

## Comparing the performance of MFI's with other Commercial Bank in KPK

**Muh Saqib Khan;**

Deptt; Business Administration Gomal University, D.I.Khan KPK, Email; [Saqiblecturer@gmail.com](mailto:Saqiblecturer@gmail.com)

**Dr; Ghulam Muhammad Kundi;**

Department of Business Administration; Gomal university .D.I.Khan (KPK) Pakistan,

**Naveed Saif;**

Deptt; Business Administration Gomal University, D.I.Khan KPK, Email; [naveedsaif\\_naveedsaif@yahoo.com](mailto:naveedsaif_naveedsaif@yahoo.com)

**Dr; Aziz Javed;**

Deptt; Business Administration Gomal University, D.I.Khan KPK, Email; [azizjaved\\_mba@yahoo.com](mailto:azizjaved_mba@yahoo.com)

**Hamid Khan**

Deptt; Business Administration Gomal University, D.I.Khan KPK, Email; [Hamed\\_nido@yahoo.com](mailto:Hamed_nido@yahoo.com)

**Khalid Rehman;**

Deptt; Business Administration Gomal University, D.I.Khan KPK, Email; [Khalidrehman08@gmail.com](mailto:Khalidrehman08@gmail.com)

### ABSTRACT

Micro Financing is one of the most important phenomena for growth as well as a mechanism of generating employment opportunities and speed up the national growth particularly for developing countries like Pakistan. In Current research works we try to examine the effect of micro financing on customer's. For this purpose many commercial banks like MCB, Khyber Bank, Allied Bank and other financial institutions performance was measured with Micro financing Institutions and Banks like Khushali Bank, First Micro Finance Bank, SRSP and NRSP in Rural Areas of Khyber Pakhtoon Khwa. For this purpose comparison is made on behalf of Capital Adequacy Ratios (CARs), Debt equity ratios (DERs), Return on Assets (ROEs), Net Profit Margin (NPMs), Operating Expenses to assets (OPTAs) and others through applying ANOVA statistical method. Results indicate that there is big difference between the mechanisms of providing loans to community. In many discipline's the performance of MFIs was satisfactory but because of the problems like policy for liberalized interest rates, minimum opportunities for institutionalization and mobilization of savings are the hurdles in effective use of the concept named Micro financing.

**Key Words;** Micro Financing, ANOVA s, Commercial Bank, financial institutions,

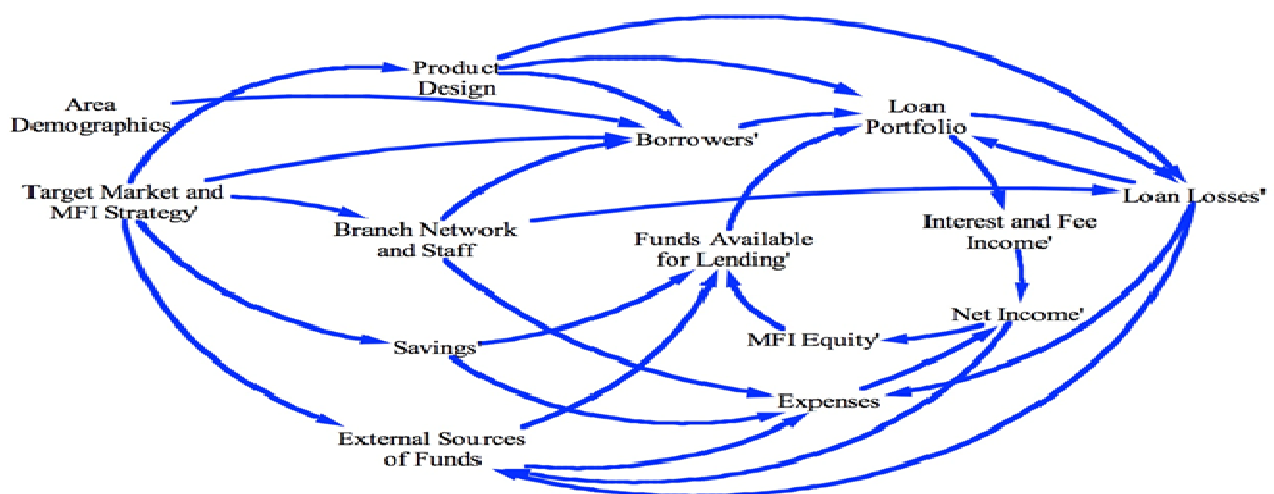
### Introduction;

