

Impact of Microfinance on Poverty in Zambia

Sam Milupi Mbewe¹, Zhang Diping²

^{1,2}School of Sciences, Zhejiang University of Science and Technology, Hangzhou, China

Abstract

This research studies the impact microfinance has on poverty in Zambia. The study uses simple linear regression analysis to determine if a relationship exists between the two variables, with poverty being predicted while microfinance being used to predict the outcome of its impact on Zambia. It is a well-known fact that most countries in Africa are facing this type of phenomenon, many countries are striving to alleviate poverty by enforcing different measures and one of them is through the introduction of microfinance institutions. This study defines and gives a clear view of what and how microfinance institutions are fighting poverty by providing different types of services to unemployed individuals, individuals who lack access to conventional banking systems, low-income earners, small businesses, and enterprise owners.

Keywords: Poverty, Impact of Microfinance, Regression Model, Zambia

Introduction

Zambia is a landlocked country found in the southern central part of Africa, the capital city of Zambia is Lusaka. As of 2022, Zambia's population stands at exactly 20 million people. Zambia has ten provinces in total and more than 72 ethnic groups. Zambia was once one of the most prosperous sub-Saharan African countries, with a fast-growing economy, but in recent years Zambia ranks as one of the least developed countries in the world. Zambia is one of the countries that has high rates of poverty in Africa and the world. Zambia has over 58% of people living under the poverty line as of 2023 (Data source: World Population Review). According to government data, most of the people are living in poverty, data given from Zambia's eight provinces, Lusaka 20%, 30% Copper-belt, Southern 57%, Western 82%, Eastern 70, Northern 79%, Central 56%, and Luapula 81% (Lusaka Times.com). As can be seen from the data above the majority of people are living in poverty. The government has a lot to do to ensure they provide enough opportunities for these people living in poverty, to improve their lives.

Poverty can be defined as a state in which people or communities lack financial resources and essential basic needs for a minimum standard of living, Hannah More (2023), this simply means basic needs are not met, basic needs, in this case, include food, clothes, water, and shelter. As such, people fail to be productive or contribute to the development of the economy. Poverty slows down the development of any country Surajo and Karim (2016) fully emphasize how poverty causes such problems. Studies have also shown that poverty also increases crime rates in a poverty-stricken community Jungeun (2015). Without basic needs, people find ways through which they can attain or rather acquire these needs Fougere (2010). People in Zambia face the same problem, but with new policies and measures put in place and the introduction of microfinance, Zambia is fighting poverty through such institutions. Microfinance is seen globally as one of the main factors that can be used to fight poverty and at the same time improve the

economy of a national country. A lot of governments today have set up different institutions to support the growth of microfinance.

Credit has to be given to the Bank of Zambia for putting in place regulations and policies to support microfinance institutions. The financial system in Zambia comprises the Bank of Zambia (the country's Central Bank), 15 commercial and merchant banks, 3 building societies, 21 insurance and pension firms, securities firms, non-banking institutions like leasing companies, foreign exchange bureaus and microfinance institutions all supervised and handled under two market segments, Edna Mudenda (2002). The Bank of Zambia put in place a regulatory framework to support microfinance through a project called the 'Development of Microfinance Regulations Project' which consisted of three main objectives, Chiara Chiumya (2006). The objectives were aimed at developing regulations, prudential reports, and systems necessary for the effective supervision of microfinance institutions which were undertaken in two phases one in 1999 and the second in 2001. The microfinance industry was started in the year 2001 in Zambia, exactly 19 years ago today. Micro Bankers Trust and Finca Zambia were the first and second banks respectively to be licensed and accepted as microfinance institutions in the country.

Background of Microfinance

Microfinance by definition is known as a type of financial service offered or provided to individuals of lower socioeconomic background, unemployed, low-income individuals, or groups who lack access to conventional banking or traditional financial services like savings accounts, checking accounts, funds transfer, micro-insurance, and microcredit, Ahmed, Sabuj. (2022). Microfinance is also known as credit finance. Microfinance has helped a lot of people globally from the time it was started and supported by many institutions, today according to World Bank data over a million people globally have benefited directly from microfinance services.

