Impact of Entrepreneurship on Unemployment and Poverty Reduction: The Case of Bukavu in DR Congo

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ABSTRACT

The Democratic Republic of the Congo (DRC) grapples with severe poverty and unemployment issues, necessitating a focus on factors that can alleviate both challenges. This study specifically examines the impact of entrepreneurship on poverty reduction and unemployment in Bukavu. Through a comprehensive literature review and data analysis using a linear regression on cross-sectional data, the research reveals a trend with individuals transition from employment to entrepreneurship, particularly after completing studies, leading to a decline in the unemployment rate since 2015. Entrepreneurs also exhibit lower poverty indicators compared to non-entrepreneurs. The study recommends implementing measures, such as tax relief and entrepreneurial education, to encourage entrepreneurship, thereby creating employment opportunities and addressing poverty and unemployment in Bukavu.

Keywords: Poverty, Unemployment, Entrepreneurship
JEL Classifications: D31, J13, C23

1. INTRODUCTION

In 2012, approximately 77% of the population lived in extreme poverty, surviving on <$1.9/day. According to the most recent projections from the World Bank, the extreme poverty rate was expected to decrease to around 73% in 2018. It is noteworthy that the Millennium Development Goals (MDGs) set a target of 40% by 2015, indicating that the Democratic Republic of the Congo (DRC) ranks among the sub-Saharan African countries with the highest poverty rates (Kikouta, n.d.), surpassed only by Nigeria. Different papers tried to evaluate the impact of entrepreneurship to the poverty at the macroeconomics level using the economics growth as a channel (Priambodo, 2021). The high poverty level is more observed among youth and women (Okolie et al., 2021) and (Conseil and Position, 2000). While the perception, of the induvial according to youth and women entrepreneurs' decision keep constituting limit in alleviating poverty in the context of Africa (Priambodo, 2021). Even though, there is not much and

recent analysis of poverty in the DRC, the social situation remains worrying. A few studies demonstrate the factors that contribute to the reduction in poverty, Kibala identifies the increase in jobs through business creation as a panacea (Kibala Kuma, 2020a) to the poverty and unemployment. The actual context of DRCongo shows that, the rate of youth unemployment keep increasing across the country, due to the lack of job opportunities and the higher rate of university graduate fellow each year. In consequence, the entreprenrships becomes an alternative solution, to reduce poverty and unemployment level in DRCongo (Bureau international du Travail, 2015). Where most of the jobs created are drived by the small and medium firms due to the low financial and experience of the entrepreneurs in the country (Rapport, 2015).

According to a report from the National Employment Office (ONEM) on employment, the job market faced significant challenges in the past decade. Since 2007 to 2022, a stark contrast was evident, with 1,245 job seekers competing for only

28 available positions, and the context continue to become weak than to be supported by local policy in addressing unemployment matters and poverty in the DRCongo as in some other African countries as well (Gamede, 2023).

Confronted with the disparity between job supply and demand, entrepreneurship emerges as the most effective means to alleviate unemployment. Entrepreneurship, manifested through the establishment of new ventures, contributes to the reduction of unemployment by engaging not only entrepreneurs working independently but also unemployed individuals working on behalf of these entrepreneurs (Baldegger, 2016). Fostering an entrepreneurial mindset becomes imperative for job creation, enhancing the quality of life, and promoting economic independence, particularly among the younger population (Awogbenle, 2010).

While, for most of the cases entrepreneurship in the DRCongo is characterized as "survival entrepreneurship," (Balemba et al,2014) where individuals establish businesses due to social constraints. Entrepreneurs initiate their businesses out of necessity rather than to exploit an opportunity (Bonkinga, 2012). Many embark on creatively launching small businesses or engaging in commercial and productive activities, often within the informal economy, to independently break free from poverty at the end solving poverty or creating jobs to others becomes random event (Espoir, 2018).

Even though the entrepreneurship is demonstrated as one of the main panacea in addressing poverty and unemployment, it is observed that in the DRCongo, the rate of active population involved in entrepreneurships is <50% while 70% of all of them are enrolled in the informal sectors, this makes the entrepreneurship policy not to be effective (Kibala Kuma, 2020).