Micro finance institution objective is to have positive impact over the life of poor by reducing poverty. In order to be effective the six aspect of micro financing must work effectively. And these six factors are commonly known as six dimension of outreach. The factor are breadth of outreach, Depth of outreach, Scope of outreach, Value of financing services, Cost of outreach or operational self sufficiency. All of these factors explain in detail about different but important features of micro financing. If any of the above outreach factor is not achieved the overall mechanism of Micro financing will effect and cannot produce required result. MFI (Micro Finance Institutes) performance will be at the highest only if economic sustainability and all the factors of outreach program worked together. Or we can say that "The supply of loans, saving, deposits and other basic financial services to the poor people is known as micro finance". (Wikipedia.org)

As Micro finance is the concept of providing credit to the borrower on small basis as well as small installment in order to take star of new business, or expand their existing business. The topic of Micro financing is very wide in its scope due to its greater impact on different dimension of its target customers. Generating income women empowerment

particularly in rural areas, Reduction in Poverty, tools as to increase the standard of living of people. Employment generation, Effective use of human Resource, Converting problems of population growth in human mechanization, and turning from under developing toward developed nation are few of its impact areas. However in this study our main focus is based on comparing the performance of MFI with other commercial bank as well assessing the role of Micro financing on the socioeconomic condition of poor people in rural areas of KPK. (Conceptualized model of Micro Financing); The detail of Micro financing concept in Pakistan is as in 1970 Agricultural Development Bank of Pakistan (ADBP) Later on named Zari Taraqiati Bank Limited (ZTBL) was incited the concept of unawareness to the newly concept of its outreach and financial performance the bank remain unsatisfactory and currently passes through the process of downsizing.

Letter on in 1980 two another projects Agha Khan Rural Support Program (AKRSP), later on change it name as First Micro Finance Bank (FMFB), and Orangi Pilot Project (OPP), was initiated to provide help to the poor in Karachi by providing small term loan. AKRSP emphasize on Northern Area and Chitral as well as in while OPP focused on Karachi. As AKRSP get popularity because of its institutional setup and strategy. It pays way to introduce Rural support program by government at national level. The arm of these (RSRs) was reduction in poverty specially in rural areas of Pakistan. The concept of this (RSPs) was same e.g. provision of credit to poor. At the same time Non Government organization's (NGO's) and Multipurpose (MFI's) also provide loans to poor people eor their social and economic development. IN 1998 Pakistan Micro finance Network (PMN) was introduce to represent MFIs. Latter on with the help of IMF Pakistan poverty alleviation Fund (PPAF) was introduced to provide funding opportunities to MFIs. Currently PPAF provide 60 percent of loan to MFIs that are the member of PMN. According to the report of (CLEAR 2010-2011) PPAF total Credit loan fund is Rs 12.493 million (US \$ 194.3 million) and its current outstanding funding to MFIs is Rs 5.324 million (US \$ 71.87 million). Latter on with the help of Agriculture development bank (ADB) anew bank fund worth US \$ 15 million was establish for the purpose of capacity building of MFIs. In order to easy the generating of Micro financing with the help of UK department of international development (DFID) a newly scheme named Micro finance credit Guarantee Facility (MFCGF) was launched by grant of UK pound 10 million to SBP (SBP, 2008, IMF, 2008). At the moment new scheme named Benazir Income Support Program of Rs; 38 billion is created for the poor segment of country



### **Understanding Concept of Micro Financing;**

Microfinance can be defined as “Microfinance services – as opposed to financial services in general – are retail financial services that are relatively small in relation to the income of a typical individual. Specifically, the average outstanding balance of microfinance products is no greater than 250% of the average income per person (GNI per capita).” By microfinance information exchange Themix.org. The concept is defined by CDGEP Microfinance gateway as ““Microfinance” is often defined as financial services for poor and low-income clients offered by different types of service providers. In practice, the term is often used more narrowly to refer to loans and other services from providers that identify themselves as “microfinance institutions” (MFIs). These institutions commonly tend to use new methods developed over the last 30 years to deliver very small loans to unsalaried borrowers, taking little or no collateral. These methods include group lending and liability, pre-loan savings requirements, gradually increasing loan sizes, and an implicit guarantee of ready access to future loans if present loans are repaid fully and promptly.”

