

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

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Received on: 13-02-2022

Accepted on: 16-03-2022

Abstract

This study is to gauge the impact of microfinance banking on Economic/Sectoral growth in Pakistan. Highlighting and emphasizing on the principal role of microfinance banking in Pakistan like as growth rate of agricultural sector, manufacturing sector, services sector, GDP plus employment rate. Microfinance banks in Pakistan are working in specialized areas such as agricultural, manufacturing, trading and service to strengthen the employment and standard of living as well as GDP. The Granger Causality Test was applied on the time series data in EViews to investigate the data and the results indicate that microfinance banks are not performing up to the mark and government needs to pay more attention to microfinance sector if needs to eradicate the poverty and generate employment. The null hypothesis was accepted and microfinance banks showing no effects on the sectoral growth of Pakistan.

Keywords: Micro finance, sectoral growth, Agriculture sector, GDP, Service sector, research.

Introduction

1.1 Overview and Background of Microfinance

Pakistan is greatly populated and underdeveloped country in which domestic, economic and political instability is very prominent. The economy of Pakistan is dominated by services sector but agriculture plays an important part. Pakistan's most important industry is Textile industry which contributes 60% in the exports. Pakistan is now no more an agricultural based country because agriculture sector is contributing now 21% in the GDP and 45% is a labour force employed in different sectors. Manufacturing sector is contributing 25% in the GDP. It means services sector is the major sector contributing in the GDP. Nature of export products have also been changed in the current scenario. The economy of Pakistan is a proof of many transform especially from 1999 some for the improvement and some are worse.

Microfinance is a very important and essential strategy for any economy. In Pakistan the concept of micro finance practically started in 2000. Khushali Bank of Pakistan was the first

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

microfinance bank registered under state bank of Pakistan Microfinance Act and afterwards in 2002 First Micro finance bank and others were started. Before the year 2000 concept of microfinance was only used by Nongovernmental Organizations which were used to help needy people to upgrade and lift up them above the poverty line. Microfinance is power full instrument to fight against poverty. Access to microfinance makes people for planning their future and empowering women socially and economically. Introduction of new microfinance programs giving new identity to deserving people and enhancing economic growth across developing countries. The microfinance concept in rural and urban areas is started as a revolutionary strategy for two decades from now the evolution of microfinance in the globe and particularly in South Asia is encouraged by the success story of the Grameen Bank by Dr. M. Yunus is the example of success and growth of microfinance in south Asia as well as in the world and requirements of the deprived and needy based on social ethics. The primary objective of every underdeveloped country is to have access to microfinance especially for women and small medium enterprise intending alleviating poverty generating employment opportunities raising GDP. The endeavor of microfinance is not only to give access to credit but also to give them for the repayment track of microfinance. There is a major change in recent years in social lives of the users to have emphasized on reducing poverty of the underdeveloped country to increase the social, financial & economic development, depending on different financial services a country is using for the inhabitants living under the poverty stripe. In addition, the focus of the microfinance has been changed and now it is involving the exchange transactions between outreach and capability. The one of the most important implications of that change is "microfinance". In Pakistan the microfinance field or sector is also facing challenges in enhancing microfinance. Microfinance is a way to come out from the situation of unstable economic growth of different sectors of Pakistan. The target of microfinance in Pakistan is to increase sectoral growth and decrease unemployment and poverty. The intention of the study is to scrutinize the escalation pattern of the different sectors of economy and secondly on GDP and unemployment. Microfinance is a vibrant development tool and helping to expand the depth of financial services.

In the eye of Microfinance Net work (2021) Microfinance industry is increasing tremendously in recent years in Pakistan and it is estimated that the same trend will be observed in coming years. With microfinance banks the microfinance institutions are also playing economic building roll in Pakistan and as. Microfinance banks aimed to provide financial services to all irrespective of the area, level of income and affordable cost. Financial sector's innovation are participating in economic growth of the country and increasing the number of transactions resulting in new private sector net work.

Microfinance is all concerning of available financial tools, typically in the outline of SME loan, loan to need and justified people who are unable to approach such financial services from traditional bank system, Microfinance has extensively been measured as an significant financial technique for poverty cutback and employment creation. Microfinance has in progress gaining weight in the year of 2000 in Pakistan, as a device of employment generation and poverty reduction, since commencement of 2000 it was internationally emphasized to enhance and practice and particularly the increase in financial support from IFIs for microfinance and encouraged agricultural, manufacturing and service sectors to develop microfinance sector as a financial device of economy in the country. As pointed out mounting

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

focus at international level on microfinance, in late 1990s microfinance established getting magnitude towards Pakistan to introduce new world of financial services for unprivileged. The vibrant boost in the international financial support through the Non-Government Organizations (NGOs) facilitate to develop their financial activities and also well thought-out as a major rousing force for the founding of dedicated microfinance organizations in the country's different sectors. Realizing the great importance and need of microfinance it has become a major device of poverty alleviation and employment generation and sectoral economic growth, the government accelerates its well-built efforts to establish microfinance banks at recognized level and prolonged its considerable sustainable support to the NGOs as well. To encourage the microfinance banks as a formal sector the government has taken the most significant step to launch the Microfinance Sector Development Program (MSDP) in 2000. The chief intention of the program to encourage poor people of deprived society and bring positive upward change in the GDP, employment and growth of the diverse sectors by supporting them in the shape of financial aids to endow the poor of the society on lengthen basis. Furthermore, It is acknowledged by the government that microfinance banks as a significant financial device of poverty cutback in their Poverty Reduction Strategy Paper (PRSP). The Khushali Bank (KB), the initial microfinance specialized bank, was instituted in the year of 2000 under an unusual ordinance of State Bank of Pakistan. After that MFI Ordinance 2001 became into practice and brought in working to provide an independent framework solely for banks as microfinance banks. Government provided those measures which were necessary for the infrastructure being decided by the MFI ordinance for the microfinance banks, the financial and encouragement techniques were undertaken with the State Bank of Pakistan (SBP). The executing authority considered responsibility for maintaining and regulating the traditional microfinance institutions (MFIs) is the State Bank of Pakistan. For the speedy and rapid growth of the different sectors of the economy for example agriculture, manufacturing, services, employment and GDP, State Bank is Corley lighting on those strategies and policies which rate favourable environment for promoting microfinance. As an outcome of the State Bank efforts within a decade after the microfinance institution ordinance – 2001, other than Khushhali Bank four more microfinance banks are started their financial services for the betterment of the unprivileged out of those banks Tameer Bank and First Microfinance Bank (FMFBL) have started their services at national level on the other side Network Microfinance Bank limited (NMFBL) and Rozgar Microfinance Bank limited have started their services at district level. In addition with the strong support of government Microfinance Network (PMN) was come into existence in 2001. For the enlargement of microfinance, (PMFN) Pakistan Microfinance Network providing a forum for microfinance banks and also acting as a coordinator between the different sectors for the development of microfinance in the economy of Pakistan. Presently microfinance banks providing their services under the microfinance ordinance are ten and hopefully if there would be government support and microfinance network's efforts then microfinance will work tremendously.

Internationally there are no other standards to measure the potential region of microfinance; all countries have to identify the market dimension according to their own requirements, goals and focus on the particular zone. In Pakistan, the potential microfinance users are usually being measured around one third of the total population of the country. Practitioners

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

of the field explained that the future users are approximately from the inhabitants living lower than poverty line. Sultan, Yousuf and Mashi (2016) examined the sound effects of microfinance on Bangladesh's economic growth and found that there is significant positive impact on internal growth and strong relationship between the microfinance and growth and showed that it is an significant ingredient to promote economic growth.

