Return Migration and Entrepreneurship: Does Human Capital Matter?

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ABSTRACT

Return migration is a topic of considerable interest in scholarly literature, with many studies suggesting that returning migrants can impact the economic development of their home country through capital accumulation and entrepreneurship. This study seeks to examine the entrepreneurial intentions of return migrants and the influence of formal education and training on their entrepreneurial tendencies. Utilizing data from the National Workforce Survey (Sakernas) in 2020 and employing logistic regression analysis, the study revealed that formal education tends to steer returning migrants towards the formal sector rather than entrepreneurship upon their return. Conversely, while training was found to potentially increase the likelihood of entrepreneurship, the effect was not statistically significant. Additionally, individual characteristics such as age, gender, and marital status were found to significantly influence entrepreneurial intentions, with older individuals, females, and married individuals exhibiting a higher propensity for entrepreneurship among return migrants. These findings contribute to the existing literature by highlighting that, on average, return migrants in Indonesia tend to have relatively low levels of education, and higher levels of human capital may diminish their interest in entrepreneurship.

Keywords: Entrepreneurship; Formal Education; Human Capital; Return Migration; Training
INTRODUCTION

Migration can be defined as a labor movement from the origin to the destination area that crosses the country's borders to work, which certainly provides many benefits. Migration has been a topic of interest for many years, with economic motives identified as a primary driver according to Todaro in Puspitasari & Kusreni (2017). This theory suggests that people migrate due to income disparities between their place of origin and their desired destination, with minimum wage serving as a key determinant for international labor migration. In contrast, Stark and Bloom (1985) proposed the New Economics of Migration theory, which emphasizes the role of family and household conditions. According to this theory, poverty is a significant factor influencing migration decisions, prioritizing the need to support family over wage considerations in the destination area.

The number of migrants returning to their home country fluctuates considerably and is shaped by a variety of factors. Some individuals return due to external reasons such as conflicts, political changes, shifts in economic development, personal events like illness or family deaths, or alterations in the socio-economic landscape of the host nation. Conversely, others had always intended to return (Hamdouch & Wahba, 2015). The focus lies not in the rationales prompting the return, but rather in the consequences it bears on the entrepreneurial prospects of the returnees. Return migration carries implications for the economic outlook of the origin countries, primarily through the accumulation of savings amassed abroad. Several studies delve into how international migration serves as a pathway for accessing financial resources via overseas savings, and they explore the employment decisions of returnees, particularly their inclination towards entrepreneurship.

In recent decades, numerous studies have investigated whether individuals returning to their home countries after migration are more inclined to start their own businesses compared to those who never migrated. McCormick and Wahba (2000), for instance, conducted research in Egypt and discovered that migrating to higher-wage economies, even for relatively brief periods, facilitates the accumulation of financial capital and acquisition of new skills, leading to increased entrepreneurial activity upon return. Similarly, Batista et al. (2010) conducted a study in Mozambique and found that households with return migrants are 54% more likely to establish businesses on average, with the entrepreneurial impact of return migration primarily observed in retail and agricultural sectors. Cassarino (2015) introduced the concept of 'return preparedness', emphasizing migrants' capacity to mobilize various resources, not solely economic, in anticipation of or following their return. Furthermore, family dynamics emerge as a significant factor in the reintegration process of return migrants, shaping both the economic and social impacts of return migration.

Multiple researchers have provided corroborating evidence regarding migrant entrepreneurship in specific countries, such as Burundi (Sagmo, 2015), Cape Verde (Åkesson & Baaz, 2015), the Democratic Republic of Congo (Baaz, 2015), and Senegal (Sinatti, 2015). Those previous studies argue that both social networks abroad and in the home country play crucial roles in shaping the paths of migrants upon their return. Furthermore, empirical studies focusing on return migration and entrepreneurship emphasize the importance of migrants' ability to leverage their work experience (Wahba & Zenou, 2012; Lacomba & Cloquell, 2017; Sinatti, 2019). Factors such as the duration of the migration period, the level of experience acquired, and the capital accumulated abroad may significantly impact return migrants' capacity to establish and effectively manage their own businesses (Bensassi & Jobour, 2017).
Based on data from the International Migrant Workers Protection Agency or Badan Perlindungan Pekerja Migran Internasional (BP2MI, 2022), in 2021 there were 6,860 new migrants with the highest placement in Hong Kong (61.5%). This number decreased significantly compared to 2019 of 22,153 migrants and 8,257 migrants. Five provinces in Indonesia contributed to the most international migrants in 2021 are East Java (2,499), Central Java (1,796), West Java (1,090), Bali (511), and Lampung (460). Based on the data, it is known that Java is a region that greatly contributes to the international migration process because it contributes the highest number of international migrants than other islands in Indonesia. Among these amounts, it is known that 80% are female migrants and only 20% migrant migrants. Based on the work sector, 70% of them work in the informal sector and the rest work in the formal sector.

