



Research Article

# Decoding the Key Determinants of Self-Employment in Botswana

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**Abstract:** Entrepreneurship plays a key role in eliminating unemployment and promoting inclusive economic development, especially in developing countries like Botswana. The determinants of self-employment are analyzed using cross sectional data from the 2015/16 Botswana Multi-Topic Household Survey (BMTHS) and a binary logistic regression model. The key determinants of self-employment include age, citizenship, education level, marital status, and geographical location, which have a significant impact on an individual's probability of being self-employed. Specifically, older individuals, foreigners, married or widows, and rural dwellers have greater probabilities of being self-employed. The findings also show that individuals with higher education such as diplomas, job training, and university degrees/other degrees are negatively correlated with being self-employed, suggesting that the more educated an individual is, the more they prefer wage employment. Also, findings suggest that programs of entrepreneurship need to be diverse by not only focusing on youth but older people as well, supporting citizen owned enterprises and integrating entrepreneurship training in all education levels. Furthermore, special support should be given to family businesses and rural entrepreneurship development schemes which can encourage more inclusive entrepreneurial growth. Addressing these socio demographic and spatial disparities by adopting segmented and responsive policies can enhance government efforts at promoting self-employment as a sustainable activity for economic diversification and poverty reduction.

**Keywords:** entrepreneurship; self-employment; youth unemployment; labour market

## 1. Introduction

Entrepreneurship and self-employment are vital drivers of economic development, employment, and poverty reduction. Governments and policymakers worldwide have increasingly encouraged graduates and non-graduates not to depend solely on formal employment but rather to consider starting their own businesses as a viable exit strategy out of unemployment and poverty. The growing global interest in entrepreneurship is fueled by the continued challenges that developing countries face, such as the limited capacity to absorb graduates in the labour market, unstable economic growth, and increasing inequality (Organisation for Economic Co-operation and Development, 2020; United Nations Botswana, 2022; World Bank, 2024).

The International Labour Organization (2022) defines a self-employed person as an independent worker who owns a business or exercises a profession alone. Recent research also defines a self-employed person as one who undertakes economic activity for the purpose of earning a living or profit either separately or in co-venture with partners, either with or without employees, depending on the nature and size of the undertaking (Organisation for Economic Co-operation and Development, 2021; Global Entrepreneurship Monitor, 2023).

According to Parker (2018), self-employment and entrepreneurship often overlap conceptually, with self-employment in most cases used as a proxy for entrepreneurship in empirical research, despite differences in motivation, scale of business, and innovation potential. The Global Entrepreneurship Monitor defines entrepreneurship as any attempt at a new business or venture creation, including self-employment, whether it involves the launch of a new business or the expansion of an existing one (Global Entrepreneurship Monitor, 2023).

Unemployment and poverty remain high in Botswana and are priority areas. The national

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unemployment rate was 25.4% in 2022, with youth and female unemployment being extremely high (Statistics Botswana, 2023). Poverty levels also remain a challenge compared to other upper-middle-income countries, driven by income and regional inequality (African Development Bank Group, 2022). In order to address these challenges, the Botswana Government has focused on entrepreneurship promotion as a strategic response to the limited formal sector job creation. While the unemployment rate has slightly fluctuated, the majority of jobs created are small-scale and often in informal enterprises (especially within agriculture) and are heavily dependent on government subsidies. Additionally, employment within the public sector has stagnated as a result of budgetary constraints and the hiring freeze which effected since 2010 (World Bank, 2024).

Recognizing the importance of entrepreneurship as an engine of economic diversification, the Government of Botswana has developed different institutions and initiatives to enhance entrepreneurial development. These include the Local Enterprise Authority, Citizen Entrepreneurial Development Agency, and the Youth Development Fund. These initiatives support small, medium, and micro enterprises through training, mentorship, and subsidized financing. Nevertheless, self-employment still accounts for a modest share of total employment around 23%, and concentrated in low-growth sectors (United Nations Botswana, 2022; World Bank, 2024). The Global Entrepreneurship Monitor (2023), highlights that entrepreneurial activity in Botswana has not yet reached a stage that could transform the country's employment landscape and more still needs to be done.