Narrowing the analysis in Bukavu city in Republic of Congo, it is observed that no more studies have tried to assess the impact of entrepreneurship on poverty reduction or unemployment given the number of programs supporting this policy in the region.

2. METHODOLOGICAL APPROACH

2.1. Collection of Data and Sampling
The target population for this study comprises adults residing in the city of Bukavu, encompassing both entrepreneurs and non-entrepreneurs. It is essential to include employees and the unemployed to evaluate whether poverty is more pronounced among them compared to entrepreneurs. The non-entrepreneurs serve as the control population for comparative analysis.

The sample size is given by the following formula proposed by Bugandwa (2019):

$$n = \frac{Z_\alpha^2 [P(1-P)]}{\varepsilon^2}$$

Where n is the sample size, Z_α^2 the value of the square of the normal distribution at the alpha significance threshold set at 0.05 which gives $(1.96)^2 = 3.416$; P is the theoretical proportion of the variable of interest (the proportion of poor people for the case of

this study). We consider the value of 0.5 which is the value of P which maximizes the sample size in other words we consider that 50% of the population are entrepreneurs and 50% are not. Is the square of the error threshold set by the researcher. Here we set it at 7% ε^2 (Bugandwa, 2019). The sample size is:

$$n = \frac{3,416 * 0,25}{0,0049} \leq 174$$

To reduce the non-response rate and technical errors linked to collection, up to 178 people were surveyed. After removing incomplete questionnaires, only 175 were considered in the analysis.

2.2. Measurement of Variables
a. Entrepreneurship: The primary independent variable under investigation in this study is a dichotomous qualitative variable. It takes the value of 1 if the respondent owns their own business (formal or informal) and 0 if they do not engage in entrepreneurship. This variable serves as the basis for categorizing the respondents into two distinct groups for the purpose of this study.
b. Poverty: Two approaches to measuring poverty are utilized in this study: monetary poverty and multidimensional poverty. The study estimates two separate models, each with a distinct dependent variable. One model incorporates the monetary approach to poverty, while the other considers the non-monetary approach as the dependent variable. This dual modeling approach allows for a comprehensive analysis of poverty, addressing both its monetary and multidimensional aspects.

2.2.1. Monetary approach
Monetary poverty is evaluated using the Foster-Greer-Thorbecke (FGT) index, an indicator designed to assess the level of poverty within a specific group. To calculate the FGT index, data on the income (or expenses) of the individuals in question is required. A poverty line is established, and the index is computed by determining the percentage of individuals falling below this defined poverty threshold. This methodology provides a quantitative measure of monetary poverty within the studied population (Foster et al., 1984).

$$FGT_\alpha = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{z - Y_i}{z} \right)^\alpha I\left(Y_i \leq z \right)$$

Where N is the size of the total population, z is the poverty line, is the income of individual i. Finally, $Y_i I(Y_i \leq z)$ is a function that takes 1 if income is above the poverty line zY_i. The higher the value obtained by this equation, the higher the poverty rate. A person is poor here when their income is below the threshold or the poverty line, i.e. if $Y_i \leq z$. In this study, the poverty line is set at $1 per person per day. To assess the disparity between an individual's income and the poverty line, the α index is employed. The parameter α, serving as an indicator of aversion to poverty, facilitates a transition between different poverty indices. A higher value of α assigns greater weight to the poorest individuals in the computation of the poverty rate. Various alpha levels are considered, each influencing the calculation of the poverty rate differently.