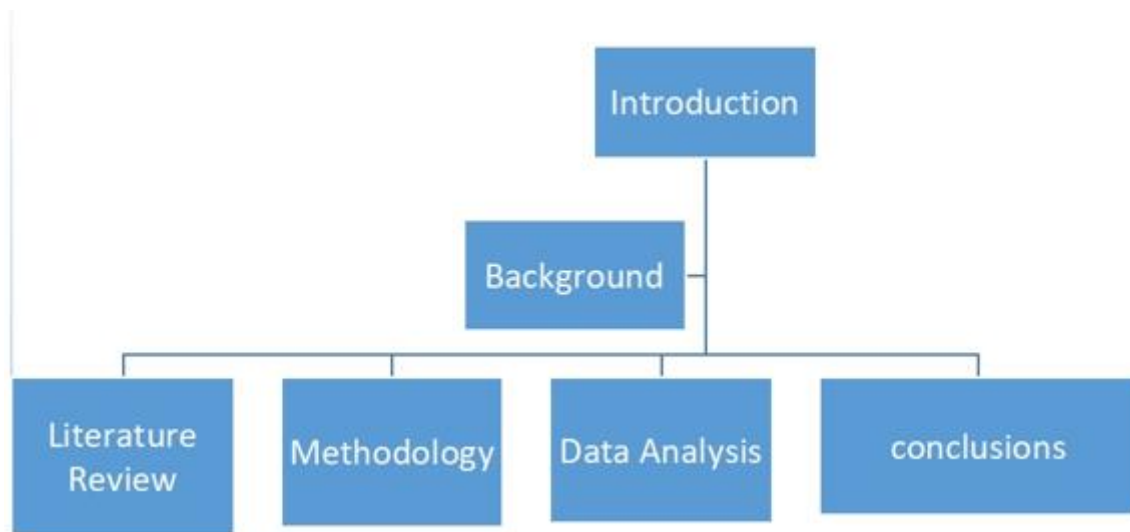
The history of microfinance stems from as early as the 18th century, it was used by the Irish to help improve the lives of impoverished Irish citizens started by Jonathan Swift. Aidan Hollis and Arthur Sweetman (1996). The history of microfinance can be traced back to as early as the 1800s, Lysander Spooner a theorist wrote about the benefits of small credits to entrepreneurs and farmers as a way to get people out of poverty. Microfinance was used and became popular on a larger scale in the 1970s. In 1983 a man known as Muhammad Yunus from Bangladesh invented Grameen Bank, Esty, K (2017). Muhammad Yunus is an economic and social entrepreneur, whose main goal was to provide small loans to entrepreneurs, his vision was inspired by some women he met who were selling bamboo. Grameen is a model that Muhammad Yunus used to provide financial services to the poor, he provided small loans to the poor. Today Grameen Bank is found in the headquarters of the capital city of Bangladesh, Dhaka. The bank has over 2,200 branches across Bangladesh with over 97% of the recipient of the loans being women. The Grameen model symbolizes an efficient means to help the poor by providing them with financial services to help them improve their lives, Auwal, M. A., & Singhal, A. (1992). In 2006 Yunus and Grameen won the Nobel Peace Prize for their efforts in creating microfinance, today we have over 10,000 microfinance institutions across the globe. Microfinance has been proven as a vehicle of economic development and this can be seen by the many countries that use this system, especially those from Asia. Microfinance alleviates poverty, once financial services are provided to people in rural areas, where poverty is highest and most prevalent, people can be aware and make the right decisions finance-wise. The main goal of microfinance is to provide financial services to unemployed individuals, individuals with low incomes, small business owners, and those seeking capital to start a business.

Purpose and Significance

The report is aimed at finding out the impact microfinance has on poverty in Zambia. If there exists a relationship between microfinance and poverty in Zambia. The report takes microfinance as the dependent variable because ever since it was introduced, it has been considered a vehicle of development, meaning it does improve any economy and alleviates poverty. Poverty is the independent variable because we are trying to find out whether microfinance has any impact on it in Zambia.

Study Structure

In the following chapter, the literature review answers three main questions: 1) How does microfinance work, 2) what are the benefits of microfinance and its impact on poverty, and lastly what are the critics of microfinance?



Literature review

This part of the report answers three questions about microfinance. This part vividly and closely gives a clear understanding of why microfinance is considered a vehicle of development that can be used to alleviate poverty, giving a thorough understanding of microfinance and how it operates to alleviate poverty, factors that make it beneficial to both poor people and the economy in the long run and critics of microfinance, what makes it bad if not used in the right way.

How does microfinance work?

This is a question that many people ask and want to find out how microfinance institutions operate. By definition microfinance institutions provide financial services to people living in poverty, unemployed, unable to have access to traditional banking services, or too poor to start a business. The main goal is to provide these services to such individuals to help them improve their lives, Barman, D., Mathur, H. P., & Kalra, V. (2009).