Several challenges continue to hinder entrepreneurship in Botswana. These include limited access to markets, financial exclusion, lack of management skills, poor entrepreneurial culture, and inadequate infrastructure (African Development Bank Group, 2022; United Nations Botswana, 2022). Mannathoko (2011) and Global Entrepreneurship Monitor (2023), highlight that 80% of the businesses in Botswana fail within the first 3 years of operating, which is a great concern considering the efforts and resources the Botswana Government invests in entrepreneurship development.

Gindling and Newhouse (2013) argue that understanding the characteristics and motivations of self-employed individuals is pivotal when designing policies that promote entrepreneurship. There remains a gap in Botswana-specific empirical evidence on the key factors that influence self-employment. This study seeks to fill that gap by identifying the socio-demographic, economic, and geographical factors influencing self-employment in Botswana. Understanding these factors will assist in formulating targeted strategies to support entrepreneurship to achieve sustainable economic growth, job creation, and poverty reduction. The study will assess the characteristics that influence the likelihood of being self-employed in Botswana.

Research questions concern the following:

- (1) How do socio-demographic characteristics such as age, gender, marital status and education level influence the possibility of being self-employed in Botswana?
- (2) Does an individual's health status influence self-employment decisions in Botswana?
- (3) Is there a significant difference in self-employment motivations between geographical locations in Botswana?

## 2. Literature Review

Self-employment has been studied at both macroeconomic and microeconomic levels. The microeconomic perspective investigates household level issues and data, where analysis is done on why an individual would switch from paid employment to self-employment or compare earnings for individuals transitioning between the two (Obschonka et al., 2017; Parker, 2018; Dawson et al., 2009; Rees & Shah, 1986). The macroeconomic approach considers self-employment from a national perspective, and explores its relationship with unemployment and economic development (Organisation for Economic Co-operation and Development, 2021; Neto, 2024). The focus of this study is at a micro level and the literature reviewed primarily adopts the microeconomic approach.

Gender has been recognized as an important factor in self-employment decisions. Gender has been found to influence entrepreneurship including Botswana (United Nations Botswana, 2022), the United Kingdom (Dawson et al., 2009), Portugal (Neto, 2024), Greece (Vlachos, 2016), Organisation for Economic Co-operation and Development (OECD) countries (Klapper & Parker, 2011), and Israel (Shavit & Yuchtman-Yaar, 2001). Entrepreneurship is traditionally viewed as a male dominated activity, and men are usually more than women in entrepreneurial activities (Choi, 2024). Studies undertaken in the United

States, Portugal, and Greece have found that men are more likely to enter self-employment for financial reasons, while women often enter out of necessity or lifestyle (Nikolova & Bargar, 2010; Klapper & Parker, 2011). In Botswana, family responsibilities continue to push women to participate in entrepreneurship (United Nations Botswana, 2022). However, female entrepreneurship may also be underreported. As Millán, Congregado, and Román (2012) and Parker (2018) observe, many women are usually classified as unpaid family workers even when they play a large role in managing the business, this therefore may not give a true reflection of the extent of women in entrepreneurship.

The effect of age on self-employment remains mixed in the literature. Some studies (Parker, 2018) suggest that younger individuals are more likely to engage in entrepreneurship due to their greater risk tolerance and energy, while others are of the view that older individuals have acquired more financial and human capital and are more likely to be self-employed (Gindling & Newhouse, 2013; Asheim, 2020). These opposing findings may reflect differing social safety nets, pension systems, and labor market conditions across countries globally.

Marital status is another determinant of self-employment. Rees and Shah (1986) find that married individuals are more willing to take entrepreneurial risks due to better social capital and stability in household income. Dawson, Henley and Latreille (2009) found that married individuals are often motivated by financial obligations and the desire to increase household income. Neto (2024) notes that marriage offers a safety net, such as spousal income, which may cushion the risks sometimes associated with self-employment.