Previous research has highlighted the role of human capital often measured by educational attainment in influencing an individual's interest in entrepreneurship. Entrepreneurship, defined as the establishment of business ventures that provide goods and services, create employment opportunities, contribute to national income, and foster economic development, also involves the generation of innovative ideas and job creation, ultimately promoting economic growth through creative problem-solving (Sethi, 2008; Gutiérrez & Baquero, 2017). Knowledge and skills are crucial for entrepreneurs as they provide a sense of autonomy and the ability to effectively manage business operations (Bowen & De Clercq, 2008; Jiménez et al., 2015). Ma (2002) suggests that the accumulation of human capital during migration reinforces the utilization of local social networks, thereby enhancing the entrepreneurial endeavors of returnees. Additionally, migrants with higher levels of education, as well as those who pursue further education while abroad, are more inclined to return to their home countries (Gashi & Adnett, 2015).

International migration serves as a means for migrants to bypass credit constraints prevalent in economically disadvantaged countries, with longer periods spent abroad allowing for greater savings accumulation that can be utilized upon return for investment and project establishment (Hamdouch & Wahba, 2015). This study aims to evaluate the influence of return migration on entrepreneurial pursuits. By focusing on Indonesia, this research investigates the factors shaping entrepreneurial behavior among return migrants, while considering the human capital of former migrants to elucidate how education and training impact entrepreneurial intentions among returnees. The novelty of this research lies in its examination of the determinants of entrepreneurial activities specifically among return migrants in Indonesia, offering insights into the interplay between migration experiences, human capital, and entrepreneurship in the context of economic development.

This study not only sheds light on the dynamics of return migration and its effects on entrepreneurial activities but also holds significant implications for policy and practice. By understanding the determinants of entrepreneurial behavior among return migrants in Indonesia, policymakers can formulate targeted interventions to support and harness the economic potential of this demographic. Additionally, the findings contribute to the broader discourse on migration and economic development, highlighting the role of human capital in shaping post-migration entrepreneurial intentions. Moreover, insights gained from this research can inform initiatives aimed at promoting education and training programs tailored to enhance the entrepreneurial skills of return migrants, thereby facilitating their successful reintegration into the local economy. Overall, this study underscores the importance of considering migration experiences and human capital in devising strategies to foster entrepreneurship and drive economic growth in both origin and destination countries.
LITERATURE REVIEW

The Theory of Migration

International migration is motivated by numerous factors, both internal and external, which are unique to each person. These factors include both push and pull factors originating from the individual's place of origin, which contribute to the decision to migrate abroad, also known as international migration (Nasra, 2017). The decision to migrate internationally is intricately linked to the goals of individuals, particularly in terms of fulfilling their unlimited needs. According to Todaro and Smith (2008), economic factors primarily underlie international migration, notably the disparity between anticipated income and current income levels. Mantra (2000) argues that four critical factors are the reasons why someone migrates, namely (1) individual factors; (2) factors in the area of origin; (3) factors in the destination area; and (4) obstacles between the location of origin and the destination area.

The existence of income differences will encourage each individual to choose a destination country that is considered to have the maximum expected gains. In addition to the difference in income, there are other factors such as tools to satisfy needs as well as limited employment opportunities. More broadly, several studies have examined the fact that international migration factors are driven not only by economic motives but also by social factors (Bauer & Zimmermann, 1995). The encouragement factor from family or married individuals is vital to pay attention. This theory examines poverty variables using indicators of the level of wages received by each individual (Halkos & Gkampuora, 2021). Some individuals are more focused on getting wages and work that can meet family needs, not based on the size of the numbers. Therefore, considerations other than economics in the international migration process in Indonesia also need to be considered.

