeted training and mentorship programs should be developed to enhance entrepreneurial skills and provide critical support in financial management, marketing, and business planning. Additionally, facilitating access to capital and creating networking opportunities will be essential for business growth and sustainability. Secondly, streamlining business regulations and simplifying licensing procedures can help incentivize former blue-collar employees to pursue formal entrepreneurial ventures. Such measures are crucial for improving income and living standards while ensuring a smoother transition into the formal sector. Lastly, optimizing programs like Program Kartu Prakerja, especially in the post-pandemic context, is vital for delivering relevant skill enhancements and support. Success in these areas will depend on collaborative efforts from government bodies, the private sector, nongovernmental organizations, and educational institutions. By addressing these recommendations, stakeholders can foster a more inclusive and dynamic entrepreneurial ecosystem that supports former blue-collar employees in transitioning to successful entrepreneurship.

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