

SOUTH-SOUTH MIGRATION AND ENTREPRENEURSHIP: THE CASE OF CHILE¹

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Abstract

There is a vast literature addressing migration towards more developing economies, often focusing on migrants' inclusion into local labour markets. However, less information is available regarding the labour inclusion of migrants in emerging economies usually characterized by high levels of inequality and extensive informal markets. Latino America, and Chile in particular, provide a unique opportunity to study the labour market integration of migrants. The region has experienced an unprecedented inflow of migrants in recent years, and Chile has not been an exception to this trend. In 2017, the migrant population in Chile was estimated at around 746 thousand. Five years later, in 2022, the number had escalated to 1.5 million (INE, 2022). Formal and informal barriers have limited migrants' access to formal markets, leading them to opt for informal jobs or entrepreneurial ventures. However, this decision is not homogeneous across migrant subgroups, especially facing external shocks. In this chapter, we will examine the inclusion of migrants in the Chilean labour market between 2017 and 2022. We will explore labour decisions among migrants and locals, analysing demographic characteristics and exploring an econometric analysis.

¹ This publication is based on research supported by the Templeton World Charity Foundation, Inc. (funder DOI 501100011730) under the grant <https://doi.org/10.54224/32650>

Furthermore, we will specifically address the substantial rise in the migrant population and the impacts of the pandemic and its subsequent recovery phase. We aim to inform policymakers regarding the role of the entrepreneur in an emerging economy as a strategy to deal with unemployment, underemployment, and informality during this period.

SUBMITTED VERSION

1. Introduction

The body of research on migration within developed economies is extensive and frequently examines how migrants integrate into local labor markets. This research often highlights entrepreneurship as a key strategy for economic inclusion, both at the individual and community levels. In contrast, there is a relative scarcity of literature that explores how migrants find employment in emerging economies, which are usually characterized by significant inequality and large informal sectors. In these contexts, migrants face various formal and informal barriers that impede their access to formal labor markets. These barriers take the form of legal obstacles, discrimination, and limited access to necessary resources and networks for formal employment. Consequently, many migrants turn to informal employment or necessity based entrepreneurial activities, to cope with hostile labor market conditions.

Latin America, and Chile in particular, provide a unique opportunity to study labor market integration of migrants. The region has seen an unprecedented inflow of migrants in recent years, and Chile is no exception. This increase in migration can be attributed to various factors, including economic instability and political unrest in neighboring countries. In 2017, the migrant population in Chile was estimated at around 746,000. By 2022, this number had increased to 1.5 million (INE, 2022). This rapid growth in the migrant population, is a critical demographic shock that presents both challenges and opportunities for the Chilean economy and society.

Migrants in Chile face formal and informal obstacles in the labor market. These challenges can range from legal barriers, such as visa restrictions, to social barriers, such as discrimination and lack of recognition of foreign qualifications. Despite these challenges, many migrants integrate into the labor market, often through informal employment or entrepreneurial activities. These informal sectors can offer flexibility and opportunities for income generation, but they also come with risks, such as lack of job security and benefits.

Migrants are a diverse group; thus, their integration approaches should be varied. By taking a closer analysis of the data, we aim to uncover how a developing economy like Chile, can effectively tackle recent migration challenges. The study period is 2017-2022, this time span includes a national Understanding the different backgrounds and needs of migrants allows for the creation of more effective and tailored integration strategies. These strategies not only help migrants use their capabilities for their own development and human flourishing, but also boost the local economy.

The remainder of this chapter is organized as follows. Section 2 provides context on migration in the Chilean labor market, including historical trends and recent developments. Section 3 presents the theoretical framework to understand the described phenomenon, drawing on relevant theories and models from the literature. Section 4 explores labor market statistics highlighting key patterns and trends present in the data. Section 5 presents an econometric analysis exploring causalities in the likelihood of becoming an entrepreneur. Finally, Section 6 presents concluding remarks, discussing results and outlining directions for future research, with emphasize in the importance continuing the study in this area to better support migrant population and enhance their contributions to the economy.

2. Contextualization of the new migration patterns in Chile

The political and economic crisis in Venezuela has led to an unprecedented humanitarian and refugee crisis in Latin America, the scale of the Venezuelan migration is historically unprecedented (Poblete et al., 2023; Pirovino and Papyrakis, 2023). More than 5.6 million venezuelans have emigrated from their country of origin and almost 80% reside throughout Latin America (Perez-Brumer et al., 2021).

Migration has become a significant global phenomenon, with increasing numbers of individuals moving internationally in pursuit of improved opportunities. Between 1990 and 2020, the global migrant population surged from 152 to 281 million, representing 3.4% of the global population in

2020. Traditionally, migration has been characterized by south-to-north transitions, and as a result, much of the existing literature has focused on the integration of migrants into developed economies.