Safrida et al. (2008) stated that the purpose of international migration was also driven by the need for short-term labor shortages. In addition to internal factors that come from oneself, there is also the role of the surrounding environment, especially the family in encouraging international migration (Nasra, 2017). However, there are broadly push factors from the area of origin and pull factors from the destination of international migration. The Theory of Migration expressed by Lee (1966) states that the volume of migration can develop in line with the diversity of an area. Therefore, the factors of migration can be classified into positive factors that can provide benefits (+), negative there are costs to be paid (−), and neutral (0). For example, in Everett Lee's theory, the lack of employment opportunities in the area of origin, which influences the creation of unemployment, is one of the factors causing people to migrate internationally (Bhagat, 2020).

Return Migration and Its Effect on Country of Origin

Return migration is a phenomenon observed in countries as a result of international migration, often driven by various factors such as the desire to serve in one's home country. Previous research on return migration has outlined three key decisions for distributing the outcomes of migration to bolster the economic sector in the country of origin. Firstly, upon returning, migrants invest the finances accumulated during their time in the destination country back into their home country (McCormick & Wahba, 2000; Piracha & Vadean, 2010; De Vreyer et al., 2010). Additionally, efforts are made to facilitate the transfer or adoption of new technologies in the home country as a means of keeping pace with advancements (Agunias, 2006; Plaza & Ratha, 2011).
Another aspect involves leveraging the knowledge, skills, and personal growth acquired through adaptation, which can create opportunities within the home country (Zweig et al., 2006; Mahuteau & Tani, 2011; Kuschminder & Jessica, 2012). Additionally, return migration's third dimension entails utilizing social capital to stimulate economic development by forging new networks and potentially altering traditional norms and values (Black et al., 2003). Social capital refers to the collective resources of a community, comprising social networks, reciprocal interactions, and shared values aimed at achieving common objectives (Field, 2005).

Return migration can have various effects, both positive and negative, on the country of origin. While migrants are abroad, the remittances they send back home can contribute significantly to the development of their places of origin. These remittances not only benefit households and families but also have a positive impact on the overall state, as observed in Asian and African countries (Hugo & Singhanetra-Renard, 1987) and in Japan (Sudibia, 2007). In the context of Indonesia, international migration plays a significant role in the country’s foreign exchange earnings. However, the positive impact of migration extends beyond the migration process itself to include the return migration phase. The return of migrants to their home areas results in increased availability of development resources, particularly in rural regions.

Policies targeting increasing the contribution of return migration to the development of countries of origin can be classified into three groups. The first group contains policies to reduce the information, bureaucratic, and regulatory barriers faced by potential return migrants. The second group provides financial or other incentives to returnees, and the final group targets reintegration into society and increasing labor market productivity. Previous research also states that migrants have a significant role and potential when returning to their area of origin (Gashi & Adnett, 2015).

The Role of Human Capital in Entrepreneurship
John Locke’s theory emphasizes the significance of human capital quality and the experience of primary qualities in shaping human cognition, a notion echoed by Karatsiori (2023). This perspective finds resonance in the entrepreneurial decisions of migrants, which injects vitality into the economy, as noted by Lamine et al. (2021). Entrepreneurship, characterized by the freedom to shape work environments and make critical decisions, serves as a compelling allure for individuals, as highlighted by Ferreira et al. (2020). Creativity, an integral component of entrepreneurship, is emphasized by Ferreira et al. (2020) and further reinforced by Juliana et al. (2021), who emphasize the interplay between creativity, entrepreneurship, and innovation in forging competitive advantages. As economic activities increasingly pivot towards creativity, innovation, and entrepreneurship, individuals with greater education and experience exhibit neural tendencies, as posited by Oke and Nair (2023). Moreover, the facilitation of opportunities through relationships further nurtures entrepreneurial inclinations.