1.2 Problem Statement

Debated largely in the last decade, the effectiveness of microfinance services as a tool for economic development and prosperity becomes blurred (Cull & Morduch, 2017). Microfinance may serve as an effective instrument to alleviate poverty and reduce unemployment burden but somewhat it becomes inevitable to assess its effectiveness in developing countries (Kerstin Lopatta & Tchikov, 2017). Microfinance institution should play their role in the sustainable development by financial performance, study showed that social performance of microfinance institutions have negative impact on poverty ratio (Achouak and Leila, 2020).

In specific context, agriculture sector development of the developing countries largely rely upon microcredits and micro-lending but unfortunately, due to lack accessibility to these facilities and financial assistances, agricultural sector development becomes stagnant (Azriani, Paloma, & Usman, 2018; Mohapatra, Khadanga, & Majhi, 2018). On the other hand, manufacturing and service sector development require huge working capital and financial support (Mittal, 2016). Economic policies may encourage their production and development but in reality, these sectors were not gaining potential benefits at large (K Lopatta & Tchikov, 2016). However, microfinance services may help these sectoral developments (Aidoo & Mensah, 2018) but due to ineffective mechanism and accessibility to the larger proportion of the population, these sectors were not developing at their definite pace (Pashkova et al., 2016; Pei-Wen, Zariyawati, Diana-Rose, & Annuar, 2016; Raihan, Osmani, & Khalily, 2017). In the similar context, Pakistan is one of the developing countries that have several microfinance institutions and instruments (Wapakala, 2016). Unfortunately, due to unstable political and economic situations in the past decade, sectoral development and growth of Pakistan were not upto its mark (Imran & Arshad, 2017). Indeed, there has been great importance to investigate the effectiveness of microfinance services for sectoral development and growth in Pakistan. Henceforth, the macroeconomic problems such as unemployment and poverty may also be addressed in positive aspects for instance, the effectiveness of microfinance services for employment opportunities and economic development at large. Therefore, the study has aimed to investigate the impact of microfinance on sectoral development, economic growth and employment in Pakistan. The research question is "What is the impact of microfinance banks on economic/sectoral growth of Pakistan?"

1.3 Objectives and Significant of the Study

The research is being arranged for the achievement of the following objectives.

- To identify the impact of microfinance on agricultural sector,
- To identify the impact of microfinance on manufacturing sector,
- To identify the impact of microfinance
- on services sector

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

- To identify the impact of microfinance on employment.
- To identify the impact of microfinance on GDP.

1.4 Outline of the Study

The scope of the research is to help the microfinance banks to motivate people in Pakistan to fight with the poverty. They will get a complete idea of the agriculture sector; manufacturing sector services sector and rate of employment are improving because of microcredit. And this study will even focus on the other factors influencing economic growth in Pakistan. Microenterprises are supported by microcredit by number of microfinance banks (MFBs) government launched a scheme of Microfinance Growth Strategy-2020 by forecasting that a microfinance sector require additional finance of Rs.300 billion to approach 10 million users. On the other side for fulfilling the financial demand many of the international financial institutions have joined hands to incorporate (PMICL) Pakistan Microfinance Investment Corporation Limited, a company which will increase investment of private sector in Pakistan. The key intention of the PMICL was to catch the attention of commercial funds to facilitate the increasing financial demand of economy to enhance the ability of different sectors to promote economic growth of the country. It is recognize that establishment of microfinance sector is significant for financial change in the country and main milestone of the company is to bring commercial funding to improve microfinance sector in the country to upgrade and boost different sectors of economy. There were also some limitations which were the hindrances for this study. For example lack of time and resources were the main constrains which were faced during the research was conducted.

1.5 Definitions of Variables

● Unemployment

According to Microfinance Industry Report (2021) about 73 million of the population other than the labor force of Pakistan, of which 72% are male. The statistical unemployment rate was estimated in 2007 to be 6.2%, even though youth unemployment between 15-19 years was higher at 7.6% and unemployment in urban areas is 10.1%. In the labor market the trend shows that employment mentions have changed in the performance of the economy and organization in current years. Agriculture sector is the prime sector having 43% of the population out of the total being associated to agriculture sector, even though its contribution is declining and this is pursue by services sector by 35.9% of which largest sub-sector are also included for example wholesaling and retailing, and subsequently industry, out of which construction and manufacturing are the chief sub sectors. The merely and necessary way out and technique of unemployment is microfinance. It Increases employment opportunities, entrepreneurship and reduces unemployment. Microfinance is a method which is used for trading, manufacturing and transportation, follow-on in an increase in employment openings. To access the microfinance proposals resulting increase in production and production leads to improved employment chance in different sectors for the wider society and diminution in the unit price of those goods due to change in demand supply.

- **Poverty Eradication**

According to microfinance network microfinance deals with unprivileged people to secure, and bring increase in their financial resources and earnings, the basic way out of hunger stage. The capability of meeting their day to day expenses or to overcome the gap of cash flow to fulfill their basic needs of life, is an initial stair to break the layer of poverty. Microfinance facilitates to eradicate poverty and the strong vulnerability which distinguish their way of life. It helps smooth generation of income and maintains spending levels yet throughout the hard phases of life. Collin, Edson and Petronella (2022) investigated in their study that funds are not only solution to reduce the poverty. Microfinance has vibrant effect on poverty reduction

- **Empowering Women**

A woman plays more active role in increasing investment, empowering themselves bring positive results in economic activates, welfare of the family and increasing GDP if correct microfinance programs are designed and implemented. A woman empowerment program of microfinance in Nepal investigated that 68% women users of microfinance programs make their economic decisions by themselves without any dependency. There was report by TSPI in which it is mentioned that independence from poverty, self confidence of females, better financial status in the society are the results of the microfinance. Microfinance users have become an active and vital players of the economy and were chief changer of the women independence in the society. Naila Kabeer (2011) in her study found that microfinance programs change financial behavior and increase self-worth. She also investigated that there is increasing trend in women's participation in economic activities bring positive change and due to which there is decline in gender violence. Belay Mengsite (2022) investigated that by improving female financial independence through microfinance there is positive change on economic emowerment of women.

- **Gross Domestic Product (GDP)**

Microfinance is acting as a major financial tool in increasing GDP of an economy. An analysis by Jhon Wolly (2009) about performance of microfinance institution and domestic GDP focused recent changes in Bolivia. Particularly he examined the positive change in the supply of microfinance, the increasing competition trend among new micro entrepreneurs and the current economic conditions. Current studies have proved that there is a hope to increase GDP through microfinance institutions and this is also suggested that investment in microfinance sector would be proven not only indirect increase in GDP but also will change the portfolio of the deprived category of the society. The study by Jhon Woolly (2009) found that microfinance institutions are more reliable to resolve of world as poverty issues of the world as compare to commercial banks, microfinance banks should adopt unique operations which ensure the financial stability of the poor. Achouak Barguelli (2020) analyzed that microfinance institution play effective role in economic development of a country through its social performance, it was also mentioned in her study that financial performance should be given priority to those activities which help to increase sustainable growth in the country.

- **Agricultural Development**

Access to financial services is a chief issue to increase agricultural for developing countries and especially agro based countries because they export raw items and import finished item. According to a research done in Bangladesh majority of the farmers are marginal and not having their own land, farmers cultivating by approaching to credit facility by leasing their land to ruling people and it become very difficult in some situations to have access to microfinance because they are not having any collateral security. The unavailability of financial resources like short term, medium term or long term made the agriculture sector under developed. The inadequacy of microfinance gives bad effect on agriculture production of Bangladesh and. Furthermore investors are really keen about their investment and not ready to make investment in the sector which is unpredictable in production and cannot return more than double on their investment like other sectors of the economy. Microfinance is successful strategy to approach the under develop areas of the country with micro credit for entrepreneurship, empowering women and particularly in alleviating poverty and agriculture development. Tenaw and Islam (2009) mentioned in their study that through stable and appropriate microfinance program the agriculture sector of the country could be stronger and poverty can be eliminated. Nosirum (2010) wrote in his paper that, it is key important for microfinance banks to identify their responsibility and potential towards agriculture sector.