Similarly concept was more easily explained by Krishna Venugopals it is the relationship between the poor and neglected segment of the particular country/nation/region and their well being management techniques in order to improve their live standards as well as utilizing the Human Resource in the right direction in order to combat poverty. For this purpose she designed the simplest concept based diagram in order to understand the concept of Micro financing. In the above simple diagram Krishna Venugopal trying to tell his son how a micro credit can be utilized in right way. The whole concept resolve around borrowing how should be utilized this money ,what are the strategies to offer short term loans, how the base amount will be get back along with small amount of interest. How MFIs (Microfinance Institutions) will generate funds from international and national sources, as well as how to minimize risk associated with the micro financing. Commonly this simplest micro financing concept is implemented almost every where but limited changes are made according to the socio, demographic condition of particular country/region as well as government regulation and technological development are also kept in mind.

### **Objectives:**

The main purpose of this study is to compare the performance of CB with MFIs and assessing the impact of Micro Finance on socio- economic condition of poor people the specific objective for the study is as following.

- To compare the performance of financial performance of MFIs and commercial bank in KPK Pakistan.
- To analyze the financial structure Micro finance institution in PKP.

### **REVIEW OF LITERATURE;**

Various levels of financial sustainability and performance indicators of the size of the recent change in the measurement of the performance of the microfinance sector are a widely used approach, a new focus was. It microfinance institutions in the absence of opportunity costs (Ledgerwood, 1998) argued that economic sustainability is necessary, because you can. Other Soaekneun (; Morduch 1999, Khandker, 1998) if the secondary does not damage the social purpose of the small would be. Microfinance's social and commercial purposes in the transaction between been widely discussed, but its trade-offs can be minimized by adopting a growth strategy to improve efficiency and productivity, emphasizing that it is very clear. Long-term sustainable and focused growth strategy, the cost-effectiveness of the microfinance sector in the field of possibilities (Craig and Cheryl, 2006) can be guaranteed.

Differences in income between the rich and the poor, cause serious problems in society such as Central Africa, including in the development of the region is rather important. In addition, the financial depth is easily improved productivity and production assets and constraints in micro-credit to the poor and vulnerable populations, and therefore poverty reduction (Hulme and Mosley contributed in 1996, the World Bank, 2001; Jalilian and Kirkpatrick, 2002 Kai and Hamori, 2009b). However, the only other claim financial benefits to the rich, thus increasing inequality and deepening the vulnerability. Beck et al. Poor and vulnerable populations, such as relatives, mainly rely on informal

financial community, or friends of the loan and because the development of the financial sector (2004) that help the rich intellectual.

Ahlin and Jiang (2008) description of the model, which is considered as the financial development and the adoption of a small microfinance reduce inequality shows that According to them, the microfinance by lowering the incomes of the rich and increase the income of poor people because of the wages paid by the employer of increased quality offline  $\rightarrow$  Decreases. Green et al. Incomplete financial markets and the risk of exposure to exclude poor people because the population in poverty (2006) (Stiglitz, 1998) is an important factor affecting the improvement of financial access of the poor and vulnerable people in poverty reduction could be improved claims. Balance of microfinance, but the effect can be explained theoretically by Thus, we have enough research on the empirical analysis of this study is the lack of information.

What mainly exist are impact analyses at the house–hold level (micro level), such as analyses of the effect of microfinance on household income or consumption. There is a consensus that microfinance decreases the consumption volatility of households and leads to consumption smoothing and increased production (Khandker, 1998; Parker and Nagarajan, 2001; Zaman, 2001; Cuong et al., 2007). However, impact analyses such as the effect of microfinance on income or poverty

Analysis of the impact of home do exist are  $\rightarrow$ , such as analyzing the effects of microfinance on household income or consumption level (micro level), mainly. Microfinance has agreed to reduce the volatility of domestic consumption and increased production and consumption smooth (Parker and Nagarajan, 2001; Only, 2001; Cuong et al, 2007 Khandker, 1998) to connect to. Impact analysis, but the effect of microfinance on income or poverty