Entrepreneurship, as Darmawan et al. (2020) delineate, amalgamates knowledge and experience, acting as barometers for human resource quality. This notion is underscored by Gieure et al. (2020), who emphasize the pivotal role of knowledge and experience in initiating and sustaining businesses. Internal factors such as proactive, visionary, self-confident, and creative attitudes, as outlined by Maccoby and Cortina (2022), play a crucial role in this endeavor. However, challenges in building Micro, Small, and Medium Enterprises (MSMEs) persist, encompassing issues such as the lack of soft skills among human resources, limited capital, marketing hurdles, technological constraints, and restricted access to market opportunities, as highlighted by Haryadi et al. (2023). To address these challenges and boost income levels, leveraging information technology and its advancements proves instrumental in enhancing service growth and fostering
relationships among marketers, as noted by Ranjith et al. (2023). The digital economy, as emphasized by Badri and Amrina (2023), emerges as a cornerstone in bolstering the resilience of MSMEs.

**RESEARCH METHOD**

The study utilized data from the National Labor Force Survey (Sakernas), conducted by the Central Bureau of Statistics (BPS) in 2020. Sakernas data offers a micro-level perspective, providing insights into the overall employment landscape and changes in employment structures over time. The sample for this study comprised 1,403 return migrants. Logistic regression was chosen as the analytical approach to determine whether return migrants with higher levels of human capital exhibit a greater inclination toward entrepreneurship. Below is the logistic regression model employed in the study.

\[
\ln \left( \frac{Working_i}{1 - Working_i} \right) = Y_i = \beta_0 + \beta_1 \text{Secondary education}_i + \beta_2 \text{Higher education}_i + \beta_3 \text{Training}_i + \beta_4 \text{Formal}_i + \beta_5 \text{Urban}_i + \beta_6 \text{Age}_i
\]

To interpret the estimated coefficients from the logistic regression model, the odds ratio needs to be calculated for each coefficient. The odds ratio represents the change in the odds of the outcome variable (in this case, intention towards entrepreneurship) associated with a one-unit increase in the predictor variable.

The formula to calculate the odds ratio for each coefficient is as follows:

\[
\text{Odds Ratio Model 1} = \frac{\text{Working}_{i1}}{1 - \text{Working}_{i}} = e^{\beta_0 + \beta_1 \text{Secondary education}_i + \beta_2 \text{Higher education}_i + \beta_3 \text{Training}_i + \beta_4 \text{Formal}_i + \beta_5 \text{Urban}_i + \beta_6 \text{Age}_i}
\]

By using the coefficients of the logistic regression estimation results, it can be calculated the amount of someone's chance of being an entrepreneur and someone's chance of migration using the following formula.

\[
P_i = \frac{1}{1 + e^{\beta_0 + \beta_1 \text{Secondary education}_i + \beta_2 \text{Higher education}_i + \beta_3 \text{Training}_i + \beta_4 \text{Formal}_i + \beta_5 \text{Urban}_i + \beta_6 \text{Age}_i}}
\]

**RESULTS**

International labor migration is a transfer of labor from the area of origin to the destination area that crosses the national boundary with the intention of working which certainly provides many benefits, especially in terms of economy (Noveria, 2017). According to Lee in Mantra (2000), the process of population migration is influenced by driving and towing factors. In its description, there are four important factors that are the reason for a person to migrate, namely individual factors, factors in the area of origin, factors contained in the destination area, and obstacles between regions of origin with the destination area. In Lee's theory, the lack of employment in the area of origin that influences the creation of unemployment is one of the factors that causes the community to migrate internationally. This section will describe international migration and return migration in Indonesia observed in this study.

**International Migration by Province**
According to the United Nations in Chamie (2020), an international migrant is defined as an individual who has relocated across an international border for a duration of at least 12 months. Consequently, migration denotes a shift in population distribution both within and between countries. The broader concept of "mobility" encompasses all forms of population movement, with "migration" being a specific subset that involves a change in one's habitual place of residence (Bastia & Skeldon, 2020).