Microfinance supports two models, the first model supports banking for entrepreneurs, and this is a model aimed at supporting individuals looking for capital to start a business. The model allows an individual to apply for a loan to service his or her business venture. The second model is for small businesses and enterprises, this allows groups to apply for a loan, and they collectively come together to apply for a loan as a group.

Microfinance institutions are responsible for educating people, they provide people with skills in investing, accounting, bookkeeping, and cash flow. Before people are given loans or before they apply for loans, they are first offered lessons on how to manage debts, plan and avoid debts, and evaluate businesses before they invest in them, J. Copestake, S. Bhalotra & S. Johnson (2001). People are also taught how to make budgets, this is the most important step in the learning process, it helps people to prepare for the future and reduce their spending, providing sustainable decisions. People are also taught about savings accounts and how to create one. Financial agreements and interest rates are also taught to individuals to prepare them for any financial hiccups in the future. These are very important skills that people are taught by microfinance institutions in line with regulations given by the Bank of Zambia, they help regulate how microfinance institutions operate in Zambia.

Benefits of Microfinance and its Impact on Poverty

What benefits has microfinance brought to Zambia and what impact has it had over the 19 years since it started back in 2001? To answer this question, the report collected data from the top 8 microfinance institutions in the country, carefully analyzing their performance and growth in 8 provinces in Zambia. The institutions have at least 4 branches across the country providing financial services and helping alleviate poverty. One of the microfinance institutions we analyzed was Micro Finance Zambia, which provides so many services to the public, that they have over 14 branches across the country. Some of the services they provide are payroll-backed loans that help people finance their needs, from education bills, car insurance, medical bills, and capital for small businesses, other financial needs are met through these loans offered to both the informal and formal sectors by the regulations and supervision of the Bank of Zambia.

One important factor to note from this is that Zambia is a developing nation, hence the emphasis to alleviate poverty through microfinance which is deemed as the vehicle of development. Microfinance services extend beyond the direct effects of giving people a source of capital, Edna Mudenda (2002). Entrepreneurs who create successful businesses, in turn, create jobs, trade, and overall economic improvement within a community. All these are factors that are taken into consideration because they both improve the lives of the poor and the economy.

A: Salary backed loan segment	Collateral salary	Repayment Automatically deduct from salary
B: Individual entrepreneur loan segment	Guarantor Car, furniture, etc.	Customers put money in their accounts
C: Group loan segment	None Collective responsibility (social collateral) Compulsory savings	Loan officers/chairperson collects money at the site