Table 1: Measurement of poverty index

Dimension	Indicator	Is helpless if…	Relative weight
Education	Years of schooling	No member of the household aged 10 or over has completed 5 years of study.	1/6
	School attendance	A child of school age does not go to school until the age where he can finish grade 8	1/6
Health	Infant mortality	The household has experienced a child death in the last 5 years.	1/6
	Nutrition	A child or adult in the household for whom nutritional information is available is malnourished.	1/6
Living conditions	Electricity	The household has no electricity	1/18
	Sanitary equipment	Household sanitation facilities are not adequate or are used commonly with other households	1/18
	Potable water	The household does not have access to drinking water, or this access is a 30 min or more round-trip walk.	1/18
	Flooring	The floor of the accommodation is made of mud, dung, or sand.	1/18
	Cooking energy	The household uses dung, wood, or charcoal as cooking fuel.	1/18
	Capital goods	The household does not own more than one of the following: radio, TV, telephone, bicycle, motorcycle, refrigerator and does not have a car or truck.	1/18

Source: Alkire et al. (2014)

Table 2: Description of variables

Variables (code)	Nature	Measure	Expected effect
Dependent variables			
Poverty index (PVT)	Quantitative	Multidimensional poverty index consumption per day	
Dependent variables			
Entrepreneurship (ETR)	Binary qualitative	0=Non-entrepreneur 1=entrepreneur	-
Age (AG)	Quantitative	Number of years since birth	-
Gender (GR)	Binary qualitative	0=Female 1=Male	+
Household size	Quantitative	Number of people living under the respondent's roof	-
Residential municipality (CH)	Qualitative multinomial	1=Kadutu 2=Ibanda 3=Bagira	±
Level of education (BORN)	Qualitative multinomial	1=none, 2=primary, 3=secondary, 4=university, 5=professional	-
Civil status (EC)	Qualitative multinomial	1=single, 2=married, 3=divorced/separated, 4=widower	±

Source: Author's composition

Table 3: Presentations of the profile of the respondents

Variables and their category	Terms	Frequencies n=175	Percentage
Gender	Man	145	82.86
	Women	30	17.14
Municipality	Bagira	31	17.71
	Ibanda	94	53.71
	Kadutu	50	28.57
Marital status	Married	94	53.71
	Bachelor	70	40.00
	Separated/Divorced	7	4.00
	Widower widow	4	2.29
Level of study	Primary	0	0
	Secondary	83	47.43
	Superior	87	49.71
	Professional	5	2.86
		Average	Standard déviation	Min-max
Age		33.43	10,896	19-72
Household size		6.05	3.11	1-13

Source: Generated in Stata 14 from data

2.2.2. FGT0: The poverty rate
FGT0 is obtained by replacing α by 0 in the equation above.

This amounts to dividing the number of poor people by the total population of a country: This indicator is therefore the incidence of poverty.

2.2.3. FGT1: The depth of poverty
Unlike the incidence of poverty, the rate obtained here is weighted by the distance between the poverty line and the income of an individual "i" this indicator is called the depth of poverty. We can have the same number of poor people in two different populations but a very different poverty rate depending on the distance between the individuals' income and the poverty line.

2.2.4. FGT2: The severity or intensity of poverty among the poor
In this context, like the depth of poverty, greater emphasis is placed on individuals who are farther from the poverty line, but in this case, the weighting is more than proportional. Consequently, an individual with an income twice as low as another will carry more than twice the weight in the poverty rate calculation (provided that the incomes of both individuals are below the poverty line). This approach underscores the importance of seriously considering the gap between the poverty line and income, reinforcing the need for actions to reduce this disparity (Foster et al., 1984).

In the regression analysis, the dependent variable, the poverty variable, will be a dichotomous variable. It assumes the value of 1 if the individual lives below the poverty line and 0 otherwise. To compare the impact of poverty on each of the two groups (entrepreneurs and non-entrepreneurs), the rate, depth, and severity of poverty will be calculated. This comprehensive assessment will provide insights into the varying degrees to which each group is affected by poverty.