Table 1. International Migration in Indonesia by Province, 2021

<table>
<thead>
<tr>
<th>No.</th>
<th>Province</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>East Java</td>
<td>70,410</td>
<td>37,829</td>
<td>28,810</td>
</tr>
<tr>
<td>2.</td>
<td>Central Java</td>
<td>60,602</td>
<td>26,335</td>
<td>17,504</td>
</tr>
<tr>
<td>3.</td>
<td>West Java</td>
<td>58,013</td>
<td>23,255</td>
<td>12,178</td>
</tr>
<tr>
<td>4.</td>
<td>Bali</td>
<td>3,316</td>
<td>894</td>
<td>5,086</td>
</tr>
<tr>
<td>5.</td>
<td>Lampung</td>
<td>21,217</td>
<td>9,154</td>
<td>4,244</td>
</tr>
<tr>
<td>6.</td>
<td>NTB</td>
<td>30,687</td>
<td>8,255</td>
<td>2,331</td>
</tr>
<tr>
<td>7.</td>
<td>Banten</td>
<td>2,304</td>
<td>792</td>
<td>400</td>
</tr>
<tr>
<td>8.</td>
<td>DKI Jakarta</td>
<td>821</td>
<td>349</td>
<td>285</td>
</tr>
<tr>
<td>9.</td>
<td>NTT</td>
<td>953</td>
<td>378</td>
<td>241</td>
</tr>
<tr>
<td>10.</td>
<td>North Sulawesi</td>
<td>559</td>
<td>307</td>
<td>241</td>
</tr>
<tr>
<td>11.</td>
<td>South Sumatera</td>
<td>1,558</td>
<td>497</td>
<td>194</td>
</tr>
<tr>
<td>12.</td>
<td>North Sumatera</td>
<td>15,948</td>
<td>2,840</td>
<td>194</td>
</tr>
<tr>
<td>13.</td>
<td>Yogyakarta</td>
<td>1,285</td>
<td>358</td>
<td>190</td>
</tr>
<tr>
<td>14.</td>
<td>South Sulawesi</td>
<td>1,126</td>
<td>300</td>
<td>147</td>
</tr>
<tr>
<td>15.</td>
<td>West Kalimantan</td>
<td>1,589</td>
<td>371</td>
<td>131</td>
</tr>
<tr>
<td>16.</td>
<td>Central Sulawesi</td>
<td>555</td>
<td>166</td>
<td>73</td>
</tr>
<tr>
<td>17.</td>
<td>South Kalimantan</td>
<td>146</td>
<td>80</td>
<td>57</td>
</tr>
<tr>
<td>18.</td>
<td>Southeast Sulawesi</td>
<td>263</td>
<td>81</td>
<td>38</td>
</tr>
<tr>
<td>19.</td>
<td>East Kalimantan</td>
<td>100</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>20.</td>
<td>Kepulauan Riau</td>
<td>1,036</td>
<td>54</td>
<td>36</td>
</tr>
<tr>
<td>21.</td>
<td>Bengkulu</td>
<td>293</td>
<td>154</td>
<td>34</td>
</tr>
<tr>
<td>22.</td>
<td>Riau</td>
<td>1,021</td>
<td>195</td>
<td>34</td>
</tr>
<tr>
<td>23.</td>
<td>Jambi</td>
<td>361</td>
<td>86</td>
<td>30</td>
</tr>
<tr>
<td>24.</td>
<td>West Sumatera</td>
<td>1,114</td>
<td>216</td>
<td>30</td>
</tr>
<tr>
<td>25.</td>
<td>Aceh</td>
<td>665</td>
<td>120</td>
<td>22</td>
</tr>
<tr>
<td>26.</td>
<td>Central Kalimantan</td>
<td>24</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>27.</td>
<td>West Sulawesi</td>
<td>249</td>
<td>64</td>
<td>12</td>
</tr>
<tr>
<td>28.</td>
<td>North Kalimantan</td>
<td>1,089</td>
<td>216</td>
<td>8</td>
</tr>
<tr>
<td>29.</td>
<td>Maluku</td>
<td>88</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>30.</td>
<td>Bangka Belitung</td>
<td>16</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>31.</td>
<td>Papua</td>
<td>50</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>32.</td>
<td>Gorontalo</td>
<td>8</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>33.</td>
<td>North Maluku</td>
<td>19</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>34.</td>
<td>West Papua</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>277,489</td>
<td>113,436</td>
<td>72,624</td>
</tr>
</tbody>
</table>

Source: BP2MI (2022)