Figure 1 Microfinance sector in Zambia

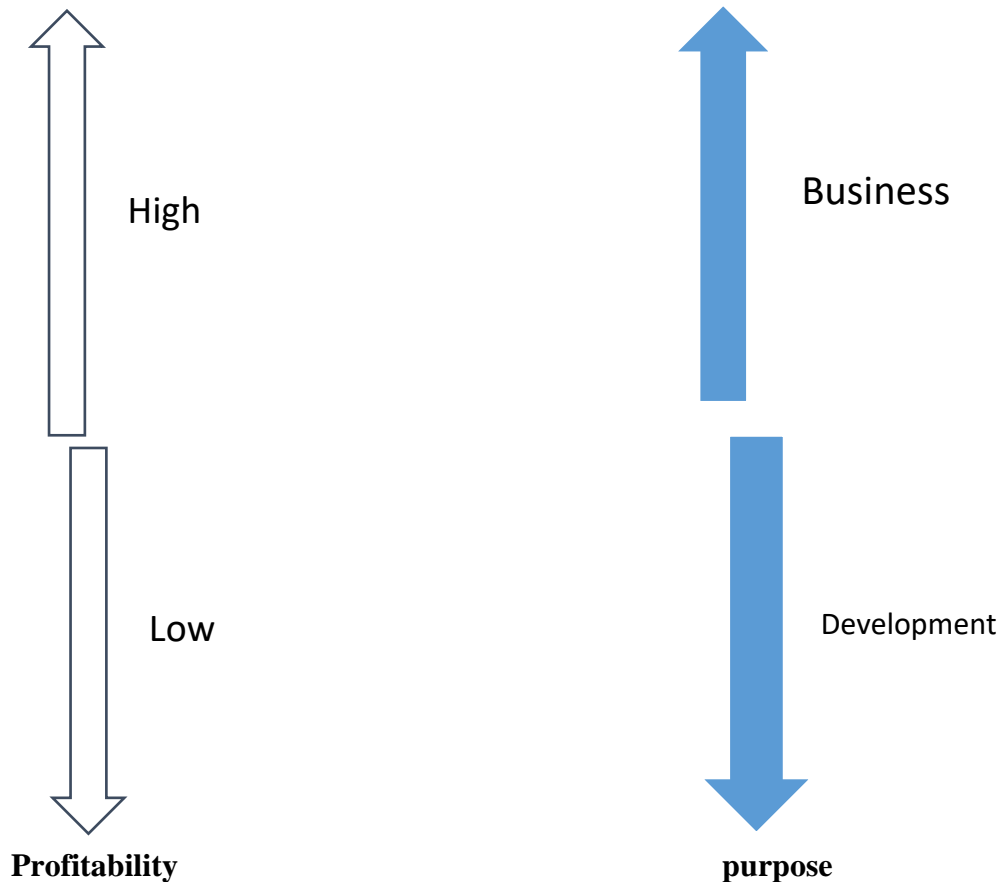
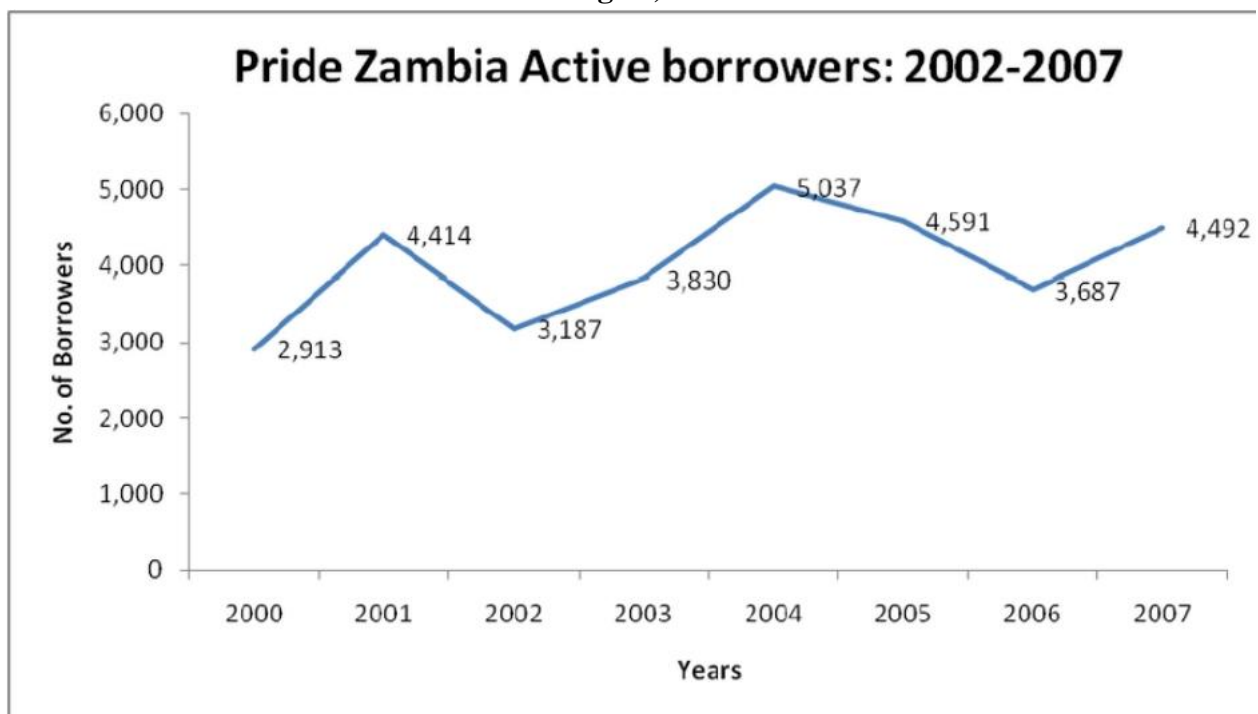