- **Manufacturing & Industrial Sector**

Naidu and Anand (2012) investigated one of the main hindrances faced by manufacturing sector in Suva, Fiji is financial obstacles for business growth and manufacturing sector is unable to obtain internal and external finance and manufacturing and industrial established the forces of economic development and growth. Johanna and Romeo (2022) found that financial and nonfinancial services rendered by microfinance institution provide dual support to the industry and there should be no restriction on multiple times borrowings in a year. Diversification of industrial sector is the reason to find out the main potential and basic target of economic growth. The author also investigated that SMEs play a pulsating part in employment generation, GDP, increase in foreign exchange and generating government's revenue through taxes. For sustainable growth of country's economy MSMEs are considered very significant by facing financial problems. The study mentioned the financial hindrances for the growth of MSMEs. Ashna (2012) analyzed in her study that developing countries have great potential by taking advantage of their resources, Small and medium enterprise sectors are the most vibrant sectors of the economy. SMEs participate important role in providing employment in the country and contribute in the economic development of the nation.

Literature Review

2.1 Hypothesis Development

The study mainly based on the underlying concept of endogenous growth and theoretical foundation to evaluate the relationship amid the monetary policy and performance of stock market. It was postulated by that microfinance reflects the development trends in agriculture sector (Guriro & Shaikh, 2018; Sulemana & Adjei, 2015), manufacturing sector, and service

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

sector ; thereby, it basically reflects economic development. Hence, financial assistance by microfinance institutions leads to elevating economic performance and ultimately affects sector-based growth (Khandker et al., 2016a). In this regards, literature supported the argument that microfinance can help to improve agricultural sector development and therein, microfinance and agriculture sector growth has significant relationship Khandker & Samad (2016b) Similarly, Azriani (2018) postulated that agricultural financing through microfinance institutes can help to elevate agriculture sector development in the larger perspective. Another study manifested that microfinance can help to enhance agriculture sector development in developing countries (Mohd, 2018). Therefore, following hypothesis has been developed on the basis aforementioned synthesis.

H1. Microfinane has significant impact on agriculture sector development.

In addition, microfinance can also help to improve manufacturing sector performance Pashkova (2016). Aidoo and Mensah (2018) accentuated that financial assistance through microfinance structure and banks gradually improves manufacturing sector development in developing countries. Another empirical study supported the similar argument that there is a powerful relationship between microfinance structure and institutes with manufacturing sector development (Quaye & Hartarska, 2016), Thereby, following hypothesis has been developed on the theoretical and empirical foundations.

H2. Microfinane has significant impact on manufacutring sector development.

Service sector development is the vital areas for financially viable development and it can service much better with the potential microfinance opportunities in the economy (Habte, Visser, & Ocran, 2017). It has further been manifested that service sector development can also be triggered with adequate microfinance service provision and increasing accessibility. The potential possibilities of service sector development can be attained largely by adequate provision and accessibility to microfinance services especially in emerging and developing countries (Kasemsap, 2018). Thus, following hypothesis has been developed on the basis of above discussion.

H3. Microfinane has significant impact on service sector development.

Furthermore, numerous studies also postulated that microfinance can help to improve overall economic performance and ultimately elevate economic growth of the country (Akingunola, Olowofela, & Yunusa, 2018; Kinnan, 2015; Pham, Katsuhiko, & Pham, 2019); however, there has been large evidences on the economic maturity and expansion of developing countries particularly for the nexus between microfinance and economic growth. Moreover, studies have supported the argument that microfinance services found to be one of the significant factors improving economic growth and thereby, Shetty and Vasanthi (2019) accentuated that microfinance can alleviate poverty and income inequality by providing job opportunities and employment venues to the larger proportion of the population (Cull & Morduch, 2017; Wapakala, 2016). Henceforth, following hypotheses have been developed on the basis of above empirical discussion.

H4. Microfinane has significant impact on economic growth.

H5. Microfinane has significant impact on employment.

2.2 Empirical Studies

John Woolley (2008), in his thesis looked at the performance of microfinance banks and correlated with GDP growth of the country. Microfinance is a topic of leading attention in current scenario, specifically due to the hope that microfinance helps unprivileged users although still financially booming. Evidence showed that users who are impressively minimum default rates and still positive returns. Adding to this aspect that micro finance helps the deprived while still upholding financial accomplishment, past researches recommended that the microfinance is a strategy to fetch positive change in the local or internal marketplace. Most of the researches has focused on financial performance as a variables in times of economic change.

Though microfinance programs are increasing are increasing hastily around the world specially the underdeveloped countries are still unable to approach microfinance programs which are fundamentally made for them to bring them the above to poverty line. In underdeveloped countries microfinance institutions are unwilling to provide microfinance because of level risk for the repayment of loan they have taken that is why the small & medium entrepreneurs could not access the microfinance programs and they have no option other than the traditional banking services which becomes very difficult for them. Money lenders also ply their part for providing finance to SMEs on very sky-scraping rate of interest and at the end those loan become burden for them and sometimes give very negative impact on the small business and again haul them same stage where they were before taking microfinance specifically in rural agricultural areas. Balochistan Rural Support Program (BRSP) a non government organization supporting rural areas of Balochistan investigation that 93% of the rural population of Balochistan believe on that microfinance has increase the agricultural efficiency in rural areas and also a factor behind the agricultural development of balochistan. The core idea/goal of the research was to explore the future of microfinance in the development of agriculture efficiency and improvement the agriculture sector and life of the needy members. The positive effects are founded by this study in the field of agriculture through microfinance. Microfinance also helps the deprived to increase their seasonal income through major change in their agricultural production. It is also explored that due to change in the economic conditions of the poor member of the people assessing microfinance programs is rising every day. Availability of social capital to the entrepreneur is encouraging the entrepreneur to make investment in the agricultural sector of Baluchistan. It was recommended in the study that microfinance strategies are very fruitful for needy farmers and playing major part to increase the GDP eradicating poverty and employment chances in the country. According to BRSP microfinance organizations should be more active for giving financial benefits to the unprivileged and be a part of their solutions of the financial problems. It was monitored during the study that there were no proper guidance or training programs for the microfinance users to make this finance efficient for them and also for the society, there should be a separate department to help the entrepreneur in case of failure of repayment of investments and there should be rescheduling in the amount of installments and time period. Amount of installments and time period is very important for microfinance program users because sometimes in pressure of payment which is not good for the society. Microfinance users should be properly monitored and assessed and when ever needed should be guided and trained by the microfinance organizations.

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

Abiola Babajide (2013) mentioned in her study in special effects of microfinance on SMEs growth in Nigeria that impacts of different financial services on development of small & medium enterprises in terms of the available loan size and its payback time period, the progress of small & medium enterprises, the financial services and the interest rate provided by the microfinance banks. The statistical techniques were used to interpret the results. The enterprises which are supported by microfinance banks are selected to find out the effects of microfinance banks of Nigeria. Physical powerful proofs are found that the small & medium enterprises which are using microfinance are not bringing any positive outcome in the growth and development of small & medium enterprises in Nigeria even though size of the business organization, location of the business and managerial skill are having constructive and encouraging impacts on escalation and development of the small business enterprises. The study also points out that microfinance banks should widen their services, area of services and introduce easy and user friendly procedures to support and expend the capability of small & medium business enterprise.