Citizenship and immigration status is also found to influence entrepreneurial decisions. Non-citizens or foreigners are often faced with barriers in entering formal employment, which pushes them to engage in self-employment as a means of survival and income generation (Organisation for Economic Co-operation and Development, 2021; Fairlie, 2018). Studies such as Millán et al. (2012) and the International Labour Organization (2022) highlight that immigrants are often risk-takers and engage in self-employment to overcome exclusion in formal labor markets. In Botswana, non-citizens often participate in informal or small-scale entrepreneurship because of the legal and policy constraints on formal sector employment.

Education is another critical factor that also has mixed results in literature. While higher education can equip individuals with business skills and opportunity recognition capabilities (Aidis, 2023), it can also increase access to formal employment, which would reduce the possibility of self-employment (Obschonka et al., 2017). In Portugal, individuals with lower education levels have been found to enter self-employment out of necessity rather than opportunity (Neto, 2024). In contrast, studies in OECD countries suggest that those with advanced degrees are more likely to start self-regulating professional services (Klapper & Parker, 2011; Organisation for Economic Co-operation and Development, 2021).

Health status is also found to be a significant determinant of self-employment. Rietveld, van Kippersluis, and Thurik (2015) argue that self-employment is more physically and mentally demanding, which can discourage individuals with poor health. People with poor health are found to avoid self-employment due to uncertainty, lack of medical benefits, and greater workloads (Sitharam & Hoque, 2016). However, in countries with weak social protection systems or labor market discrimination, individuals with chronic health conditions may likely view self-employment as their only sustainable option (International Labour Organization, 2022).

The geographical dimension of self-employment is also relevant. Entrepreneurship tends to vary by location due to labor market structure, access to resources, and cultural norms. Unemployment in rural areas is often high and there are fewer wage employment opportunities, therefore rural areas tend to have higher levels of necessity-driven entrepreneurship (World Bank, 2024). Haapanen and Tervo (2009) found that in Finland, rural entrepreneurs were more likely to start businesses out of necessity than those in the urban areas. Similar patterns are also observed in developing countries, including Botswana, where lack of rural labour market opportunities push individuals into self-employment (United Nations Botswana, 2022).

### 3. Materials and Methods

In line with the empirical literature (Vlachos, 2016; Neto, 2024; Shavit & Yuchtman, 2001; Sanders & Nee, 1996) this study adopts the logit regression model to investigate the determinants of self-employment in Botswana. The model is specified as:

$$\ln \left[ \frac{P_i}{1-P_i} \right] = \beta_0 + \sum_{j=1}^n \beta_j X_{ij} + \varepsilon_i \quad \varepsilon_i \sim \left( 0, \pi^2 \right)$$

where  $P_i$  is the probability that the individual is self-employed,  $\beta_0$  and  $\beta_j$  are parameters to be estimated,  $X'_{ij}$  represents explanatory variables  $j$  for household  $i$ ,  $\ln$  is the natural logarithm and  $\varepsilon_i$  is the error term.

The dependent variable, employment status is defined as a dummy variable, taking a value of 1 if the individual is self-employed and a value of 0 if they are engaged in paid employment. Following some works (Parker, 2018; Obschonka et al., 2017; Brixiová & Kangoye, 2013; Aidis, 2023; Vlachos, 2016; Nikolova & Bargar, 2010; Dawson et al., 2009; Shavit & Yutchman, 2001; Rees & Shah, 1986), seven independent variables are considered in this study, including age, gender, education, citizenship, marital status, health status, and region of residence.

The choice of independent variables was mostly guided by the empirical literature on the determinants of self-employment and data availability. Table 1 describes the variables used in the model.

**Table 1.** Description of variables used in the model.

Variable	Variable definition
<b>Dependent variable</b>	
Employment Status	Employment Status; 1= Self-employed, 0= Paid employed
<b>Independent Variable</b>	
Age	Age in years
Gender	1=male, 0=female
Citizenship	1=citizen, 0=non-citizen
Health	1=Has a chronic disease, 0=Has no chronic disease
<i>Highest Education level</i>	
No training	1= Has no training 0=otherwise
Certificate	1=Has a certificate , 0=otherwise
Diploma	1=Has a diploma, 0=otherwise
Job training	1=Has job training, 0=otherwise
University Degree	1=Has a university degree, 0=otherwise
Other Degree	1=Has other degree, 0=otherwise
<i>Marital Status of HH</i>	
Never Married	1= Never married 0=otherwise
Married	1=Married, 0=otherwise
Cohabiting	1=Cohabiting, 0=otherwise
Separated	1=Separated, 0=otherwise
Divorced	1=Divorced, 0=otherwise
Widowed	1=Widowed, 0=otherwise
<i>Region</i>	
Cities/towns	1= cities/towns, 0= otherwise
Urban villages	1= urban village, 0= otherwise
Rural villages	1= rural village, 0= otherwise