Figure 1. Above is a picture showing just how beneficial the microfinance industry has contributed to Zambia, as can be seen there three categories are shown in the picture, A, B, and C each showing the level of accessibility of a loan from different groups of people in society Chiara Chiumya (2006). Most people in the country depend on backed loans to sustain either businesses or their families, as can be seen from the chart above in section “A” which represents people who apply for loans using their salary as collateral to pay back the loan. A lot of people in Zambia especially the working class, people who have low incomes normally apply for such types of loans. The past few years have seen multiple financial institutions offer more of such services, institutions like IZWE, LUPIYA, and ElitPay supply such services to people who require such services, and the amount of money people can borrow for a loan and qualifications differs between different professions too, people employed in government institutions, those who are self-employed and those who are employed by private institutions. International monetary fund, international financial statistics data shows that the borrowing rate in Zambia as of 2020 was 9.5, which shows just how much people are investing in such opportunities. Section “B” represents how individual entrepreneurs manage their loans. People who fail to pay back give up their property in return, the property is given in accordance with the same exact amount borrowed. As the statistics have shown, there is a huge gap between the 1900s and 2000s, back in the day, people borrowed more than they borrow today. Section “C” shows loans obtained by a group. These types of loans require a group working together, they shoulder the responsibility, and pay back together. People who have benefitted largely from these institutions are those living in urban areas as compared to those in rural areas. People who are working have a higher degree of getting loans and paying back through salary cuts once paid while those in rural areas of Zambia

are only capable of getting loans to start small businesses to support themselves. Most people in rural areas highly depend on farming for survival. Having access to such benefits only helps them improve their standards of living. This is the major impact microfinance has had on Zambia, providing such services to people in rural areas helps them to start their businesses such as fish farms and poultry farms. These practices help them to improve agricultural practices, with credit available, people can also buy seeds for crop diversification. All these are benefits that microfinance is contributing to economic empowerment in Zambia, this is a big role it has played and in the long run, has a big impact on the economy and poverty. Once provided with the right training people in rural areas can fund their initiatives, and buy their tools and technology for their farms.

Figure 2 shows a graph representing the number of people who can borrow money from microfinance institutions in Zambia across the country (Data source: Juliana Siwale Research gate)



The picture above shows the impact microfinance has had on Zambia, the number of borrowers keeps increasing over the years, and people who successfully start businesses can employ people in their community and help alleviate poverty. The impact over the years has been growing, as many people are developing an interest in farming and supporting their initiatives, especially young people.

Other benefits microfinance has brought to Zambia are, through Consultative Group to Assist the Poor (CGAP), providing more opportunities for people to improve their lives by providing financial services to them Ghosh, Jayati, (2013). Microfinance encourages people to be financially independent, with readily available access to financial services, people stop depending on their friends and families for basic needs. Boosts their confidence to support themselves, Newman, A., Schwarz, S., & Ahlstrom, D. (2017). They provide financial resiliency to cover any large unforeseen expenses, people are taught how to invest, deal with debt, accounting, bookkeeping, and cash flow processes. Offers financial education and skills, before anybody is offered a loan he or she is first taught financial knowledge of how to handle the loan, budget, and know the interest rates. They also reach out to poor people living in remote areas too, in Zambia the

main goal has been to promote financial services in remote areas, where people can't fully access traditional banking services like opening accounts, getting loans, and finally, they encourage entrepreneurial activities and business development in poverty-stricken areas Mathias (2016). People can get loans to fund their projects.

Critics of Microfinance

Microfinance in the recent past has been highly criticized. It was started with the intended purpose of providing financial services to the poor but recently people have turned it into a profit-making business hence neglecting those that can't still afford banking services. For example, some firms only focus on the working class, meaning those that who are unemployed cannot access the services, or those living in extreme poverty. The target market is shifted toward those who are already doing well with an assurance that they can afford to pay back their loans. The second reason is that most of the new microfinance institutions today provide loans with very high-interest rates, making it difficult for the poor and others that can't afford the loans to miss out on the services offered Kar, A., Swain, R. (2014). This means that a lot of people are still left out and cannot acquire the benefits offered by these institutions. Some microfinance institutions have been reported as being fraudulent, lacking transparency and accountability to their customers or clients. Many clients are not provided with the necessary information when given loans, especially the costs to be incurred, all these cases represent unsafe and unstable conditions for clients, Edna Mudenda (2002). Individual microloans are not enough to provide realistic paths to financial freedom, people feel like the loans are too small, since most financial institutions only offer small loans to people, the money is deemed to be too little to be financially free. Interest repayments, however low, it's still a burden, most people still feel like have to pay back the interest, in the long run, Manos, R., Gueyie, JP, Yaron, J. (2013), it just becomes a cycle of returning the money, for example in a situation where the businesses perform poorly, and they still need to pay for the interest, there is no profit made but instead, they end up paying for the interest Some critics believe that even though the interest rates are too low, Olsen, T. (2017), some institutions are making money off the poor, for example, some large companies have formed microfinance institutions for profit, and they charge higher interest rates just like normal banks. Some people with microfinance loans have cited that they didn't see an improvement in their annual net income. This is because most people who either own a business or are investing in businesses lose money over a long period. In addition, the interest rates are high hence people find it hard to maintain their accounts, which means that they don't get to see any improvements in any of their streams of income Subhabrata Bobby Banerjee (2017).