### **Research Methodology**

This chapter will explain the overall methodology for collection of required information. For this purpose in the section well will define in detail all the techniques for information gathering. As appropriate method for data collection and analyzing will enhance the value of research work. As our research work consist of getting data from poor segment of population in selected district of PKP rurals areas. As well as we have to compare the performance of Microfinance banks with other commercial bank because the main theme is of our research study is micro financing. That's why appropriate method is required to get accurate information. For current research well will obtain data from primary sources as well as secondary medium also. This chapter gives information about collection, data analysis, using of different statistical packages for analysis of data to find out more meaningful results.

#### **SECONDY SOURCES:**

Secondary data plays an important rule in defining the designed satiation. Actually secondary data is that one which is already available and published and it can be used for further research. In this research work first a portion that comprises of analyzing the MFIs with other commercial bank performance. We try to obtain data from secondary sources. There fro hare is the list of sources from which we obtain secondary data.

- Internet
- Articles
- KSE 100 index
- MFIs Annual reports
- CBs Annual reports

- Books etc.

### Techniques for data analysis:

In order to analysis data different techniques were used. For the first part of research work e.g. comparing the performance of MFIs and commercial banks we use one way (ANOVA). According to researcher this method is used when the researcher want to identify if there any significant difference exist among the performance of the MFIs and CBs.

### RESEARCH MODEL:

$$MF = B_0 + B_1 \text{ CARs} + B_2 \text{ DERs} + B_3 \text{ ROEs} + B_4 \text{ NPMs} + B_5 \text{ OPTAs} + E$$

Where

CARs= Capital Adequacy Ratios

DERs = Debt equity ratios

ROEs= Return on Assets

NPMs= Net Profit Margin

OPTAs= Operating Expenses To Assets

E= Error

The following equation of Micro financing explain in detail about the variables in this study .Actually this study consist of investigating different prospects of the Micro financing .In phase one relationship between micro financing and increase in growth as well as saving is measured through Pearson correlation. For which a separate hypotheses was developed. While in the next section the impact of micro financing on the conditions as well as different factors are measured. For this purpose a multi correlation equation is developed that consist of independent variables like income level, social status, psychological satisfaction, motivation level, reduction in poverty level in that particular region was measured through equation  $MF = B_0 + B_1 IL + B_2 s.s + B_3 P.S + B_4 M.L + B_5 RPL + B_6 CE = E$  .while in third section the difference between MFIs micro financing institutions and other commercial banks were tested. For this purpose comparison is made on behalf of Capital Adequacy Ratios (CARs), Debt equity ratios (DERs), Return on Assets (ROEs), Net Profit Margin (NPMs), Operating Expenses to assets (OPTAs) and others through applying ANOVA statistical method. After analyzing the data for the above multiple regression equation the final values are as following and the equation become

$$M.F = 1.039 + 0.456 \text{ CARs} + 0.334 \text{ DERs} + 0.499 \text{ ROEs} + 0.554 \text{ NPMs} + 0.589 \text{ OPTAs}$$

### Understanding Micro Finance development in Pakistan;

The detail of Micro financing concept in Pakistan is as in 1970 Agricultural Development Bank of Pakistan (ADBP) Later on named Zari Taraqiati Bank Limited (ZTBL) was incited the concept of unawareness to the newly concept of its outreach and financial performance the bank remain unsatisfactory and currently passes through the process of downsizing. Letter on in 1980 two another projects Agha Khan Rural Support Program (AKRSP), later on change it name as First Micro Finance Bank (FMFB), and Orangi Pilot Project (OPP), was initiated to provide help to the poor in Karachi by providing small term loan. AKRSP emphasize on Northern Area and Chitral as well as in while OPP focused on Karachi. As AKRSP get popularity because of its institutional setup and strategy. It pays way to introduce Rural support program by government at national level. The arm of these (RSRs) was reduction in poverty specially in