### 3.1. Data and Descriptive Statistics

This study uses the data for the 2015/16 Botswana Multi-Topic Household Survey (BMTHS), a household level nationwide survey that was conducted during the period November 2015 to October 2016. The main objective of the BMTHS was to provide a complete and thorough data set for providing a basis for establishing poverty profiles for



Botswana. The survey had modules on household consumption and expenditure, education, employment, access to health amenities, community activities and other information on school and health facilities, as well as household characteristics. BMTHS survey gathered information from 7,060 households and 24,720 individuals from cities/towns, urban villages and rural villages. This study is based on information for individuals who were engaged in paid employment and self-employment (both formal and informal), which reduced the sample to 7,521 respondents.

Descriptive statistics are presented in Table 2. Most of the variables used in the model are dummy variables, except for age which is a continuous variables. As indicated in Table 2, 28.9% of the individuals were self-employed, implying that the remaining 71.1% were engaged in paid employment. Males account for 53.3%, while females accounted for the remaining 46.7%. Citizens account for about 95% of the participants, while non-citizens account for only 5%. Furthermore, 25% of the sample had a chronic disease, while the remaining 75% had no chronic disease. The mean age of the individuals stood at 39 years.

**Table 2.** Descriptive statistics results.

Variable	Mean	Minimum	Maximum
<i>Dependent Variable</i>			
Employment Status	0.289	0	1
<i>Independent Variables</i>			
Gender	0.533	0	1
Citizenship	0.949	0	1
Health status	0.252	0	1
Age	39	12	98
<i>Highest Education level</i>			
No training	0.624	0	1
Certificate	0.133	0	1
Diploma	0.098	0	1
Job training	0.036	0	1
University Degree	0.095	0	1
Other Degree	0.014	0	1
<i>Marital Status</i>			
Married	0.246	0	1
Cohabiting	0.298	0	1
Separated	0.014	0	1
Divorced	0.012	0	1
Never Married	0.397	0	1
Widowed	0.034	0	1
<i>Region</i>			
Cities/towns	0.297	0	1
Urban village	0.387	0	1
Rural village	0.317	0	1

Most of the sampled individuals do not have any form of training (62.4%), followed by Certificate holders (13.3%) and Diploma holders (9.8%). The majority of the individuals were never married (39.7%), 24.6 % were married, 29.8% were cohabiting, 1.2% were divorced, 3.4% were widowed, and only 1.4% had been separated. Majority of the individuals stayed in urban villages (38.7%), followed by rural villages (31.7%) and then cities/towns (29.7%).

#### 4. Results and Discussion

The results for the estimated logit model are presented in Table 3, which shows the coefficients, the corresponding p-values and marginal effects. The Log Likelihood Ratio test shows that the model is a good fit for the data ( $p < 0.001$ ). The Pseudo-R<sup>2</sup> (0.1142) is low which is common for cross-sectional data. A Variance Inflation Factor (VIF) was computed in order to detect multicollinearity. The test produced low VIFs. The highest VIF was recorded at 1.63, the lowest at 1.04, and the mean VIF at 1.21. Since the VIFs are less than 10 we can conclude that multicollinearity is not a serious problem (Stock & Watson, 2011).

The results of the empirical model show that the significant variables are age, citizenship, having highest qualification being a diploma, job training, university degree or other degree;



being married or widowed; and residing in cities/town or urban village. Age is found to be positive and statistically significant. The estimated marginal effect suggests that a one-year increase in age of an individual would increase the likelihood of being self-employed by 0.66 percentage points. Therefore, older individuals are more likely to be self-employed than the youth. The variable on citizenship was statistically significant and negative, this implies that citizens are 11 percentage points less likely to enter into self employment than non citizens. This would imply that employment opportunities in the country are usually given to citizens, while non-citizens usually enter the country to engage in other forms of employment like self-employment.