2.2.5. Multidimensional poverty

The international multidimensional poverty index (MPI) offers a detailed examination of poverty through a "high resolution" lens. It directly assesses the nature and extent of accumulated deprivations related to health, education, and household living conditions. This approach provides crucial insights into identifying who is poor and the severity of their poverty. Consequently, decision-makers can use this information to design policies and allocate resources more effectively. The international MPI complements monetary measures by utilizing indicators that are directly comparable across diverse populations, eliminating the need for conversion rates. Moreover, it allows for disaggregation by social subgroup and subnational region, offering insights into poverty within and between countries and facilitating the tracking of poverty trends over time. The international MPI was developed in 2010 by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Program (UNDP) for their periodic report: Human Development Reports (Alkire and Santos, 2010; Alkire et al., 2014)

The MPI has three equally weighted dimensions and 10 indicators shown in the table below.

In reference to Table 1, a person is categorized as multidimensionally poor (or "MPI poor") if they experience deprivation in at least one-third of the weighted multidimensional poverty index (MPI) indicators. Like monetary poverty, multidimensional poverty is also represented as a dichotomous variable, taking the value of 1 if the individual's deprivation score is greater than or equal to 1/3. To compare entrepreneurs and non-entrepreneurs regarding multidimensional poverty, the MPI is calculated for both groups using its two components. The Inequality-Adjusted Poverty Gap (MPI-2) and the Headcount Ratio (MPI-1) together form the MPI, providing a comprehensive assessment of poverty that considers both the intensity and incidence of deprivations across multiple dimensions. Incidence: The percentage of poor people or poverty rate (H): which is the proportion of people who have a deprivation score greater than or equal to 1/3. Intensity: the average proportion of dimensions in which the poor are deprived. This is the average (A).

$$IPM = H*A$$

2.3. Data Processing Techniques

For data processing, two main methods are used, notably descriptive statistics and econometric estimation via linear regression.

Certainly, the multiple linear regression was employed to unveil the relationship between the calculated poverty index (dependent variable) and the independent variables outlined in the model. This regression is appropriate when the dependent variable is a quantitative variable. The mathematical formulation of the regression equation is as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_n X_n + \varepsilon_i$$

With Y the dependent variable, which is the poverty level, β0 the constant, βi the vector of coefficients to be estimated from the model, Xi the vector of independent variables and ε the error term.

The estimated model is presented as follows:

Poverty level $= \beta_0 + \beta_1$ Entrepreneurtiat $+ \beta_2$ Âge $+ \beta_3$ genre $+ \beta_4$ éducation $+ \beta_5$ Taille du ménage $+ \beta_6$ Commune $+ \beta7$ Etat Civil $+ \varepsilon$

Table 2 presents the exogenous and dependent variables used in the study, as well as their description and definition. It presents the expected sign based on the literature review.

3. STUDY RESULTS

3.1. Results of Descriptive Analysis

3.1.1. Profile of répondent

The profile of the respondents is presented in the table below:

In reference to the Table 3 above presenting the characteristics of the respondent, it is evident from the presented data that most survey respondents are men, likely attributed to their greater experience in formal entrepreneurship, possessing precise addresses, and a more receptive attitude during the survey. This facilitated their willingness to participate. Regarding residential locations, the predominant trend reveals that a significant number of respondents reside in Ibanda, followed by Kadutu, and finally Ibanda commune. This geographic distribution sheds light on the regional concentration of participants. When examining educational backgrounds, the findings illustrate that a substantial 49.7% of respondents hold a higher level of education, while 47.43% have completed secondary education. Merely 2.8% have undergone vocational training, and none possess primary education qualifications. This distribution is influenced, in part, by the survey's urban setting with a relatively high enrollment rate in secondary and higher education institutions.

Analyzing the age demographic, the average age of respondents is 33 years, with a standard deviation of approximately 11 years. This indicates a predominantly youthful survey population, albeit with considerable individual age deviations from the average. Lastly, the household size averages 6 people, with a standard deviation of 3. These demographic details set the context for the subsequent presentation of entrepreneurial status results, outlined in the forthcoming table.