However, there is a growing trend of migration to emerging economies, with Latin America exemplifying this shift. Between 2015 and 2020, the annual rate of change in the migrant stock in Latin America grew by 9%, more than twice the rate observed in any other region or group of countries (United Nations Department of Economic and Social Affairs, Population Division, 2020).

In this context, there is a need to improve our understanding of how migrants adapt to environments often characterized by weaker institutional structures. This is particularly relevant when analyzing inclusion in labour markets, due to high levels of inequality and significant informal sectors in host countries.

Chile presents a unique case study for this analysis, as it has experienced an unprecedented entry of migrants in recent years. According to comparable international data, the annual rate of change in the migrant stock in Chile during the period 2015 to 2020 was the fourth highest in the world, reaching a growth rate of 18.9%. This rate is more than seven times the global growth rate (2.5%) and twice the rate in South America (9%). National data also reflects this trend, with the migrant population in Chile increasing dramatically from an estimated 746 thousand in 2017 to 1.5 million by 2022.

Over six million Venezuelans have emigrated from their country as of December 2021, primarily due to ongoing humanitarian crises and political instability. Most of this exodus, amounting to approximately five million people, has been to other countries within the Latin American region. Colombia, Peru, and Chile have been the main destinations, collectively hosting about 70% of the Venezuelan migrants (Poblete, Mandakovic & Apablaza, 2023).

In Chile, there were legislative changes in 2018 that affected migration patterns due to the implementation of new administrative measures to regulate migration flow. Among the measures adopted were "Democratic Responsibility Visas" for Venezuelan migrants and "Humanitarian Visas" for Haitian migrants, in addition to an extraordinary process to regularize migrants already in Chile.

While these policies aimed to regulate migration flows, they also made Chile a more attractive destination for migrants by providing clear legal pathways to residency. As a result of these adjustments, there was an increase in the migrant population between 2017 and 2022.

In this context, the National Migrant Survey conducted in 2022 serves as a source of information for enhancing the understanding of labor and economic dynamics in Chile. With a nationally representative sample of 3,742 participants, of which 3,698 are over 18 years old, this survey sheds light on the diversity of the migrant population in Chile: Venezuelan migrants make up 33.54% of the respondents, followed by Peruvians (14.24%), Colombians (13.58%), Bolivians (13.9%), and Haitians (13.5%), with the 'other' category representing 11.25% of the total.

3. Theoretical framework

The literature linking migration processes and entrepreneurship seeks to understand the causes and consequences of entrepreneurial initiatives undertaken by migrants, examining the phenomenon from various perspectives. For example, studies that analyze conditions at the micro (demographic and psychological), meso (financial capital and networks), and macro (institutions and regulation) levels of entrepreneurial activities led by migrants (Dheer 2018; Guerrero et al, 2021).

Some of the most relevant areas present in the literature are associated with transnational entrepreneurship, ethnic entrepreneurship, and refugee entrepreneurship. Transnational entrepreneurship focuses its study on the conditions and characteristics of an entrepreneur who migrates from one country to another and maintains business relationships with the country of

origin (Drori et al., 2009). On the other hand, ethnic entrepreneurs link business activity to a common cultural origin intrinsically intertwined in specific social structures, generally gathered in specific cities or neighborhoods (Clark and Drinkwater, 2010). Lastly, refugee entrepreneurship explores the reality of forced migration processes and in most cases turns out to be a form of social integration (Bizri, 2017).

The research on migrant entrepreneurship from a labor market perspective is also multifaceted, reflecting the complexity of the subject. Specifically, it examines the role of entrepreneurship in promoting migrants' integration into the labor market, which in turn fosters economic and social innovation (Crawley et al., 2018; Kloosterman and Rath, 2001). Numerous studies suggest that the modest compensation received by highly skilled migrants in paid employment drives them towards self-employment as a strategy to achieve better income (Davidsson and Honig, 2003; Constant and Zimmermann, 2006). Despite the global interest described above, there is limited literature that explores migrant entrepreneurship in developing countries. The academic debate around migrant entrepreneurship focuses on movements from emerging countries to developed economies. Over time, the restrictive barriers imposed by developed countries on the entry of migrants have led them to seek new destinations.

Li (2001) in the case of Canada, finds that immigrations increase self-employment because of highly skilled and wealthy immigrants have a higher propensity of becoming entrepreneurs. Guerero et al., (2021) show a different pattern regarding labor integration in Chile, where a highly skilled migrant in a rapidly developing economy does not ensure success in the labor market through entrepreneurship; however, it plays a crucial role in fostering international and necessity-driven entrepreneurial activity. Some examples of relevant existing literature centers on the changing dynamics of Venezuelan migration before and after 2015 (Pirovino and Papyrakis, 2022), the relation between Venezuelan migration's impact in the labor market and perceived discrimination (Groeger et al., 2024) and the relationship between migration and entrepreneurship in Colombia (Muñoz-Mora et al., 2022).