rural areas of Pakistan. The concept of this (RSPs) was same e.g. provision of credit to poor. At the same time Non Government organization's (NGO's) and Multipurpose (MFI's) also provide loans to poor people eor their social and economic development. IN 1998 Pakistan Micro finance Network (PMN) was introduce to represent MFIs. Latter on with the help of IMF Pakistan poverty alleviation Fund (PPAF) was introduced to provide funding opportunities to MFIs. Currently PPAF provide 60 percent of loan to MFIs that are the member of PMN. According to the report of (CLEAR 2010-2011) PPAF total Credit loan fund is Rs 12.493 million (US \$ 194.3 million) and its current outstanding funding to MFIs is Rs 5.324 million (US \$ 71.87 million). Latter on with the help of Agriculture development bank (ADB) anew bank fund worth US \$ 15 million was establish for the purpose of capacity building of MFIs. In order to easy the generating of Micro financing with the help of UK department of international development (DFID) a newly scheme named Micro finance credit Guarantee Facility (MFCGF) was launched by grant of UK pound 10 million to SBP (SBP, 2008, IMF, 2008). At the moment new scheme named Benazir Income Support Program of Rs; 38 billion is created for the poor segment of country.

In 2000 with the help of ADB (Agriculture Development Bank) the first Micro finance Bank named Khushali Bank was established with a loan of Rs 15 million. The aim was in reducing poverty of KB and PPAF was same e.g. poverty alleviation and economic development. "In 2001 the micro finance Ordinance was introduced and separate prudential regulation were formulated as a part of microfinance initiative" (Shahzad.A.R, and Tahir.M. 2009).

## RESULT AND DISCUSSIONS;

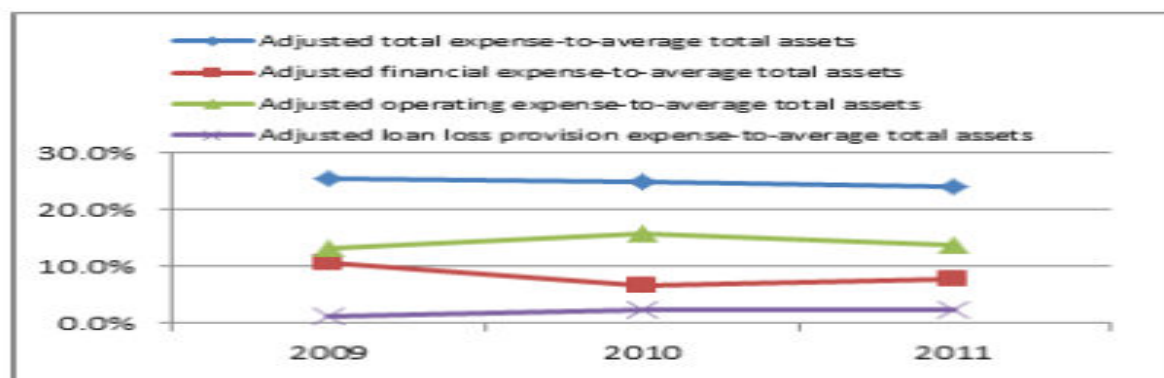
**Table No 11; Estimated Result of Multiple Regressions:**

| Variable Title | Beta   | T      | Sig   |
|----------------|--------|--------|-------|
| Intercept      | -1.053 | -2.398 | 0.17  |
| CARs           | .154   | 2.135  | 0.41  |
| DERs           | 0.154  | 1.862  | 0.69  |
| ROEs           | .444   | 1.255  | .215  |
| NPMs           | .093   | 1.676  | .091  |
| OPTAs          | .145   | 3.853  | 0.000 |

**Table No 12; One way ANOVA**

| Variable Title | F Ratio | Sig  |
|----------------|---------|------|
| CARs           | 17.893  | .000 |
| DERs           | 24.925  | .000 |
| ROEs           | 69.757  | .019 |
| NPMs           | 31.570  | .000 |
| OPTAs          | 6.332   | .000 |