The Table 4, reveals that the survey encompassed 102 entrepreneurs, constituting 58.29%, compared to 41.71% non-entrepreneurs. Among entrepreneurs, the majority, 52.9%, operate in the informal sector, while 47% are in the formal sector. Notably, 45.1% of entrepreneurs were previously employed, transitioning to

Table 4: Descriptive result of economics characteristics of the participant

Entrepreneurship characteristics	Frequencies n=175	Percentage
Entrepreneur		
Yes	102	58.29
No	73	41.71
Formal		
No	54	52.94
Yes	48	47.06
Front occupancy		
Unemployed	23	22.55
Employee	46	45.10
Student/Pupil	33	32.35

Source: Generated in Stata 14 from data

Table 5: Entrepreneurial status and poverty situation

Indicator	Entrepreneurship	
	Yes	No
Monetary poverty		
The poverty rate (FGT0)	0.21	0.38
The depth of poverty (FGT1)	0.45	0.54
The severity of poverty (FGT2)	0.30	0.35
Multidimensional poverty		
Incidence of poverty (H)	0.31	0.39
Intensity of poverty (A)	0.32	0.33
Multidimensional Poverty Index (MPI)	0.09	0.128

Source: Generated in Stata 14 from data

Table 6: OLS regression output

| Variables	Multidimensional poverty	Monnetay poverty
Entrepreneurial	−0.052	2.934**
	(0.0353)	(1.350)
Age	−0.0019	−0.027
	(0.0015)	(0.0322)
Gender (man)	−0.0759	0.496
	(0.053)	(0.695)
Household size	−0.001	−0.864***
	(0.0062)	(0.234)
Municipality		
Ibanda	0.033	4.324**
	(0.045)	(1.961)
Bagira	0.0128	0.944
	(0.045)	(0.893)
Level of study		
Superior	0.011	2.012
	(0.039)	(1.269)
Professional	−0.191***	2.975
	(0.041)	(2.796)
Marital status		
Married	0.026	−0.947
	(0.042)	(1.034)
Divorced/separated	0.014	−4.445**
	(0.088)	(2.207)
Widower widow	0.0059	−4.426
	(0.085)	(3.985)
Constant	0.406***	4.634***
	(0.0770)	(1.399)
Numbers of observation	175	175
R-Squared	0.066	0.257

Robust standard errors in parentheses, ***P<0.01, **P<0.05, *P<0.1

entrepreneurship, followed by 32.35% of students and pupils who ventured into entrepreneurship right after completing their studies. Additionally, some entrepreneurs shifted from unemployment to entrepreneurship, illustrating that entrepreneurship serves as a pathway out of unemployment. This pattern suggests that entrepreneurship has a notable impact on reducing unemployment. Individuals leaving university to pursue entrepreneurship immediately after graduation and those transitioning from unemployment to entrepreneurship both contribute to lowering the overall unemployment rate. Furthermore, entrepreneurship is seen to have a dual effect on employment, creating jobs for both self-employed entrepreneurs and workers employed by those entrepreneurs. In the upcoming figure, we attempt to visualize the evolution of the unemployment rate in Bukavu and assess the potential impact of policies aimed at enhancing entrepreneurship.

From the Figure 1 above, derived from national secondary data and disaggregated for the provinces in the DRC, illustrates the evolution of the unemployment rate in Bukavu from 2007 to 2021. Notably, there is a decreasing trend from 2015 onwards, coinciding with an upswing in entrepreneurship programs across the republic. This surge is attributed not only to the creation of new sectors in entrepreneurship but also to the involvement of national programs and NGOs. The convenience of the one-stop shops for business creation, which substantially reduces creation costs and bureaucratic hurdles involving state agents, is noteworthy during this period. Additionally, the development of start-up incubators like ORHEOL, KIVU TECH, and OPEC, which provide support to entrepreneurs from project conception to business launch, has contributed to these positive trends. Even though the youngest age group (14-24 years old) experiences the highest unemployment rate, the decreasing trend is consistent across all age groups. This suggests that by fostering entrepreneurship, there has been a significant reduction in the overall unemployment rate, notwithstanding the remaining challenges. The figure below presents descriptive statistics on consumer spending.