The decision of becoming an entrepreneur is heterogeneous within similar developing economies, demographic characteristics and institutional arrangements can impact differently the decision. Cross country studies on entrepreneurial behavior have shown that early-stage entrepreneurship varies significantly by gender (Bosma et al. 2008; Stephan et al. 2015); age (Levesque and Minniti 2006) and education (Kwon and Arenius 2010). The differences between migrants and the native-born population concerning estimations of the feasibility of becoming an entrepreneur, has also been studied in the literature. Some authors sustain that related to a self-selection process migrants tend to be willing to take more risks, and this could explain their higher propensity to initiate an entrepreneurial activity in the country of destination (Constant and Zimmermann, 2006). Other authors propose that this does not apply to all migrants, it will depend on their ethnic origin and the motive that made them leave the country of origin (Scholten et al., 2017; Li, 2006).

Furthermore, within the immigrant population, there is notable diversity in their involvement in entrepreneurial activities. Factors such as gender, country of origin, and levels of human capital influence their integration into the labor market and, consequently, their likelihood of starting a business (Li, 2006; Peroni et al., 2016; Poblete and Mandakovic, 2021; Groeger et al., 2024).

4. What does the data show? Migrants in the Chilean labor market

In recent years, the country has seen a significant influx of South-to-South migrants, particularly from Venezuela. The 2017 census data suggested that there were approximately 746 thousand migrants in Chile, representing 4.3% of the national population. By 2022, the number of migrants had reached 1.6 million, accounting for 6.6% of the population.

This section explores how labor market participation and employment rates evolved in Chile from 2017 to 2022, particularly in the context of the COVID-19 pandemic and focusing on entrepreneurial activities. The COVID-19 pandemic stands as one of the most extreme shocks in modern history, causing unprecedented and widespread instability in global markets, particularly in Latin America. The region witnessed significant disruptions in economic and social structures,

with severe impacts on day-to-day life. The pandemic's shock led to dramatic and uneven effects across various indicators, including mortality rates, unemployment, insufficient health and social assistance, and a sharp decline in GDP. In the face of these challenges, many new ventures emerged, demonstrating entrepreneurial resilience in an uncertain and rapidly changing environment (Davidsson et al., 2021).

The Supplementary Income Survey (ESI) is a complementary module to the National Employment Survey (ENE). It is conducted annually during the October to December quarter. Its main objective is to detail the labor income of individuals classified as employed according to the ENE, in addition to the income from other secondary occupations. This is in addition to the ENE results on employment and employment categories. In 2022, the ESI sample included 3,663 migrants, providing an important perspective on the labor and economic situation of this population within the Chilean context.

Labor force and socioeconomic surveys between 2017 and 2022 were used to explore changes in Chilean the labor market. This time span includes the October 2019 massive protests that took place in Chile with an exceptional degree of violence and a 9-day national curfew and the 2020 COVID-19 pandemic. The fluctuation of the GDP growth was substantial in the period, starting with 1.4% in 2017, continuing with a -6.15% in 2020 and ending the last two years of study with an average growth rate of 7%.

We additionally analyze the National Migrants Survey to describe in more detail this population of interest for our study, a survey specifically designed for migrant population in 2022. This study was financially supported by the Joint Data Center on Forced Displacement, a collaboration between the World Bank and the United Nations High Commissioner for Refugees (UNHCR). It was carried out on a sample of 3,742 migrants over the age of 18.

a. Migrant participation in the labor market

In 2017, 76% of the migrant population and 58.1% of the local population participated in the labor market. By 2022, these participation rates had changed to 74.3% for migrants and 54% for locals, respectively.

Analyzing employment trends from 2017 to 2022 reveals distinct patterns in labor participation between the migrant and local populations. Before the pandemic, from 2017 to 2019, migrant labor participation increased by 2 percentage points, from 76% to 78.5%, while local labor participation dropped from 58.1% to 57.3%. Post-2020, migrant labor participation recovered immediately, whereas it took two years for the local population to show signs of recovery.

Regarding unemployment, rates were generally higher for migrants than for locals, except in 2019. Interestingly, the highest unemployment rate for migrants was not in 2020, as it was for locals, but in 2018. Both groups were significantly affected by the COVID-19 crisis, with noticeable drops in employment and increases in unemployment and labor market exit rates in 2020. The recovery process began in 2021 and continued into 2022, but pre-pandemic levels were not fully restored.