In "Impact of microfinance on entrepreneurial development" - 2009 mentioned that the outcomes of small & medium enterprises which are struggling for the expansion, escalation and development in a underdeveloped economies like Nigeria are found. An analysis provide evidence that financial institutions are the major players in the economy not only in the Nigeria but also in the world having encouraging outcome not only for the individuals but also for the economy and government. Prince Cyimaah & Williams Kwasi (2018) wrote in their study that microfinance is playing a significant role in the economic stability and growth of emerging economies and access to microfinance services is needed for the progress and performance of small business. The paper also examined that the microfinance services for example micro loans, insurance by different institutions, savings and education are influencing the growth and performance of small business in Ghana. Christine Erhardt (2016), the study facilitates new evidences of the effects of microfinance on employment generation other than self-employment. The author examined the effects of loan size on income and employment affects with the help of individual borrowing programs of microfinance in Bulgaria. The result shows that microfinance boost the employment in the economy. It is also mentioned that small firms are comparatively more affected by microfinance as compare to large businesses. Tanley and Ezearyeji (2017) in "impact of microfinance banks on poverty alleviation and economic growth in Nigeria" explored that microfinance banks have inconsequential effects on poverty reduction and economic acceleration of Nigeria. The overall model explained that microfinance banks activities are not constructive to reduce poverty and to increase economic growth of the Nigeria. One of the main tools in Nigeria to eradicate poverty and to enhance economic growth is microfinance which enables the unprivileged to undertake economic activities. It is suggested in the study that government should establish an environment which support microfinance banks to help in the delivery of microfinance because administration of a microfinance is a complex problem. In the light of the many scholars and specialists of Nigeria in the microfinance industry are observed not to perform according to the required standard to target the client for the sustainable growth of the economy even though the trend is encouraging the researcher to focus on the outcomes of microfinance banks on poverty eradication and economic development of Nigeria. Santosh Kumar Karn (2018) indicated in

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

his study that services of microfinance institutions are largely promoted as a main component of alleviating poverty in Nepal. The purpose of the study is to highlight the strengths and weaknesses of microfinance in Nepal. Nepal is a poor country and having big market for microfinance. It is pointed out that microfinance is not a magic, a badly design microfinance banks programs or services may have not very much or limited upshot on poverty eradication, and will not make poor to increase their income but on the other side increase the debtness of the individual. Microfinance is a new branch of finance in Nepal and it is in the position to take off if the government looks into seriously. It is recommended in the study that microfinance institutions are having systematic procedures for repayment but it requires monitoring the microfinance usage activities. Most of the clients are illiterate and having no proper guidelines for the recycling for the economic activities. If microfinance banks will provide them opportunities coupled with microfinance than must be the way out of the poverty. Micro-finance programs create opportunities to progress and prolong income creation. It is investigated that there is a larger benefit on socio economic empowerment for women all the way through better self confidence and sense of worth.

Mayoux (1995) highlighted the three main differentiations of women targeted microfinance provisions.

1. Women's redemption rates are higher in market which gave them opportunity to increase their earnings as an individual entrepreneur.
2. Diminution in poverty becomes easier due to spending additional income on their dependents.
3. It reduces gender biasness by strengthening the weaker women by enhancing their approach to market, technology lawful rights and capital in society.

According Samia Mehmood (2011) the microfinance organizations provide credit finance to women in Pakistan for establishment of their business. The above research concluded that 62% of women in Pakistan are availing the facility of micro finance loan. The remaining 38% are still not benefited by this micro finance facility because developing countries like Pakistan many financial institutions still cannot reach the underdeveloped and unsound parts of the economy. Therefore, plummeting poverty and extenuating gender biasness completely still does not see possible. In the limelight of Pakistan Micro Finance Network (2009) it can be noticed that women owned business suffer more in obtaining capital and other factors of production like land, banks also does not consider granting small loans as they are possess past experience of borrowing or returning loans or most of them are young and new entrepreneur in the business. According to MFIs obstacles had been removed in the way of credit financing by granting loans to women without keeping any security and any process of obtaining loans. Panhavar (2004) stated that Pakistani women are performing dual tasks of managing family and carrying on with business activities and still facing cultural and social boundaries which act as obstacle in their way of progress. According to Human Development Report (2010) women labor force participating is 22% as compare to men which is 86% in 2008. The findings of Lucy (2008) stated that microfinance credit programs are enlightening the women about their rights, status and self confidence also producing income and employment opportunities, skills providing to them. Shabbier Ahmed (2018) focused in his studies on the ethical and economic significance of microfinance in society. From ethical point of discussion, microfinance needs to be replaced by charity to help the poor therefore the

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

availability of Islamic microfinance has increased very quickly. It has only little margin to amend the ethical and economical pitfalls attached with the supply of microfinance. The further discussion is on the psychological pressure a women entrepreneur under go after availing microfinance facility, some positive results of microfinance are also mentioned in the report. According to the statistical analysis of Global Islamic finance report (2016), the estimated amount of microfinance was provided rapidly in recent years. This finance was provided to 106 million people out of which 81% were female and two third of those females were from remote areas. Becker and Posner (2009) criticized that micro financing is an effective tool for helping the poor. Both have focused on the fact that although interesting rates on micro loans are high, but still comparatively low as charged by commercial lenders. According to Becker the high interest rates imposed on microfinance are beneficial in a sense that only those creditors who are sure for the repayment of loan and the productive use of borrowed money will processed with borrowings. Practically this type of selection process is more accurate, because the poorer will not involve him in the burden of indebtedness. Moreover borrowed money might be used in consuming on useless purposes instead of capitalized it for revenue generation, and if the above situation is practiced by the borrower, it is considered immoral. This fact is ignored by Becker that the deprived family units are particularly reliant on local and commercial money lenders due to unavailability of microfinance institutions. As a result of this, commercial money lenders impose their own rates of interests creating a monopolistic or oligopolistic market for financing. Banerjee and Jackson (2107) explored that in underdeveloped countries if gifts are given by some sound groups to rural female then it becomes a better form of microfinance and resulting to reduce poverty in that particular society. Donors can find people by availability of microfinance and significant rate of interest who think that they are eligible for microfinance and need rally round. It should be analyzed that microfinance users should invest the funds in profitable economic movements so that ample funds can be generated to pay interest and the primary amount to facilitate those who desire to work hard and had innovative schemes. The question here arises that if the number of poor deserving to receive the micro finance is huge, how to decide the recipient of loan. According to Becker those who can help themselves are the perfect and most deserving recipients of micro finance but some facts are ignored by Becker which are evident by Tisdell (2017) that those are the unprivileged:

- Are not equipped with resources of financially viable private enterprise.
- Cannot bear the dangers linked with private enterprise.
- Most of the time they are busy in their own survival having time shortage for creating social network for social forms of entrepreneurship. In short their economic poverty limits their social entrepreneurship.
- Furthermore, they are not aware about their industrious and economic opportunities. Becker's findings also ignored the fact that poor recipients of micro finance spent it on their needs despite investing it into profitable transactions. Furthermore, how and own very few means should be granted loans at a lower interest rates than the less unprivileged or even gifts. Tesdill (2017) explored in his study that they are two most important factors highly considerable in microfinance programs out of which one is time period for which loans are issued and other is repayment schedule, there are many programs maintain for one or two years and installments are started immediately after issuing the loan which brings difficulties

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

for the users because for the purpose they have taken still not completed. Zulifiqar (2017) said that Posner's distribution of available economic resources for microfinance programs is very important aspect, which is not a deep analysis of microfinance through very minimum consideration is given to hybrid microfinance institutions in Pakistan, some of the microfinance banks are the new form of NGOs. The negative aspect of these banks are that they are profit oriented and not facilitating customers as they have to do in developing economies it is very important to use their available resources efficiently and positively in shape of microfinance. Iqbal and Mirakhan (2017) found in their study that Islamic microfinance is a considerable addition in concept. The purpose of Islamic microfinance is not only to overcome interest from Islamic society but also to bring change in the life of the needy which will also improve the employment conditions, productivity in economic cycle and to stay way from social exploitation in the society. The concept of Islamic microfinance is to provide charitable finance to the unprivileged of the Islamic society. Global Islamic Finance Report (2016) mentioned that only very small amount of microloans are used to boost the economy and eradicate the poverty of the society although microfinance had been started in late 1970s but the prospectus of Islamic microfinance was disregarded or unnoticed till the date even. Islamic microfinance is still lacking in the economy to uplift the needy of the society even though the services of microfinance are credibly increasing in the developing countries but Islamic microfinance is still has no big measures in this regard.