In reference to Figure 2, it illustrates the average expenditure on various categories including food consumption, rent, schooling, water and electricity subscription, health care, and communication. The data reveals that, on average, the highest household expense is children's education. Despite the proclamation of free education in the DRC, a significant number of households opt for costly private schools or send their children abroad, leading to a substantial increase in education-related expenditure. Following education expenses, food costs rank second. Consumption expenditure on food constitutes a significant portion of household expenses, as it is a fundamental necessity regardless of the household's economic status. Rent follows as the next significant expense. Although rent is relatively high in Bukavu and constitutes a substantial proportion of certain households, some respondents do not incur this cost as they own their homes. Expenses related to water and electricity, as well as communication and transport, come next in the hierarchy. Finally, health care expenses are noted to be lower, possibly due to the unpredictable nature of substantial healthcare costs. Not every household consistently incurs significant healthcare expenses each month or year.

Figure 1: Evolution of the unemployment rate in Bukavu from 2007 to 2021
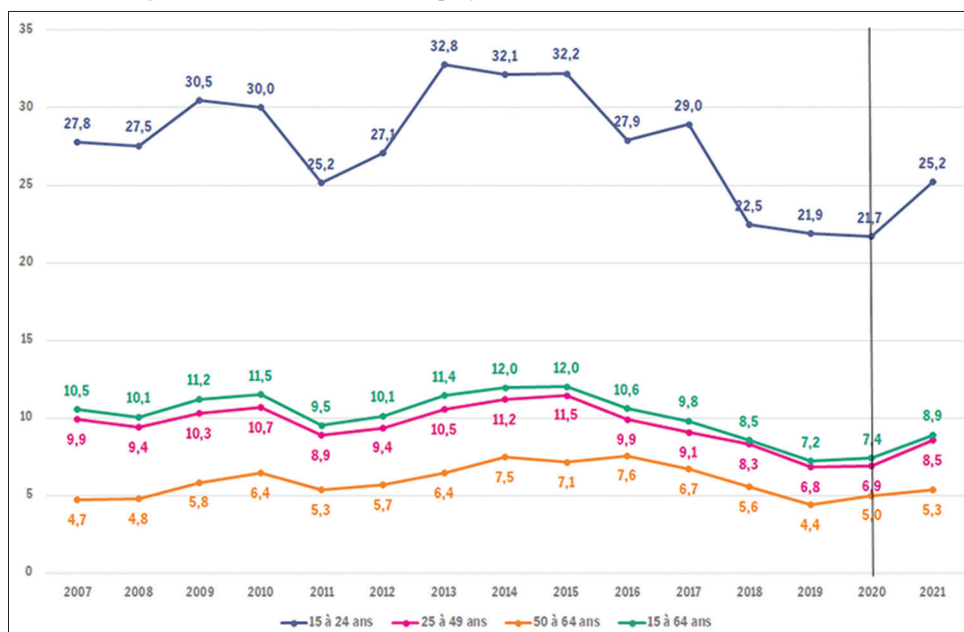
Source: National Institute of Statistics (2022), Repport Democratic Republic of Congo

Figure 2: Household consumption expenditure
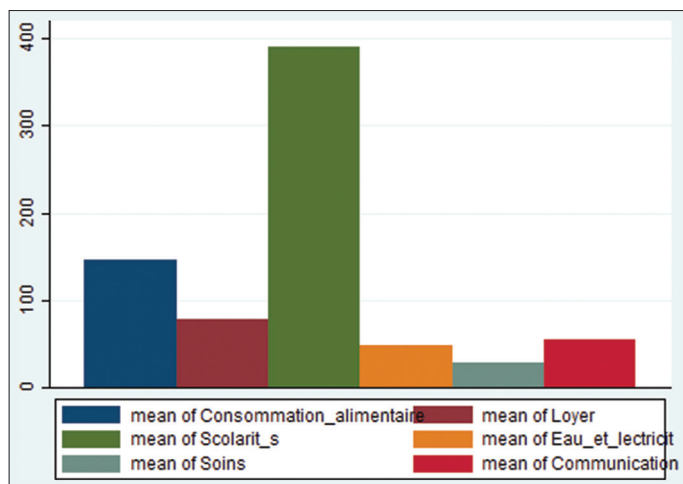
Source: Generated in Stata 14 from data

3.1.2. Entrepreneurial status and poverty situation
In this point it is a question of comparing the different indicators of poverty between two groups, namely, entrepreneurs and non-entrepreneurs. The result is presented in the table below.