Methodology

This research is based on a quantitative approach. This research focuses on annual data collected from 8 provinces and the top 8 branches of microfinance institutions in Zambia. The research focuses on the 8 branches found in the 8 provinces because the number of branches shows the impact of the microfinance institutions on poverty in Zambia, for institutions with many branches across the country simply means they have a better outreach to rural areas where poverty is highest. The research uses two variables.

Independent: Poverty, is used to measure if there is a reduction in poverty levels due to the introduction of microcredit institutions. This paper uses the poverty rate to find out if there has been any change since the introduction of microfinance institutions in Zambia were licensed in 2001, 19 years ago today.

Dependent: microfinance, is used to predict whether there has any impact in Zambia on poverty.

Study Objective:

To find out the impact of microfinance on poverty in Zambia using data from 8 provinces and 8 microfinance institutions in Zambia, the report uses the simple linear regression method and descriptive statistics to describe the relationship between microfinance and poverty data collected from 8 provinces and 8 microfinance institutions in Zambia.

Province	Poverty Rate%	Number of Microfinance branches
Lusaka	20	19
Copper belt	30	21
Southern	57	39
Western	82	4
Eastern	70	39
Northern	79	14
Central	56	7
Luapula	81	11

Figure 3 shows data collected for the analysis, data from 8 provinces, the poverty rate from each province, and the number of microfinance branches.

Regression Equation

This study will use the linear regression model to show the relationship between microfinance and poverty in Zambia using annual data from 8 provinces and 8 microfinance institutions in the country (Data source: LusakaTimes.com). The linear regression equation for this model can be expressed as follows:

$$\text{Microfinance}_t = \beta_0 + \beta_1 \text{Poverty}_t$$

The regression model uses two variables and the choice of these two variables is explained in the literature review and data provided and collected, simply justifying them as factors. Microfinance is the dependent variable and the symbol ‘t’ represents the period in 2023 as per official government statistics data. The study, by using the model will give an estimate of the time given from the data in 2023. B0 is a constant and β1 is the regression coefficient and poverty is the independent variable in the equation. The model will use the equation to measure the impact of microfinance on poverty based on the data given.

Estimation of the data: By observing the coefficient of the independent variable, in our case, this is poverty, if the coefficient is positive we can then say that poverty increases when microfinance increases, but if the result shows a negative coefficient, we say that microfinance has a negative relationship with poverty, this means that when microfinance increases poverty will decline. After these observations, we can then compare the results by considering the impact of microfinance on poverty.

Descriptive Statistics

<i>Poverty rate</i>		<i>Number of Branches</i>	
Mean	59.375	Mean	19.25
Standard Error	8.353650827	Standard Error	4.746239113

Median	63.5	Median	16.5
Mode	#N/A	Mode	39
Standard Deviation	23.62769259	Standard Deviation	13.42439145
Sample Variance	558.2678571	Sample Variance	180.2142857
Kurtosis	-0.730386128	Kurtosis	-0.82185157
Skewness	0.808568015	Skewness	0.733929469
Range	62	Range	35
Minimum	20	Minimum	4
Maximum	82	Maximum	39
Sum	475	Sum	154
Count	8	Count	8

Model Analysis

In this section, I will describe the results obtained from the regression model, which had two results that will be discussed later on in this chapter and the data from descriptive statistics analysis, and what the final equation looks like after the analysis of the data, and make a conclusion concerning the relationship between microfinance and poverty.

Empirical Results

If we look at the descriptive statistics table, descriptive statistics data from the two variables show the following results after examining them according to the table when I first examine the number of microfinance branch figures, you notice that mean was 19.25, as the minimum 4, as the maximum 39, and 13.4 as the standard deviation. While on the other hand, the poverty rate showed a mean of 59.4, a minimum of 20, a maximum of 82, and a 23.62 standard deviation. When comparing the two variables, we can see that the two results are very different from each other. If we compare the mean and standard deviation of the two variables we can tell that, poverty was more spread out and that can be seen from the standard deviation of 23.62 when compared to that of microfinance which was 13.4.