Research Methods

3.1 Data Collection and Sample Size

The secondary sources are used in the study for data collection chiefly from State Bank of Pakistan (SBP) and financial statements of 10 microfinance banks of Pakistan. This study comprehended in context to Pakistan and data have been collected for the period from 2000 to 2022 and annual data has been gathered from secondary sources. The selection of Pakistan as sample population based on the rationale that it has been neglected largely in the empirical literature in context to the current study; however, there has been great urgency and importance to undertake economic development on sectoral foundations rather than as a whole. In addition, selection of the sample period was based on the availability of continuous panel annual data.

3.2 Research Technique

In this study, the quantitative methodology has been used. When a specific study mainly deals with the gathering of quantitative data i.e. in mathematical terms and aims to employ statistical techniques and methodologies to estimate results to provide descriptive and/or inferential statistics is popularly known as quantitative research (Bordens & Abbott, 2002). The numerical data is used in this study as a result; Quantitative research approach has employed. In this research, explanatory research purpose has been used. There are mainly two major types of research purposes i.e. exploratory and explanatory. In explanatory research, the objective is to re-examine and additionally explain pre-existing phenomenon or social event. It chiefly focuses on the rearrangement of variables, region or any other research aspect to gain new dimensions and optimally practical approach about certain phenomenon

or social event (Bordens & Abbott, 2002).

3.3 Research Model Development

In correlation study, the key concentration of the study is to conclude whether co-variation & relation of two or more variables to establish the directions, magnitude, and forms of the observed relationships, the strategy involves collection of data and developing measurement of the variables of interests (Bordens & Abbott, 2002). For the regard, the current study has the principal focus on analyzing the relationship of dependent variables with independent variables. Henceforth, correlation study design suitably aligns with the objective of current study and therein, correlation research design is used in the study.

3.4 Statistical Model

Following is the statistical model of the current study.

$$ASD_t = \alpha + \beta_1(MF)_t + \varepsilon_t \quad \dots \text{Eq. (1)}$$

$$MSD_t = \alpha + \beta_1(MF)_t + \varepsilon_t \quad \dots \text{Eq. (2)}$$

$$SSD_t = \alpha + \beta_1(MF)_t + \varepsilon_t \quad \dots \text{Eq. (3)}$$

$$EMP_t = \alpha + \beta_1(MF)_t + \varepsilon_t \quad \dots \text{Eq. (4)}$$

$$GDP_t = \alpha + \beta_1(MF)_t + \varepsilon_t \quad \dots \text{Eq. (5)}$$

Where; ASD is the agriculture sector development, MSD is the manufacturing sector development, SSD is the service sector development, EMP is the employment rate, GDP is the economic growth and ε is the residual.

Microfinance is referred to as the type of banking services that provide financial assistance (known as microcredit or microloans) to unemployed and/or low-income individuals of the native economy for some sort of economic activity and employment opportunities. Agricultural Development is referred to as a type of assistance to agriculture and crop producers to improve agricultural production and sectoral development. These assistances may include protection, research sphere, application of latest technologies, pest controlling and equipment purchasing etc. Manufacturing sector development is referred to as the grooming and development of manufacturing sector through providing different policy-related and other benefits and potential opportunities to improve their production. Services sector development is referred to as the government assistance and support to numerous service sector organizations such as tourism, health, e-commerce, trade, finance etc. Through adequate policy implications and imperatives by the government, service sector development may achieve in the larger context. Unemployment is referred to as the total number of unemployed persons in the economy as in percentage of the total population. Gross Domestic Product is the broader quantitative measure of economic activities, prosperity, development and growth. It is referred to the monetary value of the total goods and services produced by the country over an specific fiscal year.

On the basis of study to find out the tentative relationship between the variable the following hypotheses were developed:

H₁: There is significance impact of microfinance banks on agricultural sector

H₂: There is significance impact of microfinance banks on manufacturing sector

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

- H₃: There is significance impact of microfinance banks on services sector
H₄: There is significance impact of microfinance banks on unemployment.
H₅: There is significance impact of microfinance banks on GDP.

Results

4.1 Findings and Interpretation of the Data

To discovery the relationship between one or more explanatory variables linear regression is used as a linear approach. In the case of one explanatory variable is called simple linear regression. For more than one explanatory variable, the process is called multiple linear regression, The complete idea of regression analysis is to scrutinize two concepts: (1) Does a predictor variables do a good results in predicting a conclusion (dependent) variable? (2) Which variables are significant predictors of the outcome variable, and in what condition do they indicate by the magnitude and sign of the beta estimates–impact the outcome variable? These regression estimates are used to explain the relationship between one dependent variable and one or more independent variables. The simplest form of the regression equation with one dependent and one independent variable is defined by the formula $y = c + b \cdot x$, where y = estimated dependent variable score, c = constant, b = regression coefficient, and x = score on the independent variable, so here simple linear is used to find out the relationship between the microfinance and agriculture sector, manufacturing sector, service sector GDP and unemployment. The available data is linearly distributed or not in other words variables are normal or not to check this the test of normality is used in E views which means there is one explanatory variable and remaining are dependent variables and there is no relationship of other variables to each other which is called multicollinearity. For testing the normality of the data Jarque-Bera test is used. According to that test the goodness of fit is tested for the available data and Kurtosis and Skewness matching is considered to find out the normality of the data. For many statistical tests normality is one of the most important assumptions for example like F test and T test. The JB tests matches the Skewness and Kurtosis values of the available data sets, the data sets could be in many forms for example time series data, errors in a regression model or data in vector. A normally distributed data has zero skews and kurtosis of 3. Kurtosis explains that how much of the data is in tail and gives an idea of the weakness of the distribution. To run the JB test it is not important to know the standard deviation and mean of the data.

• Jarque Bera test

In general large Jarque Bera test values explains that errors of the data is not normally distributed.

The formula of Jarque Bera Test Statistics is

$$JB = n [(\sqrt{b_1})^2 / 6 + (b_2 - 3)^2 / 24]$$

n = sample size

$\sqrt{b_1}$ is the sample skewness coefficient,
 b_2 is the kurtosis coefficient

For Jarque Bera test the null hypothesis is “the data is normally distributed” while the alternate hypothesis is that “the data does not come from a normal distribution”.

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

Test of Normality Jarque-Bera Test (E Views)

Ho: The sample data are not significantly different than a normal population.

Ha: The sample data are significantly different than a normal population.

Now the data was examined through descriptive analysis and the normality of the data was tested through the Jarque-Bera test.

	GDP	A	M	S	UE	MF
Mean	4.844324	12.87378	9.267027	28.71676	3.041654	6783.716
Median	4.600000	10.92000	10.49000	7.900000	0.058900	0.000000
Maximum	9.000000	27.08000	14.42000	59.26000	8.300000	55697.00
Minimum	0.400000	-5.290000	-0.070000	1.640000	0.026000	0.000000
Std. Dev.	1.932557	10.01679	4.256336	25.86832	3.386068	14240.96
Skewness	0.097899	-0.081694	-0.448537	0.161186	0.320843	2.471161
Kurtosis	2.825942	1.508913	1.944165	1.043413	1.311597	8.278079
Jarque-Bera	0.105809	3.468805	2.959274	6.062076	5.029635	80.60553
Probability	0.948470	0.176506	0.227720	0.048266	0.080878	0.000000
Sum	179.2400	476.3300	342.8800	1062.520	112.5412	250997.5
Sum Sq. Dev.	134.4519	3612.099	652.1902	24090.12	412.7564	7.30E+09
Observations	43	43	43	43	43	43

According to the results it is found that data is not normally distributed. The Skewness values are not zero and Kurtosis is not equal to three which means data is not normal and alternate hypothesis is accepted and null hypothesis is rejected. The Skewness of GDP is 0.097899 and the Kurtosis is 2.825942 both are not fulfilling the condition. The Skewness of variable agriculture is -0.081694 and Kurtosis value is 1.508913 both values are not fulfilling the Jarque Bera test. The Skewness value of manufacturing sector is -0.448537 while Kurtosis value is 1.944165 both values are not equal to the requirement of the Jarque Bera test. The Skewness of the services sector is 0.161186 and value of Kurtosis is 1.043413 which is also not according to the criteria of the Jarque Bera test. The Skewness of unemployment is 0.320843 and Kurtosis value is 1.311597, it is also not matching the given requirements of the Jarque Bera test. The Skewness value of the microfinance is 2.471161 and value of Kurtosis is 8.278079 showing to fulfilling the criteria of Jarque Bera test. All values of Skewness and Kurtosis are not matching and null hypothesis is rejected. When data is not normal then it is to be changed into normal app using another statistical test.