The results regarding monetary poverty indicate that entrepreneurs exhibit a lower poverty rate compared to non-entrepreneurs as presented in Table 5 above. Specifically, the proportion of individuals classified as poor is 21% among entrepreneurs, while it is higher at 38% among non-entrepreneurs. Moreover, both the depth and severity of poverty are more pronounced among non-entrepreneurs. The depth of poverty, representing the average deficit required for the poor to reach the poverty line, is 45% among entrepreneurs and 54% among non-entrepreneurs. Similarly, the severity of poverty, reflecting the weight of individuals farther from the poverty line, is higher among non-

entrepreneurs with a severity rate of 35%, compared to 30% among entrepreneurs.

Concerning multidimensional poverty, the results indicate that both the incidence, intensity, and the poverty index are relatively high among both non-entrepreneurs and entrepreneurs. However, the incidence, intensity, and multidimensional poverty index are slightly lower among entrepreneurs. Specifically, 31% of entrepreneurs are considered multidimensionally poor, compared to 39% among non-entrepreneurs. The intensity of poverty is 1% lower among entrepreneurs. Regarding the multidimensional poverty index, entrepreneurs have an index of 9.9%, whereas non-entrepreneurs have a higher index of 12.8%. Overall, these findings suggest that, from a multidimensional perspective, entrepreneurs fare better in terms of poverty indicators compared to their non-entrepreneur counterparts.

3.2. Estimation of the Determinants of Poverty
From the results presented in the Table 6, of the first model, it is observed that being an entrepreneur has a negative influence on the multidimensional poverty index (IMP), although this effect is not statistically significant. This outcome does not confirm the initial hypothesis. On the other hand, the level of education does have a significant impact on the IMP. Specifically, completing vocational training negatively and significantly influences the poverty index when compared to individuals at the secondary school level.

In the second model, it is evident from the table that entrepreneurship significantly increases daily per-person household expenses by approximately $3. Consequently, household income also increases because of entrepreneurship. Entrepreneurial households tend to spend about $3 more per person compared to non-entrepreneurial households. Additionally, household size has a significant negative influence on individual spending, with an increase in the number of people in a household leading to a reduction in spending by

$0.86 per person. Lastly, the results indicate that residing in Ibanda significantly increases individual spending by around $4 compared to those in Kadutu.

3.3. Discussion of the Results, the Limitation of the Work and Perspectives for Future Research

The results of this study imply, firstly, that entrepreneurship is more attractive than salaried work in this sense; most respondents say they left their old job to start entrepreneurship. This corroborates with different studies (Okamba, 2021) who found that several individuals engage in paid agricultural work due to a lack of sufficient capital to create their own non-agricultural activities. If they save enough money to do their own non-agricultural activity, they go straight into it. According to these authors, wage labor constitutes a source of capital for entrepreneurs who do not have access to credit. that unemployment among young people is largely explained by the lack of access to credit to empirical ate economic activity in the sense that it is difficult to have credit without economic activity or a guarantee (Emin, 2004). Young people are looking for paid employment to build up capital if they are determined to create employment(Boissin et al., 2009).

Secondly, the results show that the poverty indices, whether monetary or multidimensional, are greater among non-entrepreneurs than among non-entrepreneurs. This means that entrepreneurs are less affected by poverty compared to non-entrepreneurs. The empirical studies have demonstrated that poverty and inequality are high in segments of the population that do not have access to non-agricultural income. Non-agricultural income in their population is generally small economic activities created by farmers, generally small traders, while agricultural activity mainly comes from services on behalf of others. These authors justify this fact by citing the recurrence and availability of entrepreneurial income. Indeed, entrepreneurs have the possibility of having access to income whenever a need arises, while the unemployed and employees, particularly occasional employees, have uncertain income (Kiuma, Araar, & Kaghoma, 2020).