The data above shows that international migrants from Indonesia come from various provinces. Some of the provinces with the highest number of migrants in 2021 are East Java (28,810), Central Java (17,504), West Java (12,178), Bali (5,086), and Lampung (4,244). The island of Java is known to account for the highest number of migrants compared to other islands in Indonesia. In general, there has been a decline in the placement of international migrants abroad since 2020 due to the Covid-19 pandemic and restrictions on the inflow of foreign workers in several countries.
Return Migrant Based on Current Occupation

Sakernas categorizes individuals into seven distinct groups based on their employment status, which helps to delineate different aspects of employment arrangements: (1) **Self-employed**: Individuals who manage their own businesses or work independently on a freelance basis, without being formally employed by any organization; (2) **Self-employed assisted by unpaid workers**: Self-employed individuals who receive assistance from unpaid workers, such as family members or volunteers, in their business activities; (3) **Self-employed assisted by paid workers**: Similar to the previous category, but the self-employed individuals here receive assistance from paid workers, indicating a larger-scale business operation; (4) **Laborers/employees**: Individuals who work for an employer or organization and receive wages or salaries in return for their services. This category encompasses a wide range of occupations and industries; (5) **Independent agricultural workers**: Individuals involved in agricultural tasks who operate independently, without formal employment under any agricultural enterprise; (6) **Freelance workers in non-agriculture**: Individuals involved in non-agricultural freelance work or self-employment, operating in sectors outside of agriculture; and (7) **Unpaid workers or family workers**: Individuals who contribute to a family business or household activities without receiving monetary compensation. This category includes family members who assist in running family-owned businesses or household chores without being formally employed.

These classifications provide a comprehensive framework for understanding the diverse employment arrangements within the population surveyed by Sakernas.

**Figure 1. Return Migrant Based on Current Occupation in Home-country**

Source: Sakernas, 2020 (data processed)

From Figure 2, it can be seen that most returning migrants in Indonesia work as entrepreneurs after returning to their home countries, with a percentage of almost 50%. Most of them are self-employed assisted by unpaid workers (23.4%), self-employed (20.5%), and trying to be assisted by paid workers (3.2%). So, it can be said that entrepreneurship is one of the main job goals for returning migrants even though work in the formal sector (labor/employee) has a fairly high percentage too (20.3%).

**Entrepreneur Return Migrant Based on Education**

The level of education is one of the important factors that need to be observed in return migrants because usually, the level of education will determine what type of work they can do while abroad. This study also suspects that it affects entrepreneurial intention.
Based on the level of education, most of the return migrants are dominated by workers with low education. Almost a third are elementary school graduates (30.9%), followed by junior high school graduates as much as 24.9%. In fact, quite a lot of return migrants did not graduate from elementary school (15.7%). Only less than 2% of them have a higher education either diploma or university.

**Entrepreneur Return Migrant Based on Training**
In addition to formal education, human capital is also formed through informal education such as training. Training allows a worker or a migrant to have skills that can be utilized on the job.

Figure 3 shows that majority (85.9%) of return migrants do not have experience in participating in training or have certain skill certifications obtained from the training. Only 14.1% have that experience.

**Entrepreneur Return Migrant Based on Digital Adoption**
In the contemporary digital landscape, entrepreneurship has undergone a profound shift with the widespread adoption of digital technologies. This encompasses both the establishment of new ventures and the modernization of existing businesses, all aimed...
at generating economic and social value through the innovative use of digital tools. Digital enterprises are distinguished by their extensive integration of cutting-edge digital technologies to enhance various aspects of their operations (Basly & Hammouda, 2020; Sahut et al., 2021). This includes leveraging digital solutions to streamline business processes, develop innovative business models, refine data analytics for informed decision-making, and foster meaningful interactions with customers and other stakeholders. The emergence of digital entrepreneurship signifies a fundamental reimagining of traditional business practices in light of the opportunities afforded by digital innovation, marking a significant evolution in the entrepreneurial landscape.

Figure 4. Entrepreneur Return Migrant Based on Digital Adoption in Certain Activities

Source: Sakernas, 2020 (data processed)

In its simplest form, digital adoption in entrepreneurship can be classified into three main functions: promotion, communication, and transaction. Based on Sakernas data (2020), it is known that in their daily life, more than half of return migrants who are entrepreneurs have used the internet network as a means of promotion (58.9%). However, there are still 41.1% who have not used it in promotions. Furthermore, in communication, almost all return migrants have used the internet network (98.2%). The opposite occurs in the use of technology for transactions. The number of entrepreneurs who have not used technology is actually more (58.9%) compared to those who have not used technology in transactions (41.1%).