Throughout these years, the migrant population consistently showed higher employment rates than the locals. These results are consistent with trends in other similar labor markets: higher participation of migrants is usually associated with a higher percentage of individuals in the labor force. Moreover, the migrant population demonstrated a relatively fast recovery in employment rates post-pandemic, while this progress for the local population was slower. This resilience could be attributed to various factors, including the nature of jobs held by migrants or limited access to social protection implemented by the government.

b. Migrant entrepreneurs

When analyzing the distribution of entrepreneurs, which includes both self-employed individuals and employers, significant changes can be observed among the migrant population between 2017

and 2022. Between 2017 and 2022, there was a significant increase in both the number and proportion of migrant entrepreneurs in Chile.

In 2017, 21.1% of migrants in the labor market were identified as entrepreneurs, a figure that highlights their significant participation in entrepreneurial activities. However, despite the growing number of migrants, this proportion experienced a decline to 14.5% in 2019, indicating a potential downturn in entrepreneurial engagement (of the residents or newcomers) or increased challenges faced by migrant entrepreneurs during that period.

The following years reflect a recovery, with the proportion rising to 21.9% in 2021 and stabilizing at 19.8% in 2022. This fluctuation highlights the dynamic nature of entrepreneurial activities among migrants, which may be influenced by a range of factors including characteristics of the newcomers, economic conditions, regulatory environments, and access to resources.

On the contrast, the proportion of entrepreneurs within the local population showed stability over the same period, fluctuating narrowly between 25.3% and 23.2%. This consistency suggests that local entrepreneurs might benefit from a more stable ecosystem that supports sustained entrepreneurial activities, such as established networks, greater access to capital, and a more familiar regulatory landscape. The relatively minor variations in the entrepreneurial proportions among locals indicate a resilient entrepreneurial base that is less susceptible to short-term economic fluctuations compared to their migrant counterparts.

Regarding the total number of entrepreneurs in Chile, in 2017, migrant entrepreneurs represented 6.5% (142,937 individuals) of the total entrepreneurial population. By 2022, this proportion had risen to 9.4% (197,689 individuals), reflecting a substantial increase of 38.3%.

In short, despite the generally lower proportion of migrant entrepreneurs compared to locals, there are periods where the gap between the two groups narrows significantly. For instance, in 2021, the proportion of migrant entrepreneurs surged to 21.9%, closely approaching the 25.0% observed among locals. This convergence suggests that under certain conditions, migrants can enhance their entrepreneurial activities and bridge the gap with the native population. Such conditions may include favorable economic policies, targeted support programs, or improved access to entrepreneurial resources.

The observed trends underscore the importance of understanding the distinct challenges and opportunities faced by migrant entrepreneurs. The volatility in their entrepreneurial participation highlights the need for tailored support mechanisms that can help mitigate the barriers they confront and promote a more stable entrepreneurial environment. Conversely, the stability among local entrepreneurs suggests that existing support structures and conditions are conducive to sustained entrepreneurial engagement. Therefore, policymakers aiming to foster inclusive economic growth should consider these dynamics and implement strategies that address the specific needs of both migrant and local entrepreneurs.

Migrants demonstrate a capacity for high entrepreneurial activity, albeit with greater volatility, while locals maintain a more stable entrepreneurial presence. This analysis highlights the critical need for targeted interventions to support migrant entrepreneurs and sustain their contributions to the economy, ensuring a more inclusive and resilient entrepreneurial ecosystem.

c. Occupational status of entrepreneurs

The occupational categories reveal intricate behavioral dynamics among the entrepreneurs, highlighting notable differences between nationals and migrants. The proportion of migrant employers showed a remarkable fluctuation, starting at 5.7% in 2017, declining sharply to 1.1% in 2020, and then rising to 2.9% in 2022. This volatility suggests that migrant employers are particularly sensitive to economic conditions and potentially face significant barriers to

maintaining their businesses. In contrast, the proportion of local employers remained relatively stable, fluctuating slightly between 3.1% and 4.5%, indicating a more resilient entrepreneurial environment for locals.

Among migrants, the self-employment rate displayed significant variation. Starting at 15.4% in 2017, it dipped to 11.8% in 2019, peaked at 20.3% in 2021, and then slightly declined to 16.9% in 2022. These fluctuations suggest that self-employment might serve as a flexible response to changing economic conditions and labor market opportunities for migrants. Local self-employment rates were more stable, hovering around 20-21%, reflecting a consistent level of engagement in self-employment activities among the local population.