Finally, the results of the regression indicate on the one hand that it is possible to reduce the poverty index by being an entrepreneur, and on the other hand, it is possible to increase income through entrepreneurship. This result corroborates with different empirical result showing that, young swiss entrepreneurs (Njengoue, 2012) manage to increase their income so that there are those who, once leaving university, already have a company, which in turn hires other youth (Kamavuako, 2009). Other scholars finds that in Benin, many women entrepreneurs live in rich households (Doubogan & Yabi, 2016). It is also in this sense that Balemba, Lukuitshi, and Muhindo (2014) affirm that women's entrepreneurship provides additional income to the household and therefore reduces the risk of household poverty as well as different studies demonstrated in Nigeria (Ugochukwu Chinonso, 2021).

Based on the above, we see that it is possible to reduce poverty and unemployment through entrepreneurship. Indeed, by creating a business, the entrepreneur works on his own account and can develop his business and hire other individuals, which has a significant effect on unemployment. (Danjou., 2002). Zulfah AA (2020), also emphasizes that, through the spillover effect, entrepreneurship boosts the country's economic growth. He asserts that the large proportion of entrepreneurs in the active population would significantly reduce unemployment (Zulfah and Howitzerni, 2020). The authorities would do better to encourage entrepreneurship by setting up investment funds or making microfinance more accessible to business creators to reduce unemployment on the one hand and poverty on the other. Especially since access to capital is a great challenge for entrepreneurship in the DRC.

This dissertation, although it has interesting results, is not exempt from limitations, notably the fact that, by taking entrepreneurs and non-entrepreneurs on the other hand, we ignore the type of entrepreneurship, but it is possible that each type of entrepreneurship does not have the same effect on poverty. Also, this same consideration erases the different occupations of non-entrepreneurs. Furthermore, it does not identify the mechanisms by which entrepreneurship impacts poverty. That said, future research will cover these limitations by studying entrepreneurship sectors separately to know which one's impact poverty the most. It would therefore be interesting to opt for a mixed or qualitative method to better understand the mechanism by which entrepreneurship impacts poverty. An in-depth study with temporal and/or panel data can also make it possible to study the effect of entrepreneurship on poverty and unemployment. Therefore, a study that uses more rigorous methods of impact, such as a study in two stages (baseline and endline), propensity score matching, or even a randomized trial, will make it possible to better capture this impact.

4. CONCLUSION

This paper aimed to investigate the impact of entrepreneurship on poverty reduction and unemployment in Bukavu. The specific objectives included highlighting characteristics affecting household poverty, profiling the individuals studied, comparing poverty levels between entrepreneurs and non-entrepreneurs, evaluating the impact of entrepreneurship on poverty, and formulating policies to promote entrepreneurship for poverty and unemployment reduction. The initial hypothesis posited that entrepreneurship influences poverty reduction and unemployment.

The literature review, data collection, and subsequent analysis using descriptive statistics and linear regression revealed that many entrepreneurs transitioned from salaried employment, others ventured into entrepreneurship directly after studies, and some entered entrepreneurship after experiencing unemployment. The results also indicated that entrepreneurs exhibited lower indicators of poverty, both in monetary and multidimensional terms, compared to non-entrepreneurs. Furthermore, entrepreneurship positively influenced individual household consumption expenditure.

Considering these findings, this work recommends policy measures to support and encourage entrepreneurship, thereby contributing to poverty and unemployment reduction. These measures include tax relief for start-ups, promoting entrepreneurial education, facilitating access to affordable credit for start-ups, and

providing supervision for entrepreneurs in the informal sector.

While this research provides valuable insights, it acknowledges its limitations and suggests future studies to address them. Recommendations for future research involve employing mixed methods, utilizing temporal or panel data, and employing more rigorous impact assessment methods such as two-stage studies, Propensity Score Matching, or randomized trials. This comprehensive approach would contribute to a more nuanced understanding of the impact of entrepreneurship on poverty and unemployment.

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