According to Neumeyer et al. (2020), a prevalent barrier hindering the development of essential capabilities to utilize technology for ventures in developing contexts is the limited access to information and communication technology (ICT) infrastructure. Additionally, logistic regression analysis was conducted as part of the research objective to discern the inclination of migrant returnees towards entrepreneurship, yielding the following estimated results.

Table 2. Estimation Result of Logistic Regression

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>β</th>
<th>S.E.</th>
<th>Odds ratio</th>
<th>Prob</th>
<th>Exp (β)</th>
<th>95% C.I. for Exp (β)</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>-0.013</td>
<td>0.015</td>
<td>0.986</td>
<td>0.361</td>
<td>-0.91</td>
<td>-0.043 - 0.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>0.252</td>
<td>0.181</td>
<td>1.286</td>
<td>0.166</td>
<td>1.39</td>
<td>-0.104 - 0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural-Urban</td>
<td>0.019</td>
<td>0.127</td>
<td>1.019</td>
<td>0.882</td>
<td>0.15</td>
<td>-0.231 - 0.269</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.042***</td>
<td>0.006</td>
<td>1.043</td>
<td>0.000</td>
<td>7.05</td>
<td>0.031 - 0.054</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.703***</td>
<td>0.122</td>
<td>0.494</td>
<td>0.000</td>
<td>-5.73</td>
<td>-0.943 - 0.462</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td>0.466***</td>
<td>0.147</td>
<td>1.594</td>
<td>0.002</td>
<td>3.16</td>
<td>0.177 - 0.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.681</td>
<td>0.348</td>
<td>0.186</td>
<td>0.000</td>
<td>-4.82</td>
<td>-2.364 - 0.997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.0670</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob Chi²</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The number of obs.</td>
<td>1.403</td>
<td></td>
<td></td>
<td></td>
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Based on the results of the logistic regression estimation, it was found that the human capital of formal education and informal education through training had no significant effect on entrepreneurial interest in returning migrants. Higher levels of education actually reduce the tendency to become entrepreneurs and actually encourage them to enter the formal sector. On the other hand, training increases entrepreneurial tendencies, although not significantly. This trend is found in both rural and urban areas so the distinction between the two regional categories does not have a significant effect. Furthermore, individual characteristics such as age, gender, and marital status were found to significantly influence entrepreneurial interest. The characteristics of return migrants who are older, female, and married are known to have a higher probability of entrepreneurship after returning to their country of origin.

DISCUSSION

Previous research on return migration has extensively examined the multifaceted ways through which return migrants can significantly contribute to the economic development of their home countries. These studies have identified three primary channels through which returnees play a pivotal role in fostering economic growth and advancement. The first channel underscores the importance of return migrants’ accumulated financial capital, which serves as a crucial resource that can be reinvested upon their return. This financial infusion can catalyze various economic activities, including entrepreneurship, investment in local businesses, and infrastructure development (McCormick & Wahba, 2000; Piracha & Vadean, 2010; De Vreyer et al., 2010). Moreover, return migrants often bring back with them valuable insights and knowledge acquired from their experiences abroad, including exposure to advanced technologies and innovative business practices. This leads to the second channel through which return migration contributes to economic development: the transfer of knowledge, skills, and technological know-how.

By leveraging their international experiences, returnees can introduce and implement modern technologies and efficient business processes in their home countries, thereby enhancing productivity and competitiveness (Zweig et al., 2006; Mahuteau & Tani, 2011; Kuschminder & Jessica, 2012). Additionally, return migrants can play a pivotal role in augmenting social capital, which constitutes the third channel for economic development. Through their international experiences and exposure to diverse cultures and networks, returnees often possess enhanced social connections and networks, which they can leverage to establish new collaborations, partnerships, and business ventures. Furthermore, by challenging and reshaping traditional norms and values, return migrants can contribute to fostering a more dynamic and inclusive economic environment (Black et al., 2003). Thus, by harnessing these various channels, return migration emerges as a potent force for driving economic development and progress in the home country.