For applying the statistical test it is necessary to convert the data into normal distribution and for this purpose data series is transformed into stationary at first difference. Now it is checked whether the time series data was non-stationary at level and stationary at first difference. Stationary data sets are those which contain properties of mean, variance and autocorrelation all are continuous or constant over a period of time while non stationary data set is that which changes its statistical properties over a period of time. It is a general

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

assumption that a data series must be stationary, it should not have difference in mean, variance and autocorrelation over a period of time, stationary data can predict next values. One less point is contained by differenced data as compare to original data series.

The data found non stationary but it become stationary at first difference as shown below:

Group unit root test: Summary

Series: YEAR, GDP, A, M, S, UE, MF

Date: 06/11/22 Time: 11:01

Sample: 1980 2022

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 7

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-12.7685	0.0000	6	203
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-16.0958	0.0000	6	203
ADF - Fisher Chi-square	173.747	0.0000	6	203
PP - Fisher Chi-square	162.936	0.0000	6	210

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

It is very important in econometric to identify the most suitable trend in data. To find out trending behavior and non stationary is important that is why testing for stationary is required in statistic although whole results of the regression analysis may be made-up. The unit root estimation is based on stationary time series data sets, the null hypothesis is explained as a availability of unit root and alternative hypothesis is explained as stationary data or trend stationary. *A common example of a non stationary series is the random distribution:*

$$y_t = y_{t-1} + \epsilon_t$$

Where as a stationary random disturbance term the data series have a constant predicted values, based on the variance is increasing over time. The random distribution is a difference stationary series since the first difference of is stationary

$$y_t - y_{t-1} = (1 - L) y_t = \epsilon_t$$

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

A difference stationary series is recognized to be *integrated* and is identified as where is the order of integration. The order of integration is the number of unit roots contained in the series, or the number of differencing operations it takes to make the series stationary. For the random walk above, there is one unit root, so it is a series. Similarly, a stationary series. It shows the systematic pattern of a data which is not predictable. In unit root test significant value is 10% , here all P values are less than 10% and almost 0 that's why null hypothesis is rejected in favor of stationary alternative hypothesis.

- **Granger Causality Test**

Pairwise Granger Causality Tests

Date: 06/03/23 Time: 11:16

Sample: 2000 2022

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
A does not Granger Cause GDP GDP does not Granger Cause A	23	1.123332769206244 0.4389520775609906	0.3630034175632352 0.6565591532211772
M does not Granger Cause GDP GDP does not Granger Cause M	23	2.44507271695164 2.264027277249228	0.1366171754528344 0.1545121693187861
S does not Granger Cause GDP GDP does not Granger Cause S	23	0.3877317488671428 0.6037411954876344	0.6883672495547182 0.5655352425357054
UE does not Granger Cause GDP GDP does not Granger Cause UE	23	5.714556466619317 5.952734367232248	0.0221298786215344 0.01982609791259983
MF does not Granger Cause GDP GDP does not Granger Cause MF	23	0.2353125554516795 0.2615462146247014	0.7945787529059642 0.7749667596228734
M does not Granger Cause A A does not Granger Cause M	23	1.155582337405386 0.6138802873447432	0.3535935200357128 0.5604466596572442
S does not Granger Cause A A does not Granger Cause S	23	0.5981317813112008 1.156738074907782	0.5683743014700762 0.353261763277138
UE does not Granger Cause A	23	2.413365380260178	0.1395638668320656

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

A does not Granger Cause UE		1.647512724513324	0.2407432588312486
MF does not Granger Cause A	23	1.629059637134046	0.2441127095587018
A does not Granger Cause MF		0.2179897052609826	0.807855957517875
S does not Granger Cause M	23	0.0270801875801844	0.9733543135155045
M does not Granger Cause S		0.6648684680062058	0.5356743721892552
UE does not Granger Cause M	23	3.807440073194262	0.05896598224048877
M does not Granger Cause UE		12.0386077811332	0.002176103224855814
MF does not Granger Cause M	23	0.0616261516037562	0.9405885662475386
M does not Granger Cause MF		0.1000882377969328	0.9056524612581091
UE does not Granger Cause S	23	0.569157119041425	0.5833143613652804
S does not Granger Cause UE		0.5017526877365966	0.619932921648143
MF does not Granger Cause S	23	0.7372840560516189	0.5027108501474089
S does not Granger Cause MF		0.791272924102508	0.4797112020488354
MF does not Granger Cause UE	23	0.0647253141604816	0.9377143022157968
UE does not Granger Cause MF		0.1322276192103425	0.8776482155435435

Granger causality is a method of investigating **causality** between two variables in a time series data sets. Granger Causality Test is a method to explore causality between two data sets or variables in a time series data that is why an Augmented Dickey-Fuller test is applied. The process is a probabilistic account of causality; it applies experimental or empirical data to discover model of correlation. Causality is straight related to the proposal of cause-and-effect relationship, although it is just not right the same. Granger causality measures preference and information content but does not itself indicate causality in the supplementary common use of the period.

The Granger (1969) approaches to the issue of whether x causes y are to be seen, how much of the present y can be enlightened by previous values of y and then to see whether adding together past values of x can progress the rationalization. Y is said to be Granger-caused by x if helps in the prediction of y , or equivalently if the coefficients of x the past values are statistically considerable. It is also notable that two-way causation is commonly the case, X Granger causes and y Granger causes.

The given equation is for all possible pairs of x and y :

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

$$y_t = \alpha_0 + \alpha_1 y_{t-1} + \dots + \alpha_l y_{t-l} + \beta_1 x_{t-1} + \dots + \beta_l x_{t-l} + \epsilon_t$$

$$x_t = \alpha_0 + \alpha_1 x_{t-1} + \dots + \alpha_l x_{t-l} + \beta_1 y_{t-1} + \dots + \beta_l y_{t-l} + u_t$$

For each hypothesis, the null hypothesis is x does not Granger-cause y in the first regression and on the other side y does not Granger-cause x for the second regression. Assumptions of Granger Causality Test

- The past causes the present and future but the future can not predict the past.
- The effects not available anywhere else contains unique information caused by A.

4.2 Hypothesis Assessment Summary

Thus, the outcomes of Granger Causality for all equations are represented in above tables. The tables report the results corresponding to different regressions, in order to have a comparison of the diverse regressions results.

- Microfinance does not Granger Cause GDP

In this null hypothesis "Microfinance does not Granger GDP" cannot be rejected because the value of F-Test is 0.2353125554516795 and value of significant level is 0.7945787529059642 which is greater than 0.05 and it means that microfinance does not have any impact on GDP.

- Microfinance does not Granger Cause Agriculture Sector

The value of F-Test in this hypothesis is 1.629059637134046 and significant value is 0.2441127095587018 which shows that the null hypothesis is accepted and microfinance has very small effect on Agriculture and in other words microfinance does not granger cause agriculture.