Figure 4 shows the scatter plot for microfinance and poverty rate.

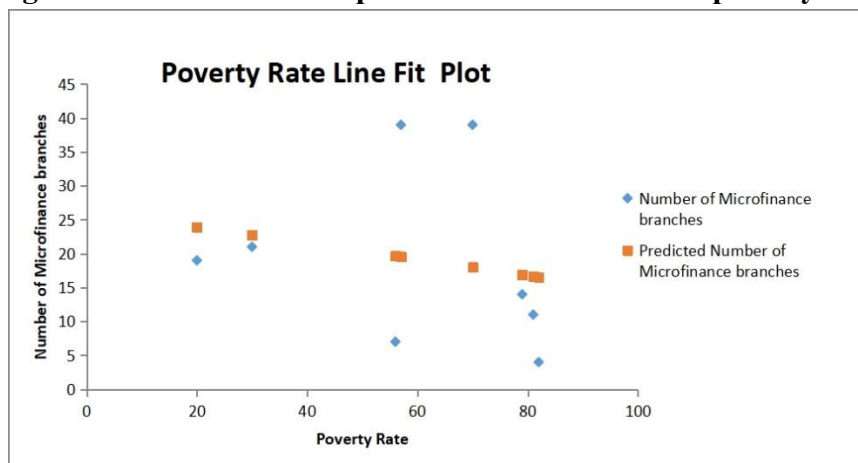


Figure 2, shows the scatter plot, which shows the relationship between microfinance and poverty, as can be seen from the above diagram, the relationship represented is negative, with a negative coefficient of the independent variable. Simply implying that microfinance does reduce poverty levels, as microfinance increases poverty reduces.

Regression analysis results and interpretation

SUMMARY OUTPUT								
<i>Regression Statistics</i>								
Multiple R	0.208867065							
R Square	0.043625451							
Adjusted R Square	-0.11577031							
Standard Error	14.18018861							
Observations	8							
ANOVA								
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	1	55.03351	55.03351	0.273693	0.619615087			
Residual	6	1206.466	201.0777					
Total	7	1261.5						
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	26.29606884	14.37122	1.829773	0.117025	-8.869036426	61.46117	-8.86904	61.46117
Poverty Rate	-0.11867063	0.226836	-0.52316	0.619615	-0.67371794	0.436377	-0.67372	0.436377

The equation of the model after carrying out the results was as follows:

$$\text{Microfinance}_t = 26.29606884 + (-0.11867063) \text{Poverty}_t$$

As can be seen from the results reported from the model, poverty does have a negative significant relationship with microfinance, poverty had a coefficient of -0.11867063 and a t-test of -0.52316, which

translates that for every unit increase in poverty expect a unit decrease of -0.11867063 in microfinance holding other variables in the model constant. The constant is 26.29606884. These results simply tell us indeed poverty does have a negative relationship with microfinance, for every 1% increase in microfinance there is a 1% decrease in poverty. This can be seen in the coefficient of poverty, which is negative 0.5 from the t-stat. Microfinance does contribute to decreasing poverty.

Conclusion

In conclusion, I will begin my conclusions with the reported work in chapter four, this report was based on finding out whether or not microfinance does have an impact on poverty in Zambia. The report is aimed at finding out if microfinance and poverty are correlated and if there is a relationship between the factors among the factors mentioned in the literature review. The factors that were chosen for this report paper were microfinance institutions (number of branches across the country) and poverty rates in the economy of Zambia. This research involves using one variable, calculated using data from 8 provinces (Lusaka, Luapula, Copper Belt, Central, Southern, Eastern, and Western provinces) and 8 microfinance institutions in Zambia (Bayport Finance, Finca Zambia, Micro fin Africa, Elpe, Unity Finance, Micro Finance, Eco Bank Zambia, Express Credit).

In this chapter, we begin by analyzing data collected for the research, the data was collected from Lusaka Times, and the data shows how Zambia has fared with microfinance institutions with high levels of poverty. The Bank of Zambia through regulations and policies introduced the first microfinance institutions in the country intending to alleviate poverty by helping poor people in rural areas. Helping people in both formal and informal sectors, microfinance is considered a vehicle of development, for people that benefit from microfinance once successful also provide employment, which in turn boosts the economy too. This can be seen as development because it improves the lives of those who are employed and those who successfully make it.