It is expected that those with higher education levels would rather enter into paid employment as compared to self-employment. Consistent with this hypothesis, the education variables were found to be significant and negative for diploma, job training, university degree and other degrees. Individuals that have a diploma or job training are respectively, 15.7 and 15.2 percentage points less likely to enter into self employment as compared to an individual that has no training. Furthermore, an individual that has a university degree or another degree is 17.9 and 15.3 percentage points less likely to enter into self employment as compared to an individual that has no training. This implies that education opens up opportunities for paid employment, and those individuals who have low educational attainments may be forced into self-employment due to limited job opportunities.

According to literature, married individuals are said to be more stable and less risk averse and therefore are more likely to enter into self-employment. Our results (table 3) corroborate this theory, those individuals that are married or widowed are respectively, 11.5 and 11.6 percentage points more likely to enter into self employment than individuals that have never been married. Location of the enterprise is also an important determinant of self-employment. The results indicate that residing in cities/towns and urban areas than in rural areas reduces the probability of self-employment. Individuals residing in cities/towns and urban villages are respectively 14.7 and 9.2 percentage points less likely to engage in self-employment than those residing in rural areas. This is consistent with expectation because paid employment opportunities are limited in rural areas.

**Table 3.** Logit estimates of the model.

Variable	Coefficients	P-value	Marginal Effects
Age	0.0345	0.000***	0.0066
Gender	-0.0189	0.740***	-0.0036
Citizenship	-0.5195	0.000 ***	-0.1103
Health Status	-0.0699	0.288	-0.0133
<i>Highest Education level (No training omitted)</i>			
Certificate	-0.0743	0.358	-0.0141
Diploma	-1.0259	0.000***	-0.1577
Job Training	-1,0310	0.000***	-0.1522
University Degree	-1.2292	0.000***	-0.1797
Other Degree	-1.0605	0.000***	-0.1531
<i>Marital Status (Never Married omitted)</i>			
Married	0.5631	0.000***	0.1153
Cohabiting	-0.0511	0.460	-0.0098
Separated	0.1475	0.510	0.0294
Divorced	0.1706	0.497	0.0341
Widowed	0.5424	0.000***	0.1159
<i>Region (Rural area omitted)</i>			
Cities/towns	-0.8341	0.000***	-0.1469
Urban	-0.495	0.000***	-0.0925
Constant	-1.2968	0.000***	
Pseudo R-Square	0.1142		
Log Likelihood	-4000.49		
LR Chi-Square	1031.22	0.000***	
No. of Observations	7521		

Self-employment is attracting a lot of interest globally as it is seen as a key driver for economic development for both developed and developing countries. The main objective of

this study was to examine factors that influence the decisions of individuals to engage in self-employment, rather than paid employment.

The results of our logit model show that the significant determinants of self-employment in Botswana are age, citizenship, education (diploma, job training, university/other degree), marital status (married or widowed), and geographical location (living in cities/towns or urban villages).

Age is found to be positive and statistically significant, this means that the older a person is the more they are likely to engage in self-employed activities. Older individuals are more likely to be self-employed than younger ones. This finding corroborates results by Muchemwa and Odimegwu (2024), who found that older entrepreneurs are more likely to enter self-employment due to accumulated capital, experience, and risk tolerance. Alene (2023) also found that age positively influences the likelihood for innovation among entrepreneurs.

The variable on citizenship was statistically significant and negative, this implies that citizens are less likely to enter self-employment than non-citizens. This may suggest that employment opportunities in the country are more accessible to citizens, while non-citizens, who may face challenges in entering the formal labor market, and will likely engage in self-employment out of survival. Similarly neighbouring Eswatini finds similar trends, where non-nationals dominate self-employment due to the limited access to wage employment (United Nations Development Programme, 2023). This finding also mirrors OECD patterns, where the non national self-employment rates are found to exceed those of the nationals in multiple countries (Organisation for Economic Co-operation and Development, 2024). Similar effects have been found in African migrant contexts, such as South Africa, where foreigners enter self-employment due to limited access to formal jobs (Fubah & Moos, 2022).