The observed trends highlight the need for targeted policy interventions to support differently migrant employers and self-employed individuals, ensuring they have access to the necessary resources and support to sustain their businesses. Additionally, the high proportion of waged employment for both groups underscores the importance of job creation and stability in this sector to maintain economic inclusion and growth. Understanding these dynamics is crucial for developing inclusive labor market policies that cater to the needs of both migrant and local populations, fostering a more equitable and resilient economy.

d. Informal and migrant entrepreneurs

Informality in entrepreneurship shows differences between migrants and locals. Between 2017 and 2022, a trend is observed in the number of informal enterprises and the percentage they represent of the total enterprises, both among migrants and nationals. In 2017, the total number of informal enterprises among migrants was 64,437, representing 45.1% of the total migrant enterprises. This number shows an upward trend over the years. By 2022, the number of informal enterprises among migrants had increased to 140,650, representing 71.2% of the total migrant enterprises. Between 2017 and 2022, informal enterprises increased by more than 118%.

In 2017, there were 1,151,750 informal enterprises among locals, representing 56.0% of the total national enterprises. By 2022, this number had decreased to 1,139,223, representing 59.5% of the total national enterprises. This translates to a reduction of 1.1%. Despite the decrease in number, the proportion of informal national enterprises increased.

As it was mentioned before, in 2022, 71.2% of entrepreneurs are involved in informal activities. Breaking down this figure, 27.1% of migrant employers have informal businesses. However, informality is even more prevalent among self-employed migrants, reaching 76.7%. In contrast, among nationals, 59.5% of entrepreneurs are informal. Although this proportion is high, it is lower than the percentage of informal migrant entrepreneurs. Among national entrepreneurs, only 13.1% of employers operate informally. However, similar to migrants, informality is more common among self-employed nationals, with 67.7%.

e. Sociodemographic characteristics

Between 2017 and 2022, the proportion of female entrepreneurs showed different trends among migrants and nationals. For migrant female entrepreneurs, there has been a steady decline over these years. In contrast, the proportion of national female entrepreneurs has been relatively stable during the same period, although it was also affected by the pandemic.

Until 2019, there was an increase in the proportion of female entrepreneurs. In 2017, women represented 51.6% of migrant entrepreneurs. This proportion gradually decreased, falling to 43.4% in 2018 and rising to 46.4% in 2019. For nationals, the proportion rose from 38.6% in 2017 to 40.0% in 2019. However, in 2020, there was a decline in the proportion of female entrepreneurs in both categories. For nationals, this proportion dropped to 37.9%, and for migrants, it fell to 41.6%. This downward trend in 2020 can be attributed to the economic and social effects of the COVID-19 pandemic. Despite these fluctuations, it is important to note that the proportion of female migrant entrepreneurs has been higher than that of national female entrepreneurs during these years. By 2022, the proportion of migrant female entrepreneurs reached the 40.6%.

Data from 2017 to 2022 show that, in general, migrant entrepreneurs tend to have a higher proportion of individuals with completed secondary and/or higher education than national entrepreneurs. Among migrant entrepreneurs, the proportion of those with secondary education has been consistently high, peaking at 93.6% in 2020 and slightly decreasing to 89.7% in 2022. In comparison, national entrepreneurs also show a high proportion of individuals with completed secondary and/or higher education, reaching 80.0% in 2020 and standing at 78.3% in 2022.

According to the 2022 National Migrant Survey, 82.9% of non-entrepreneur migrants have completed secondary and/or higher education, while this proportion rises to 85.7% among migrant entrepreneurs. Moreover, the 2022 National Migrant Survey data show significant differences in job-related task performance between non-entrepreneur migrants and entrepreneurs. According to the data, 42% of non-entrepreneur migrants work in something related to their profession, while this proportion decreases to 30.4% among migrant entrepreneurs.

When analyzing the occupation of entrepreneurial migrants by nationality, significant differences are observed. Among working Bolivian migrants, 23.4% are entrepreneurs, followed by those of Peruvian nationality with 20.5%. Migrants from other nationalities shows that 22.1% are entrepreneurs, while Venezuelans and Colombians have rates of 18.1% and 18.5% respectively. Although there are variations depending on nationality, these differences are not large, with only a 5.3% difference. In contrast, only 10.9% of working Haitians are entrepreneurs, highlighting that most of them (89.1%) do not engage in entrepreneurial activities. This low rate of entrepreneurship among Haitians may be related to language barriers they face, among other factors.

5. Econometrical analysis

Based on the previous sections, we aim to explore the likelihood of becoming an entrepreneur using an econometric model. Descriptive statistics provide a general overview of the evolution of

migrants' inclusion in the labor market, with a focus on entrepreneurship. However, these statistics only monitor the main characteristics of this group over time.

In contrast, econometric analysis offers a clearer understanding of the impact of being a migrant on the likelihood of becoming an entrepreneur, controlling not only for personal characteristics but also for the sample selection of those participating in the labor market.