The report through data analysis collected carried out a descriptive statistics method to know the mean, minimum, maximum, and standard deviation of this period. After the results were taken, the rates of poverty in comparison to microfinance, showed that the standard deviation was bigger and more widespread for poverty than for microfinance. This means that the bigger the standard deviation is the wider the spread of the variables around the mean, they are far away from the mean.

To be sure and clear that indeed the standard deviation was widely spread, I used the regression model to see the relationship and spread of the standard deviation. The model gave me this equation, $\text{Microfinance}_t = 26.29606884 + (-0.11867063) \text{Poverty}_t$. The equation simply shows the relationship of the variable over time, which is represented by the small letter t in the equation. The results from the model indicate that there is a significant negative relationship between microfinance and poverty, and I was able to conclude that microfinance does have an impact on poverty, it reduces poverty by 1% as can be seen from the data obtained from the test in the regression models. This tells me that, even though poverty is negatively related to microfinance, microfinance reduces poverty and brings development to any economy.

References

1. Britannica, T. Editors of Encyclopedia (2023, June 15). *Poverty*. *Encyclopedia Britannica*.
2. Karim, A.H.M. Zehadul & Surajo, Aminu. (2016). Youth Unemployment and Poverty in Nigeria: A Threat to Sustainable Growth and Development. *International Journal of Scientific Research & Management Studies*. 4. 10.18535/ijstrm/v4i12.02.

3. Fougère, D., Pouget, J., & Kramarz, F. (2009). Youth Unemployment and Crime in France. *Journal of the European Economic Association*, 7(5), 909–938.
4. Jungeun Olivia Lee, Karl G. Hill, Lacey A. Hartigan, Joseph M. Boden, Katarina Guttmann ova, Rick Kosterman, Jennifer A. Bailey, Richard F. Catalano, and Unemployment and substance use problems among young adults: Does childhood low socioeconomic status exacerbate the effect? *Social Science & Medicine*, (2015).
5. Ahmed, Sabuj. (2022). what is microfinance? What are the benefits of microfinance?
6. Ghosh, Jayati, *Microfinance and the challenge of financial inclusion for development*, Cambridge Journal of Economics, Cambridge J Econ, 2013
7. Newman, A., Schwarz, S., & Ahlstrom, D. (2017). Microfinance and entrepreneurship: An introduction. *International Small Business Journal*, 35(7), 787–792.
8. Aidan Hollis & Arthur Sweetman, 1996. "The Evolution of A Microcredit Institution: The Irish Loan Funds, 1720 - 1920," the University of Toronto, Department of Economics.
9. Esty, K. (2017). Lessons from Muhammad Yunus and the Grameen Bank: Leading Long-Term Organizational Change Successfully. In: Tirmizi, S., Vogelsang, J. (Eds) *Leading and Managing in the Social Sector*. Management for Professionals. Springer, Cham.
10. Auwal, M. A., & Singhal, A. (1992). The Diffusion of Grameen Bank in Bangladesh: Lessons Learned about Alleviating Rural Poverty. *Knowledge*, 14(1), 7–28.
11. Mudenda, E. (2002). 'Microfinance Regulation and Supervision in Zambia.'
12. Barman, D., Mathur, H. P., & Kalra, V. (2009). Role of Microfinance Interventions in Financial Inclusion: A Comparative Study of Microfinance Models. *Vision*.
13. J. Copestake, S. Bhalotra & S. Johnson (2001) Assessing the Impact of Microcredit: A Zambian Case Study, the *Journal of Development Studies*.
14. The impact of Microfinance in Zambia: A case study of Chipata District 2016.
15. Postelnicu, L., Hermes, N. *Microfinance Performance and Social Capital: A Cross-Country Analysis*. J Bus Ethics 2016.
16. Subhabrata Bobby Banerjee, *Microfinance and the business of poverty reduction: Critical perspective from rural Bangladesh* 2017.
17. Kar, A., Swain, R. Interest Rates and Financial Performance of Microfinance Institutions: Recent Global Evidence. *Eur J Dev Res* 26, 87–106 (2014)
18. Manos, R., Gueyie, JP, Yaron, J. (2013). Dilemmas and Directions in Microfinance Research. In: Gueyie, JP, Manos, R., Yaron, J. (Eds) *Microfinance in Developing Countries*. Palgrave Macmillan, London.
19. Olsen, T. (2017). Political Stakeholder Theory: The State, Legitimacy, and the Ethics of Microfinance in Emerging Economies. *Business Ethics Quarterly*, 27(1), 71-98. doi:10.1017/beq.2016.59