Regarding education, the results support the hypothesis that individuals with higher educational attainment are more likely to choose paid employment than self-employment. The education variables (diploma, job training, university degree, other degrees) were all significant and negative, meaning those individuals with these qualifications are less likely to enter into self employment as compared to those with no qualifications. These findings are aligned with findings by Obschonka, Hakkarainen, Lonka, and Salmela-Aro (2017), who found that higher education corresponds with a preference for paid employment, where earnings and job security are perceived to be more stable.

Marital status is another significant factor. Those who are married or widowed are more likely to enter self-employment than individuals who have never been married. This result is supported by Kumalo and Kaseeram (2019), Muchemwa and Odimegwu (2024), and Alene (2023), who highlight the role of marital status in increasing household stability and risk tolerance, both of which support entrepreneurial activity. Romeu Gordo, Stypińska, and Franke (2022) also highlights that marriage provides financial stability and support, facilitating entrepreneurial transitions. Widowed individuals most likely enter into self employment as a means of survival, to compensate for the decrease in the overall household income due to the loss of a spouse.

Geographical location was also a key determinant, as individuals residing in cities/towns or urban villages are less likely to engage in self-employment than those in rural areas. This corroborates findings from rural sub-Saharan Africa (Nagler & Naudé, 2017), USA (Conroy & Low, 2022), and South Africa (Muchemwa & Odimegwu, 2024), where higher rural self-employment is driven by necessity. Muchemwa and Odimegwu (2024) highlight that individuals in rural areas are more likely to engage in self-employment due to a lack of formal job opportunities.

## 5. Conclusions

This study investigated the key determinants of self-employment in Botswana using nationally representative household survey data and a binary logit regression model. The study established that age, citizenship, education level, marital status, and geographical location significantly influence the likelihood of individuals being self-employed. Specifically, older individuals, non-citizens, the less educated, those married or widowed, and rural dwellers are more likely to be self-employed.

These findings have important policy implications for Botswana given its high unemployment, labour market challenges, and the government's continued investment in entrepreneurship development programs. The study recommends targeted policy measures to promote inclusive and sustainable self-employment.

Entrepreneurship support needs to be made more accessible to older individuals who



were found to be more likely to be self-employed. There is a need for entrepreneurship programs that target mid-career and retired entrepreneurs, such as mentorship networks and more accessible financial options which can utilise this age group's experience and capital in to create employment. The lower likelihood of citizens being self-employed compared to non-citizens highlights the need to increase opportunities and reduce barriers to entry of citizen entrepreneurs.

The negative relationship between higher education and self-employment underscores the need to reassess how entrepreneurship is integrated into Botswana's education and training system. Entrepreneurship needs to be included in the education curriculum, there is a need for start-up facilitation for graduates, and an overall mindset change is needed in the way we view entrepreneurial activities.

Marital status (more particularly married or widowed) was positively associated with self-employment, which means that policies that promote household financial security can encourage entrepreneurial activity. This would include providing special assistance to widows and family enterprises. Geographical location was discovered to have an influence on self-employment, with individuals living in rural areas participating in self-employed more than urban dwellers. This finding highlights the necessity to strengthen rural entrepreneurship ecosystems by investing in infrastructure, directing support beyond agriculture, and improving rural access to business development services.