Using data from 2017 to 2022, we first explore the probability of becoming an entrepreneur. Bivariate results suggest a negative relationship between migrant status and entrepreneurship in the pooled data. However, when other individual characteristics such as education and age are included, this relationship becomes insignificant, except in 2019 when it remains significant.

To better explore this relationship, a probit model controlling for selection bias is more appropriate. Specifically, we implemented a Heckman probit model to account for the different probabilities of participating in the labor market, typically described as sample selection. The Heckman probit model is a two-step estimation method. In the first stage, we estimate the probability of an individual participating in the labor market. The second stage estimates the probability of becoming an entrepreneur, once the individual decides to work. In both stages, we are interested in studying the relevance of being a migrant.

Nine different models were estimated using the Heckman probit model, controlling for sociodemographic characteristics. Table 1 summarizes the results for the migrant variable in the selection model and in the main model, reported in odds ratios.

Model 1 captures information on entrepreneurs using the pooled data, sociodemographic characteristics, and year dummies. Models 2 and 3 use the same structure, but focus on two types of entrepreneurs: employers (Model 2) and self-employed individuals (Model 3). In all three models, being a migrant increases the likelihood of participating in the labor market with no significant differences in the coefficients. Regarding the probability of being an entrepreneur,

employer, or self-employed, the patterns differ. Being a migrant increases the probability of becoming an entrepreneur and employer but is not significant in explaining self-employment. The largest coefficient and highest significance are related to the first case.

Models 4 to 9 explore the relationship each year. In all cases, the trend in the selection model holds. This indicates that being a migrant positively and significantly impacts the likelihood of participating in the labor market.

However, the impact of migrant status on entrepreneurship varies over time. In Models 4, 5, 8, and 9 (years 2017, 2018, 2021, and 2022), the relationship is positive and significant. This implies that, controlling for other sociodemographic characteristics and sample selection, migrants are more likely to become entrepreneurs in these years, which are usually characterized by a more stable environment. Conversely, in years characterized by social unrest (2019) and the pandemic (2020), the relationship becomes insignificant. During the recovery period in 2021 and 2022, the results shift. Being a migrant reduces the chances of becoming an entrepreneur in both years.

Dependant var.	Main model		Selection Model		Observation
	Odds Ratio	SE	Odds Ratio	SE	
Model 1 Entrepreneur	1.256***	(0.0274)	1.814***	(0.0312)	567672
Model 2 Employer	1.129*	(0.0544)	1.820***	(0.0314)	567672
Model 3 Self-employed	0.996	(0.214)	1.822***	(0.0314)	567672
Model 4 Entrepreneur 2017	1.382***	(0.0894)	1.962***	(0.109)	102220
Model 5 Entrepreneur 2018	1.196*	(0.0836)	1.692***	(0.0888)	103741
Model 6 Entrepreneur 2019	1.043	(0.0670)	1.784***	(0.0794)	96240
Model 7 Entrepreneur 2020	1.061	(0.165)	1.842***	(0.0794)	71935
Model 8 Entrepreneur 2021	1.358***	(0.0510)	1.863***	(0.0547)	100433
Model 9 Entrepreneur 2022	1.298***	(0.0500)	1.776***	(0.0556)	93103

Significance levels: * p<0.05, ** p<0.01 and *** p<0.001

Table 1. Results of the Heckman probit models. Results in ODDS ratio. Sociodemographic and years dummies were omitted.

6. Discussion and future research

Existing literature suggests that migrants tend to engage in entrepreneurial activities at a higher rate than the native population, driven by various motivations and the unique challenges they face in the host country (Guerrero et al., 2021). Our results confirm these previous results; however, these trends tend to be heterogenous in different economic contexts.

Based on the descriptive statistics analysis, several important conclusions can be drawn regarding entrepreneurship among migrants and nationals. There has been a noticeable decline in the proportion of female migrant entrepreneurs over the years. In 2017, women made up 51.6% of migrant entrepreneurs, but this number steadily decreased to 40.6% by 2022. This trend suggests that female migrants are encountering increasing challenges in maintaining or starting their entrepreneurial ventures. In contrast, the proportion of national female entrepreneurs has remained relatively stable, fluctuating around 40% from 2017 to 2022. Although there was a slight dip during the COVID-19 pandemic in 2020, the numbers recovered by 2021, indicating resilience among national female entrepreneurs. The National Migrant Survey 2022 also shows a gender disparity in entrepreneurship among migrants. Only 41.9% of migrant entrepreneurs are women, compared to 47.4% of non-entrepreneur migrants. The COVID-19 pandemic had a noticeable impact on female entrepreneurship, with a decline in the proportion of female entrepreneurs in 2020 for both migrants and nationals. The recovery in subsequent years highlights the resilience and adaptability of female entrepreneurs despite the challenges posed by the pandemic.