The current body of empirical research lacks exploration into the non-linear (quadratic) impacts of human capital on individuals’ intentions to pursue entrepreneurship and establish registered businesses in the market. The influence of various forms of human capital on entrepreneurial endeavors can be delineated across two distinct phases. Initially, in contexts where the prevalence of human capital is low within a given country, it tends to impede the ideation process, often leading individuals to engage in necessity-based entrepreneurship out of immediate economic need. However, such ventures, predominantly informal in nature, may not be captured through official business registration processes, particularly in developing nations where their longevity and
sustainability may be limited. Moreover, when the pool of educated individuals remains scarce, there tends to be a heightened demand for labor, incentivizing individuals to seek employment opportunities instead. Consequently, an increase in human capital in these circumstances tends to suppress entrepreneurship while promoting employment, potentially resulting in a decline in entrepreneurial activity over the long term. On the contrary, in the following stage, as the economy gathers a significant number of educated individuals who participate actively in the generation of ideas or are empowered by their financial knowledge, the environment transitions to entrepreneurship driven by opportunities. This shift is further fueled by the diminishing market wages and opportunity costs associated with entrepreneurship, thereby fostering a positive association between human capital and entrepreneurial pursuits (Arshed et al., 2021). Thus, the dynamic interplay between human capital accumulation and entrepreneurial activity unfolds across distinct phases, influenced by the prevailing economic conditions and opportunities within the given context.

Policies geared towards enhancing the impact of return migration on the development of the home country can be categorized into three overarching groups. The initial set of policies aims to address the informational, bureaucratic, and regulatory obstacles faced by potential return migrants, with the goal of easing their reintegration process into their home country. The second cluster of policies involves providing financial incentives or other forms of support to encourage and incentivize returnees to come back. Lastly, the third group of policies is aimed at promoting the reintegration of return migrants into society and enhancing their productivity in the labor market. Acknowledging the potentially significant role that return migrants can play in contributing to the development of their home country, this study delves into the factors influencing return migration and subsequently explores the policy implications derived from these findings (Gashi & Adnett, 2015). Thus, by addressing the barriers and challenges faced by return migrants and providing support mechanisms, policymakers can effectively harness the potential of return migration for the socio-economic advancement of the home country.

CONCLUSION

The findings of this study indicate that entrepreneurship emerges as the primary preference for return migrants from Indonesia upon their repatriation. However, it was observed that social capital, particularly in the guise of informal education, tends to steer return migrants towards formal employment rather than entrepreneurship. Conversely, informal education in the form of training programs appears to foster entrepreneurial intentions among returnees. Moreover, individual characteristics such as age, gender, and marital status exert notable influences on entrepreneurial inclinations, with older individuals, females, and married individuals exhibiting higher probabilities of engaging in entrepreneurial activities. These findings underscore the nuanced interplay between social capital, informal education, and individual attributes in shaping the entrepreneurial trajectories of return migrants from Indonesia.

The implications of these findings are multifaceted. Firstly, policymakers and stakeholders should recognize the importance of providing support for return migrants in terms of both formal education and informal training programs to cultivate entrepreneurial skills and intentions. Additionally, efforts to enhance social capital among returnees could be beneficial, but caution should be exercised to ensure that such efforts do not inadvertently discourage entrepreneurship. Furthermore, targeted interventions may be needed to address specific demographic factors such as age, gender, and marital status to promote entrepreneurship among return migrants. Overall, fostering a conducive environment that encourages entrepreneurial endeavors among return migrants can
lead to significant socio-economic benefits for both the individuals and the broader community.

LIMITATION
Factors influencing return migration for entrepreneurship may extend beyond the individual variables considered in the current research model, as well as external factors that might not have been accounted for. Hence, there is a need for future research to delve deeper into additional factors that could potentially influence the propensity of former migrants to embark on entrepreneurial endeavors. Exploring a broader range of individual and external factors can provide a more comprehensive understanding of the dynamics underlying return migration decisions and entrepreneurial intentions. This could ultimately inform the development of more targeted policies and interventions aimed at promoting entrepreneurship among return migrants.

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N/A

DECLARATION OF CONFLICTING INTERESTS
The authors declared no potential conflicts of interest.

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