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## References

- African Development Bank Group. (2022). African Economic Outlook 2022: Supporting Climate Resilience and a Just Energy Transition in Africa. African Development Bank. <https://www.afdb.org/en/documents/african-economic-outlook-2022>
- Aidis, R. (2023). Do institutions matter for entrepreneurial development?. IZA World of Labor No. 334. DOI: 10.15185/izawol.334.v2
- Alene, E. T. (2023). Examine the association between self-employment and return migrants in Ethiopia: evidence from Gondar city youth returnees. *Journal of Innovation and Entrepreneurship*, 12, 28. <https://doi.org/10.1186/s13731-023-00288-x>
- Asheim, B. T. (2020). Economic geography as regional contexts' reconsidered – implications for disciplinary division of labour, research focus and societal relevance. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 74(1), 25–34. <https://doi.org/10.1080/00291951.2020.1732457>
- Brixiova, Z., & Kangoye, T. (2013). Youth employment in Africa: New evidence and policy options. William Davidson Institute Working Paper No. 1052. <http://dx.doi.org/10.2139/ssrn.2304253>
- Choi, Y. (2024). The Impact of Social Liberalization on Female Entrepreneurship. *Journal of Small Business Strategy*, 34(2), 118–132. <https://doi.org/10.53703/001c.117669>
- Conroy, T., & Low, S. A. (2022). Opportunity, necessity, and no one in the middle: A closer look at small, rural, and female-led entrepreneurship in the United States. *Applied Economic Perspectives and Policy*, 44(1), 162–196. <https://doi.org/10.1002/aep.13193>
- Dawson, C., Henley, A., & Latreille, P. L. (2009). Why do individuals choose self-employment? IZA Discussion Paper No. 3974. <https://ftp.iza.org/dp3974.pdf>
- Fairlie, R. W. (2018). Immigrant Entrepreneurs and Small Business Owners, and their Access to Financial Capital. Office of Advocacy. <https://advocacy.sba.gov/wp-content/uploads/2012/05/Immigrant-Entrepreneurs-Financial-Capital-Full-Report.pdf>
- Fubah, C., & Moos, M. (2022). Immigrant entrepreneurship in South Africa: A review and research agenda. *The Journal for Transdisciplinary Research in Southern Africa*, 18(1), 13 pages. doi:<https://doi.org/10.4102/td.v18i1.1160>
- Gindling, T. H., & Newhouse, D. (2013). Self-employment in the developing world. *World Development*, 56, 313–331. <https://doi.org/10.1016/j.worlddev.2013.03.003>
- Global Entrepreneurship Monitor. (2023). Global Entrepreneurship Monitor Global Report 2022/23. Adapting to a “New Normal”. Global Entrepreneurship Research Association. <https://www.gemconsortium.org/file/open?fileId=51147>
- Haapanen, M., & Tervo, H. (2009). Self-employment duration in urban and rural locations. *Applied Economics*, 41(19), 2449–2461. <https://doi.org/10.1080/00036840802360278>
- International Labour Organization. (2022). World Employment and Social Outlook: Trends 2022. <https://www.ilo.org/publications/flagship-reports/world-employment-and-social-outlook-trends-2022>
- Klapper, L. F., & Parker, S. C. (2011) Gender and the Business Environment for New Firm Creation. *World Bank Research Observer*, 26, 237–257. <https://doi.org/10.1093/wbro/lkp032>
- Kumalo, S., & Kaseeram, I. (2019). The determinants of self-employment of black entrepreneurs in Ladysmith, KwaZulu-Natal. *Acta Commercii*, 19(1), 10 pages. doi:<https://doi.org/10.4102/ac.v19i1.616>
- Mannathoko, B. J. (2011). Survival Analysis of SMMEs in Botswana: Master dissertation (Economics). Nelson Mandela Metropolitan University.
- Millán, J. M., Congregado, E., & Román, C. (2012). Determinants of self-employment survival in Europe. *Small Business Economics*, 38, 231–258. <https://doi.org/10.1007/s11187-010-9260-0>
- Muchemwa, M., & Odimegwu, C. (2024). Investigating the self-employed: the South African perspective. *Journal of Entrepreneurship in Emerging Economies*, 16(5), 1319–1337. <https://doi.org/10.1108/JEEE-12-2022-0376>