We also found that informal entrepreneurship is significantly higher among migrants compared to nationals. By 2022, 71.2% of migrant entrepreneurs operated informally, a substantial increase from 45.1% in 2017. This contrasts with a slight increase in informality among national entrepreneurs, from 56.0% in 2017 to 59.5% in 2022.

The evidence shows consistently that migrant entrepreneurs have higher educational attainment compared to their national counterparts. The proportion of migrant entrepreneurs with completed secondary and/or higher education remained high, peaking at 93.6% in 2020. This suggests that higher education may be a critical factor enabling migrants to engage in entrepreneurial activities despite the higher levels of informality.

A significant difference exists in the performance of job-related tasks between non-entrepreneur migrants and entrepreneurs. While 42% of non-entrepreneur migrants work in roles related to their profession, only 30.4% of migrant entrepreneurs do so. This indicates that many migrant entrepreneurs may be engaging in businesses outside their professional training, potentially due to barriers in the formal job market.

The evidence showed significant challenges and disparities in entrepreneurship between migrants and nationals, as well as between genders. The shocks that occurred in the period of analysis impacted differently particular population groups, such as migrant entrepreneurs, and women. They have in common higher levels of informality and barriers for entering formal, profession-related businesses.

The empirical analysis supports the previous findings and shows that being a migrant increases the likelihood of becoming an entrepreneur when controlling for personal characteristics and sample selection bias. Nevertheless, this pattern is not consistent for the probability of becoming an entrepreneur across all years analyzed. In 2020, amid the COVID-19 crisis, being a migrant is significantly and positively associated with the probability of becoming an entrepreneur. During the recovery period in 2021 and 2022, the results shift. Being a migrant reduces the chances of becoming an entrepreneur in both years.

There is literature exploring migrant entrepreneurs, especially in developed economies, focusing on motivations and outcomes (For two recent literature reviews, see Egorova, 2021, and Duan,

Kotey, and Sandhu, 2023). Most of them are related to the inclusion of migrant entrepreneurs in ethnic markets and transnational ventures. However, there is a gap regarding the role of regional ecosystems in migrants in economies with weaker institutions and exposed to recent diasporas. Our results suggests that in emerging economies with weak institutional frameworks entrepreneurship flourishes as an alternative for migrants to overcome exclusion and informality. However, the entrepreneurial path is only sustainable in a stable environment.

Moreover, the increasing affluence of a specific ethnic group, such as the inflow of new migrants from the Venezuelan diaspora, has not changed in the case of Chile, the main characteristics of migrant entrepreneurs. Our results, suggest that migrant groups less integrated in the labor market and in the society as a whole are those with lower education levels and language differences.

Future research could examine the long-term impact of informality on the success and sustainability of businesses run by migrants. This includes investigating the challenges informal entrepreneurs face and how transitioning to formality affects their business outcomes. Another relevant line of research that could be explored is the role of ecosystems in attracting, nurturing, and integrating migrant entrepreneurs. An active entrepreneurial ecosystem in the context of Kirzner's theory refers to an environment where entrepreneurial opportunities are abundant, and entrepreneurs are actively engaged in identifying and exploiting those opportunities. In the lens of external shocks, an inclusive entrepreneurial ecosystem could increase the resilience of the more vulnerable groups in society, such as migrants.

References list

- Acs, Z. J., Autio, E., Coduras, A., & Levie, J. (2008). Global entrepreneurship monitor. Executive report, 125.
- Bizri, R. M. (2017). Refugee-entrepreneurship: A social capital perspective. *Entrepreneurship & Regional Development*, 29(9-10), 847-868.
- Bosma, N., Acs, Z. J., Autio, E., Coduras, A., & Levie, J. (2008). Global entrepreneurship monitor. Executive report, 125.
- Clark, K., & Drinkwater, S. (2010). Recent trends in minority ethnic entrepreneurship in Britain. *International Small Business Journal*, 28(2), 136-146.
- Constant, A., & Zimmermann, K. F. (2006). The making of entrepreneurs in Germany: are native men and immigrants alike? *Small business economics*, 26, 279-300.
- Crawley, H., & Skleparis, D. (2018). Refugees, migrants, neither, both: categorical fetishism and the politics of bounding in Europe's 'migration crisis'. *Journal of ethnic and migration studies*, 44(1), 48-64.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of business venturing*, 18(3), 301-331.
- Davidsson, P., Recker, J. and von Briel, F. (2021), "COVID-19 as External Enabler of entrepreneurship practice and research", *BRQ Business Research Quarterly*, 24, 214-223.
- Drori, I., Honig, B., & Wright, M. (2009). Transnational entrepreneurship: An emergent field of study. *Entrepreneurship theory and practice*, 33(5), 1001-1022.
- Duan, C., Kotey, B., & Sandhu, K. (2023). A systematic literature review of determinants of immigrant entrepreneurship motivations. *Journal of Small Business & Entrepreneurship*, 35(4), 599-631.
- Egorova, T. (2021). Entrepreneurial edge in the age of migration: systematic review of migrant entrepreneurship literature. *Global Migration, Entrepreneurship and Society*, 11-33.