- Microfinance does not Granger Cause Manufacturing Sector

In this null hypothesis "Microfinance does not Granger Manufacturing" cant not be rejected because the value of F-Test is 0.0616261516037562 and value of level of confidence is 0.9405885662475386 which is greater than 0.05 and it means that microfinance does not have impact on Manufacturing Sector or Microfinance does not Granger Cause Manufacturing Sector.

- Microfinance does not Granger Cause Services Sector

The null hypothesis "Microfinance does not Granger Services Sector" cant not be rejected because the value of F-Test is 0.7372840560516189 and value of level of confidence is 0.5027108501474089 which is greater than 0.05 and it means that microfinance does not have impact on services Sector or Microfinance does not Granger Cause Services Sector.

- Microfinance does not Granger Cause Unemployment

The null hypothesis "Microfinance does not Granger Unemployment" cant not be rejected because the value of F-Test is 0.06472531416048163 and value of level of confidence is 0.9377143022157968 which is greater than 0.05 and it means that microfinance does not have impact on Manufacturing Sector or Microfinance does not Granger Cause Unemployment.

4.3 Pre and Post Microfinance Test

A pre test and post test are design to experiment where dimensions are taken both before and after a conduct of the test. The propose design means to be able to see the special effects

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

of some type of statistical test on a group. Pre test and post test may be quasi-experimental, that means the participants are not considered indiscriminately. The pre and post microfinance banks data is analyzed to find out the effects of microfinance banks on the sectoral growth of the country. The sample data is taken from 1980 to 2022 which are 43 years to show the impacts of microfinance banks on agriculture, GDP, Unemployment, manufacturing sector and services sector. It is explained through this test that before and after the introduction of the microfinance banks the sectoral growth of the country with the help of the mentioned variable is different or not.

E views introduce a dummy variable known as MF D1 .

Pre and Post MF test using Dummy variables in the E Views:

Dependent Variable: A

Method: Least Squares

Date: 06/03/23 Time: 11:36

Sample: 1980- 2022

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.95254822257243	1.6976735087243	6.45150446554	1.972164878311088e-07
MF*D1	0.00028321284381246	0.0001088291345	2.60236236424	0.01348395988036136
R-squared	0.1621239796799956	Mean dependent var		12.87378378378378
Adjusted R-squared	0.1381846648137097	S.D. dependent var		10.01678989146372
S.E. of regression	9.298987696709538	Akaike info criterion		7.350226412199563
Sum squared resid	3026.491026424438	Schwarz criterion		7.437303056126278
Log likelihood	-133.9791886256919	Hannan-Quinn criter.		7.380925007816248
F-statistic	6.772289874858437	Durbin-Watson stat		0.4892707961553908
Prob(F-statistic)	0.01348395988036144			

In the above table the dependent variable is agriculture, it is measured that the significant value or P value is 0.01348395988036144 lesser than 5% and R-squared is 0.1621239796799956 which is indicating that there is visible change among the data of agriculture before and after the microfinance banks.

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

Dependent Variable: GDP

Method: Least Squares

Date: 06/03/23 Time: 11:37

Sample: 1980 2022

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.041045185632794	0.34955738499898516	14.4212235300004	2.707646259817996e-16
MF*D1	2.899898153731964e-05	2.240832968149262e-05	1.29411615901342	0.2040996278260332
R-squared	0.0456645851278401	Mean dependent var		4.844324324324324
Adjusted squared	R-0.0183978589886355	S.D. dependent var		24
S.E. of regression	5	Akaike info criterion		1.932556655113952
Sum squared resid	1.914696675005543	Schwarz criterion		52
Log likelihood	128.3122175047048	Hannan-Quinn criter.		4.189533755030513
F-statistic	-75.50637446806448	Durbin-Watson stat		13
Prob(F-statistic)	1.674736633019642			4.276610398957227
	0.2040996278260336			4.220232350647197
				1.310252445331462

In the second table the dependent variable is GDP including 43 year's observation is taken with dummy variable indicated as MF D1, the value of R-square is 0.0456645851278401 and significant value is 0.2040996278260336 which is greater than the significant value and showing that there is no effect of microfinance banks on GDP.

Dependent Variable: M

Method: Least Squares

Date: 06/03/23 Time: 11:38

Sample: 1980 2022

Included observations: 43

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.27269866233842	0.686804229836972	12.0452063382051	5.2624922270023
	9	4	8	59e-14
MF*D1	0.00014657576068	4.402749382301047	3.32918701386900	0.0020599630359
	87642	e-05	4	85276
R-squared	0.24050884804223			9.2670270270270
Adjusted squared	52	Mean dependent var		27
	R-0.21880910084344			4.2563357120525
	18	S.D. dependent var		27
S.E. of regression	3.76196250367421			5.5402968507701
	6	Akaike info criterion		6
Sum squared resid	495.332665766777			5.6273734946968
	1	Schwarz criterion		74
Log likelihood	-			5.5709954463868
	100.495491739248	Hannan-Quinn criter.		44
	11.0834861733140			0.5968431370417
F-statistic	3	Durbin-Watson stat		106
	0.00205996303598			
Prob(F-statistic)	5264			

In the second table the dependent variable is Manufacturing including 43 year's observation is taken with dummy variable indicated as MF D1, the value of R-square is 0.2405088480422352 and significant value is 0.002059963035985264 which is lesser than the significant and showing that there is statistical effect in Manufacturing sector.

Dependent Variable: S
Method: Least Squares
Date: 06/03/23 Time: 11:38
Sample: 1980 2022
Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	21.869653136231		5.4919100882746	3.611902669402619e-06
	38	3.98215789856496911		
MF*D1	0.0010093440530	0.0002552757025433	3.9539370296902	0.00035662985154660
	66023	2684	52	62

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

	0.3087596470792		
R-squared	31	Mean dependent var	28.71675675675676
Adjusted squared	R-0.2890099227100		
	662	S.D. dependent var	25.86831900371723
	21.812225445477		
S.E. of regression	41	Akaike info criterion	9.055356549075853
Sum squared resid	16652.061260951	Schwarz criterion	9.142433193002568
	62		
	-		
	165.52409615790		
Log likelihood	33	Hannan-Quinn criter.	9.086055144692538
	15.633618034755		
F-statistic	78	Durbin-Watson stat	0.1970699019696695
	0.0003566298515		
Prob(F-statistic)	466062		

In this table the dependent variable is services including 43 year's observation is taken with dummy variable indicated as MF D1, the value of R-square is 0.308759647079231 and significant value is 0.0003566298515466062 which is lesser than the significant value and showing that there is statistical impact in services sector.

Dependent Variable: UE

Method: Least Squares

Date: 06/03/23 Time: 11:38

Sample: 1980 2022

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
			4.1573619	0.0001975511220780
C	2.368930438573365	0.5698157750868483	79338507	678
	9.91674170969253e-	3.652796448828686e-	2.7148355	0.0102255561963951
MF*D1	05	05	64645945	5
R-squared	0.1739503036742788	Mean dependent var		3.041654054054054
Adjusted squared	R-0.1503488837792583	S.D. dependent var		3.386067828502439
S.E. of regression	3.121159548460584	Akaike info criterion		5.166824489211051
Sum squared resid	340.9572924431336	Schwarz criterion		5.253901133137766
Log likelihood	-93.58625305040445	Hannan-Quinn criter.		5.197523084827735
F-statistic	7.370332143066466	Durbin-Watson stat		0.2144274575587826
Prob(F-statistic)	0.0102255561963952			

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

In this table the dependent variable is services including 37 year's observation is taken with dummy variable indicated as MF D1, the value of R-square is 0.1739503036742788 and significant value is 0.0102255561963952 which is lesser than the significant value and showing that there is statistical change in unemployment.