**Exhibit 2.31: Expense to Asset Ratios**



$$M.F = 1.039 + 0.456CARs + 0.334DERs + 0.499ROEs + 0.554NPMs + 0.589OPTAs$$

**FINANCIAL STRUCTURE:**

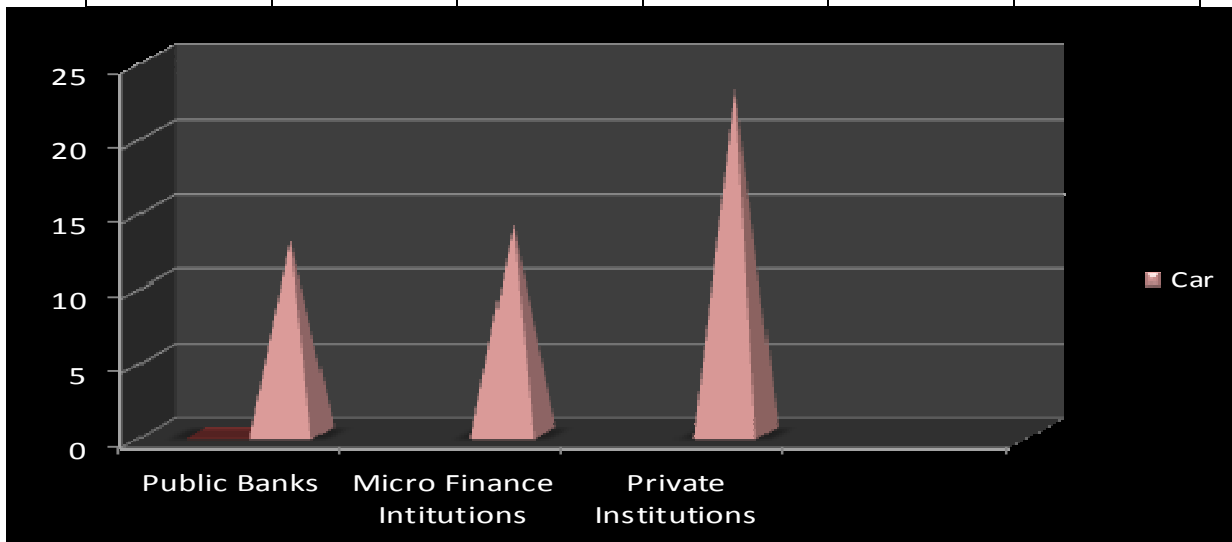
**Capital adequacy ratio**

According to (Zohra.Bi and Shyam Lal Dev Pandey 2011). “The capital adequacy ration is a measure of banks capital. It is expressed as a percentage of a banks risk weighted credit fit exposures. This ratio is also known as capital to risk weighted assets rain. The capital adequacy ration is calculated as follows”

$$CAR = \frac{\text{Tier One Capital} + \text{Tier Two Capital}}{\text{Risk Weighted Assets}}$$

**ANOVA CARs**

|                | Sum of Squares | Df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 2019.302       | 4  | 391.792     | 4.379 | .004 |
| Within Groups  | 3754.878       | 38 | 61.054      |       |      |
| Total          | 5774.18        |    |             |       |      |



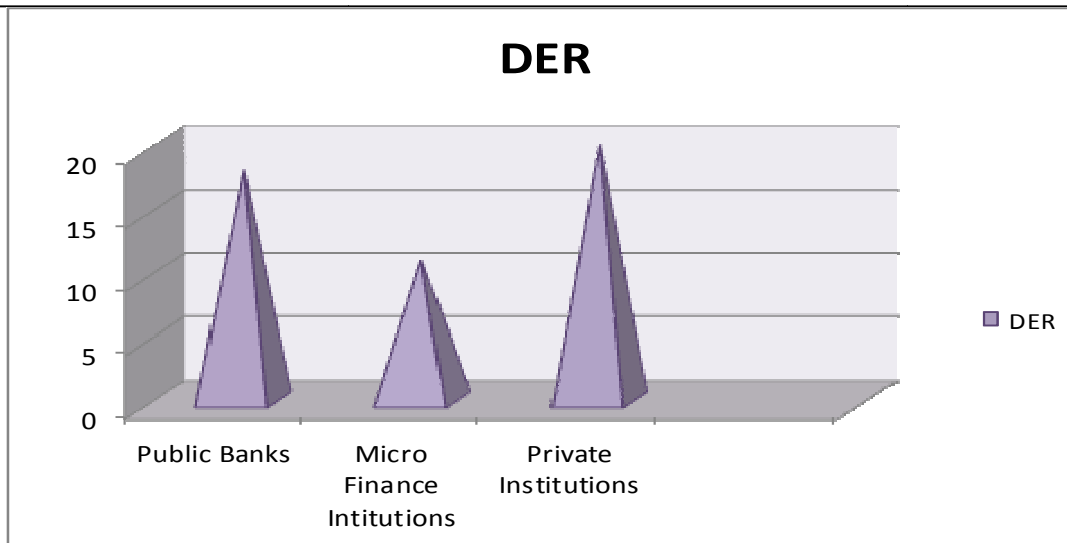
### DEBT EQUITY RATION;