- Nagler, P., & Naudé, W. (2017). Non-farm entrepreneurship in rural sub-Saharan Africa: New empirical evidence. *Food Policy*, 67, 175-191. <https://doi.org/10.1016/j.foodpol.2016.09.019>
- Neto, J. (2024). Detecting Bogus Self-Employment in Portugal's Cultural Sector: One Step Forward and Two Steps Back? *E-Journal of International and Comparative Labour Studies*, 13(1), 26-44. [https://ejcls.adapt.it/index.php/ejcls\\_adapt/article/view/1489](https://ejcls.adapt.it/index.php/ejcls_adapt/article/view/1489)
- Nikolova, V., & Bargar, M. (2010). Determinants of Self-Employment in the United States. *Undergraduate Economic Review*, 6(1), Article 2. <https://digitalcommons.iwu.edu/uer/vol6/iss1/2>
- Obschonka, M., Hakkarainen, K., Lonka, K., & Salmela-Aro, K. (2017). Entrepreneurship as a twenty-first century skill: entrepreneurial alertness and intention in the transition to adulthood. *Small Business Economics*, 48, 487–501. <https://doi.org/10.1007/s11187-016-9798-6>
- Organisation for Economic Co-operation and Development. (2020). Job Creation and Local Economic Development 2020: Rebuilding Better. Paris: OECD Publishing. <https://doi.org/10.1787/b02b2f39-en>
- Organisation for Economic Co-operation and Development. (2021). The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment. Paris: OECD Publishing. <https://doi.org/10.1787/71b7a9bb-en>
- Organisation for Economic Co-operation and Development. (n.d.). Foreign-born employment. <https://www.oecd.org/en/data/indicators/foreign-born-employment.html>
- Parker, S. C. (2018). *The Economics of Entrepreneurship*. Cambridge University Press.
- Rees, H., & Shah, A. (1986). An Empirical Analysis of Self-Employment in the U.K. *Journal of Applied Econometrics*, 1(1), 95–108. <https://doi.org/10.1002/jae.3950010107>
- Rietveld, C. A., van Kippersluis, H., & Thurik, A. R. (2015). Self-Employment and Health: Barriers or Benefits?. *Health economics*, 24(10), 1302–1313. <https://doi.org/10.1002/hec.3087>
- Romeu Gordo, L., Stypińska, J., & Franke, A. (2022). Gender differences in the determinants of mature entrepreneurship? The case of Germany. *Frontiers in sociology*, 7, 998230. <https://doi.org/10.3389/fsoc.2022.998230>
- Sanders, J. M., & Nee, V. (1996). Immigrant self-employment: The family as social capital and the value of human capital. *American Sociological Review*, 61, 231-249. DOI:10.2307/2096333
- Shavit, Y., & Yuchtman-Yaar, E. (2001). Ethnicity, Education, and Other Determinants of Self-Employment in Israel. *International Journal of Sociology*, 31(1), 59-91. <https://doi.org/10.1080/15579336.2001.11770226>
- Sitharam, S., & Hoque, M. (2016). Factors affecting the performance of small and medium enterprises in KwaZulu-Natal, South Africa. *Problems and Perspectives in Management*, 14(2-2), 277-288. DOI:10.21511/ppm.14(2-2).2016.03
- Statistics Botswana. (2023). Quarterly Labour Force Module Multi-Topic Survey. Quarter 3: 2023. <https://statsbots.org.bw/sites/default/files/Quarterly%20%20Multi-Topic%20Survey-%20%20Labour%20Force%20Module%20Q3%2C%202023%20.pdf>
- Stock, J. H., & Watson, M. W. (2011). *Introduction to Econometrics*. Boston: Pearson Education Inc.
- United Nations Botswana. (2022). United Nations Sustainable Development Cooperation Framework 2022–2026. <https://botswana.un.org/sites/default/files/2022-10/UNSDCF-BW2022-2026.pdf>
- United Nations Development Programme. (2023). 2023 Eswatini: Findings Report. Blended Micro, Small and Medium Enterprises Survey. [https://www.undp.org/sites/g/files/zskgke326/files/2025-02/blended\\_msme\\_survey\\_findings\\_report\\_2023.pdf](https://www.undp.org/sites/g/files/zskgke326/files/2025-02/blended_msme_survey_findings_report_2023.pdf)
- Vlachos, V. (2016). The determinants of self-employment in greece: Exploring business start-ups. *IJES*, 24(2), 9(3), 91-108.
- World Bank. (2024). Botswana – Country Economic Memorandum: In Search of New Drivers of Inclusive Growth. <https://openknowledge.worldbank.org/entities/publication/a6dfe87c-9f7e-4bcf-9eaa-d06ff585d36c>