Discussion, Conclusion, Policy Implications and Further Research

5.1 Discussion

The results of the study have shown that microfinance services does not accounted for improvement and growth in agriculture sector of Pakistan; thereby, hypothesis-1 has been rejected. There have been clear evidences in the literature that microfinance may serve as an important financial institution and instrument for financial activities but not specifically to sectoral development largely in the context to agricultural sector (Azriani - 2018). Moreover, literature also supported this argument that microfinance services may provide financial assistance and small packets of financial support to poor population (Mohapatra - 2018; Mohd - 2018; Sulemana & Adjei - 2015). But, due to lack of accessibility of rural population (i.e. mainly agricultural employed population) to microfinance services, the sectoral development may not particularly based on these financial support and assistance (Guriro & Shaikh - 2018).

The results of the study have shown that microfinance services does not accounted for manufacturing sector development in Pakistan; thereby, hypothesis-2 has been rejected. In this regards, empirical literature also supported this argument by providing clear evidence that microfinance in developing countries were not proven as working effectively for poor communities (Gambus & Almeida - 2018; Habte - 2017) and largely not available to entrepreneurs and small businesses (Akingunola - 2018; Goto & Negash - 2016). Moreover, literature largely supported the argument that microfinance services may not help to alleviate poor women population in developing countries (Nega & Schneid - 2014; Sulemana & Adjei - 2015; Sussan & Obamuyi - 2018).

The results have shown that microfinance does not contribute to service sector development in Pakistan provided that hypothesis-3 has also been rejected. In another stream of research and school of thought, microfinance was considered as it lost its essence and moral compass (Jose & Chacko - 2017). Due to such devastating conditions and scenario, microfinance services were not proven its effective intervention to sectoral development (Gambus & Almeida - 2018). Henceforth, studies have supported the results of present study by providing rationale that microfinance institutions were focusing on profitability and its maximization rather than its core essence of providing financial support and assistance to unserved population for self-employment (Cull & Morduch - 2017; Dwivedi & Sharma - 2015; Imran & Arshad - 2017; Wapakala - 2016).

The results showed that microfinance has significant impact on employment and thereby, hypothesis-4 has been accepted. But unfortunately, the findings provided negative imperatives for employment opportunities in Pakistan. These findings were specifically supported by the literature (Chowdhury - 2017) and it was quite interesting on the basis that due to lack of intervention of microfinance services for sectoral development and growth, employment opportunities may deprived due to high competition and lack of human capital

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

(Imran & Arshad - 2017; Khandker - 2016a). Moreover, due to lack of employment opportunities and especially in the absence of any financial support and assistance to poor population, unemployment may increase devastatingly and at the larger context, it infects the entire economic productivity and prosperity in numerous terms (Hussain - 2017).

The results also proven that microfinance and economic growth has no significant relationship; thereby, hypothesis-5 has also been rejected at 90 percent confidence interval. However, the result was quite astonishing but unfortunately, in case of decreasing effectiveness of the microfinance services (Cull & Morduch - 2017), economic development and growth will largely rely on external financial assistance and inclusion to the economy (Dwivedi & Sharma - 2015). Loan deficits and nonperforming loans may increase due to less productive economy (Aidoo & Mensah - 2018) and ultimately, economic crisis may occur in displacement of economic prosperity and advancement (Pham - 2019). Henceforth, the above finding postulated clearly that microfinance may not serve as an intervention to economic development but unfortunately initiate serving as an individual financial entity and losing its locus to something other than its core essence (Kasemsa - 2018; K Lopatta & Tchikov - 2016).

5.2 Conclusion

The objective of the study is to investigate the impact of microfinance services on agriculture, manufacturing, and service sector growth of Pakistan while the study also included employment and economic growth as other independent variables. The study has considered secondary data from State Bank of Pakistan and financial statements of 10 microfinance banks of Pakistan during the period from 2000 to 2018 on annual basis panel data series. The results of the study have provided some keen and surprising facts and findings about the microfinance system of Pakistan for economic development and growth in the wider context. The study has manifested that microfinance bank does not constituted any positive and constructive imperatives for the economic development of Pakistan while it does not have any implications for sectoral development of Pakistan in the larger perspective. In specific context, the study has manifested that microfinance services in Pakistan are not effective enough to contribute to the agriculture sector development, manufacturing sector development and service sector development discretely. This may largely be due to lack of infrastructure and branch networking of microfinance to remote and underprivileged poor communities and population segments.

In specific context, microfinance banks does not provided any assistance to farmers and agriculture labor force due to lack of accessibility to such population and therein, inaccessibility causes deprived effectiveness of microfinance banks in Pakistan for agriculture sector development. Moreover, due to less interest towards entrepreneurship and startups in Pakistan, microfinance banks does not constitute adequate attention towards manufacturing sector development while the service sector was largely accompanied by not-for-profit organizations and large-scale manufacturing; thereby, its effectiveness deprived due to myopic viewpoint.

Furthermore, these results may help government embodiments, agencies, policymakers and microfinance banks of Pakistan to enable their effective role in the economic development of Pakistan at the wider scale and rapid pace.

5.3 Policy Implications

There should be a healthy competition among microfinance banks to make the society out of poverty. There has been enormously important policy implications to government and microfinance banks in Pakistan to proven their effective presence and deliberate their resourcefulness to the poor communities, underprivileged and unserved population segments. In this regards, following are few of the most important policy implications, imperatives and directives to the Pakistan economy.

- The State bank should increase the asset base of microfinance institution.
- Microfinance banks should focus on those loans which expand the business in the economy.
- Microfinance should focus on the rural sectors of the economy for economic growth of the country.
- Utmost importantly, government should formulate some good policies to enable accessibility of generally poor rural and urban population to microfinance services for their empowerment and development. Such policies might include branches and remote services of microfinance banks to the rural areas of Pakistan especially in the agricultural hubs in Punjab and Sindh provinces.
- Microfinance banks should provide maximum sources to the rural community.
- Secondly, microfinance banks should revise their essence and reasons of existence by improving their service quality and service delivery to the masses. In this concern, microfinance banks should emphasize their channels and branch networking to the remote areas and with less security assurance.
- In addition, microfinance banks should also focus on providing microcredits, microloans and micro-lending services to entrepreneurs especially women of Pakistan. This will provide good visionary foregrounds to women empowerment and thereby, women labor force participation will also improve in the larger and wider horizon of economic development and growth.
- Rather than focusing on financial assistances to farmers, small businesses and un served population, microfinance banks should also emphasize on the pathway of generating employment opportunities through entrepreneurship and startups. In this regards, microfinance banks should develop some plans specifically to encourage entrepreneurship in the economy.
- In line with the viewpoint of extending its accessibility and availability to the masses, microfinance banks should also initiate some regular awareness programs and seminars, summits and conferences to enable population segments to approach microfinance banks and its services for economic development and growth.

5.4 Future Research Directions

On the basis of result and finding of the current study, plentiful research directions have been emerged for practical and theoretical contributions. Most importantly, it has been recommended to future researchers that province-wise annual dataset of Pakistan should be taken into consideration for adequately gauge the effectiveness of microfinance services to different sectors. Microfinance banks must adopt technology otherwise will not be a significant player in developing social goals in economy. Additionally, segmentation of SMEs

Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

and large-scale manufacturing sector can also provide beneficial results for practical and policy implications. Future studies should also emphasize on entrepreneurship opportunities through microfinance services in Pakistan to enable the aspect for widespread population. Exclusive econometric analysis and assessment should be taken into consideration to avoid statistical misappropriation and provide keen findings in the best interest of the practical, social and economic prosperity. Recently, there have been enormous studies conducted to understand and comprehend the role of microfinance services for economic development and growth; therein, it would be encouraging aspect for future studies to conduct some systematic literature review and meta-analytic researches for large-scale implications and imperatives. Best practices and models should be implemented using behavioral economics framework to ensure the application of microfinance services for strict practical imperatives. These are certainly some of the important future research directions that can help to enable the real essence and support of microfinance banks in Pakistan.

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Impact of Microfinance Banking on Economic/Sectoral Growth of Pakistan

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