- Elo, M. (2021). International venturing and investment: global citizens and golden visas. *Transnational Corporations Journal*, 28(3).
- Groeger, A., León-Ciliotta, G., & Stillman, S. (2024). “Immigration, labor markets and discrimination: Evidence from the Venezuelan exodus in Perú”. *World Development*, 174, 106437.
- Guerrero, M., Mandakovic, V., Apablaza, M. et al. Are migrants in/from emerging economies more entrepreneurial than natives?. *Int Entrep Manag J* 17, 527–548 (2021). <https://doi.org/10.1007/s11365-020-00714-6>
- Jia, X., & Desa, G. (2022). Social entrepreneurship and impact investment in rural–urban transformation: An orientation to systemic social innovation and symposium findings. In *Social Innovation and Sustainability Transition* (pp. 283-305). Cham: Springer Nature Switzerland.
- Kloosterman, R., & Rath, J. (2001). Immigrant entrepreneurs in advanced economies: mixed embeddedness further explored. *Journal of ethnic and migration studies*, 27(2), 189-201.
- Kwon, S. W., & Arenius, P. (2010). Nations of entrepreneurs: A social capital perspective. *Journal of Business Venturing*, 25(3), 315-330.
- Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of business venturing*, 21(2), 177-194.
- Li, P.S. (2001), “Immigrants’ propensity to self-employment: evidence from Canada”, *International Migration Review*, Vol. 35 No. 4, pp. 1106-1128.
- Lumpkin, G. T., Moss, T. W., Gras, D. M., Kato, S., & Amezcua, A. S. (2013). “Entrepreneurial processes in social contexts: how are they different, if at all?”. *Small Business Economics*, 40, 761-783.
- Mansour, D. M., Sedita, S. R., & Apa, R. (2018). Dynamics of Entrepreneurship in Egypt: Assessing the Entrepreneurial Ecosystem: Can Entrepreneurship Contribute to the Economic Development in Egypt?. *Entrepreneurship Ecosystem in the Middle East and North Africa (MENA) Dynamics in Trends, Policy and Business Environment*, 519-542.

- Muñoz-Mora, J. C., Aparicio, S., Martínez-Moya, D., & Urbano, D. (2022). From immigrants to local entrepreneurs: Understanding the effects of migration on entrepreneurship in a highly informal country. *International Journal of Entrepreneurial Behavior & Research*, 28(9), 78-103.
- Perez-Brumer, A., Hill, D., Andrade-Romo, Z., Solari, K., Adams, E., Logie, C., & Silva-Santisteban, A. (2021). "Vaccines for all? A rapid scoping review of COVID-19 vaccine access for Venezuelan migrants in Latin America". *Journal of Migration and Health*, 4, 100072.
- Pirovino, S., & Papyrakis, E. (2023). "Understanding the global patterns of Venezuelan migration: determinants of an expanding diaspora". *Development Studies Research*, 10(1), 2147561.
- Poblete, C., & Mandakovic, V. (2021). Innovative outcomes from migrant entrepreneurship: a matter of whether you think you can, or think you can't. *International Entrepreneurship and Management Journal*, 17(2), 571-592.
- Poblete, C., Mandakovic, V., & Apablaza, M. (2023). "As if it were home": an exploratory study of the role of homesickness among migrant entrepreneurs. *Entrepreneurship & Regional Development*, 35(9-10), 905-937.
- Scholten, P., Baggerman, F., Dellouche, L., Kampen, V., Wolf, J., & Ypma, R. (2017). Policy innovation in refugee integration? A comparative analysis of innovative policy strategies toward refugee integration in Europe. Erasmus University, Rotterdam.
- Servicio Nacional de Migrantes. (2022). Encuesta Nacional de Migración 2022.
- Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46, 308-331.
- United Nations Department of Economic and Social Affairs, Population Division. (2020). Population Division. Recuperado de <https://www.un.org/development/desa/pd/>
- Welter F. (2011). Contextualizing entrepreneurship: conceptual challenges and ways forward. *Entrepreneurship Theory and Practice* 35(1): 165–178.

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