According to (Zohra.Bi and Shyam Lal Dev Pandey 2011). “The debt equity ration is a measure of the company’s finance leverage. The ration is calculated by dividing the company’s long term debt by the shareholder’s equity. Higher the debt equity ration implies dividing the company’s long e4rm debt by the shareholders equity. Higher the debt equity ration implies a risky investment because higher the debt higher the interest has to be paid by the company.”

### ANOVA ; DERs

|                | Sum of Squares | Df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 302.156        | 4  | 135.646     | .411 | .321 |
| Within Groups  | 17051.555      | 38 | 123.131     |      |      |
| Total          | 17353.711      |    |             |      |      |





### CONCLUSION;

Micros finance act a stimulating component for creating jobs opportunities as well as increase the psychological and motivation level of respondent. IF Micro financing is truly experienced in its natural sense than it can serve masses better than any other strategy particularly in developing nations and specially in Pakistani context. After analyzing the 10 important micro finance institutions on the basis of Capital Adequacy Ratios (CARs), Debt equity ratios (DERs), return on Assets (ROEs), Net Profit Margin (NPMs), Operating Expenses to assets (OPTAs) we come to the conclusions that micro finance show massive growth, and provide short term employment. While some of the micro financing institutions face difficulty in generating funds for its appropriate business. As micro financing is still have a magical impact over different developing countries like Bangladesh, India and Sri Lanka in Asian region and most of the countries in South America, and Africa region. While in Pakistan it is still in introductory stage while cultural differences also play an important role in development of Micro Financing opportunities. That's why it is not yet use in its fullest wing in Pakistani prospective. But if government support and public private partnership plays its role than it can serve better the masses. Like through out the world in many countries NGOs non governmental organizations also initiated the concept of Micro financing. According to ( Zahra Bi, and Shy am .L. D. Panday ,2011)It is the responsibility of government to facilitate the general public by introducing liberalized interest rates, opportunities for institutionalization and mobilization of savings must be introduced.

### LITERATURE CITED

- Ahlin C, Lin J, Maio M (2010). Where does microfinance flourish?
- Bourguignon F (1998). Introduction to Handbook of income
- Banerjee AV, Duflo E, Glennerster R, Kinnan C (2009). The miracle of
- Banerjee AV, Duflo E, Glennerster R, Kinnan C (2009). The miracle of microfinance? Evidence from a randomised evaluation, CGAP, Washington DC.
- Banerjee AV, Duflo E, Karlan D (2009).Post on New York Times, blog of N Kristof,
- Bourguignon F (1998). Introduction to Handbook of income Distribution. North
- Banerjee AV, Duflo E, Karlan D (2009).Post on New York Times, blog of N Kristof, <http://kristof.blogs.nytimes.com/2009/12/28/the-role-of->
- Colombet, H.H and S. Mark. 2001. from Urban to Rural: Lessons for Microfmance from Argentina. Development Policy Review. 19 (3): 339-354

- Dev. Econ., pp. 1-16. Ahlin C, Jiang N (2008). Can micro-credit bring development?, J. Econ., 86(1): 1-21. Arrow KJ, Chenery HB, Minhas BS, Solow RM (1961), Capital-labor substitution and economic efficiency, Rev. Econ. Stat. (43): 225-250. Atkinson AB,
- Emeni, F.K. 2008. Micro Finance Institutions (MFIS) in Nigeria: Problems and Prospects: Questionnaire Survey findings. Journal of Financial Management and Analysis. 21(1): 69-76
- Hashemi, S. M, S. R. Schuler and .P. Riley. 1996. A Rural Credit Programs and Women Empowerment in Bangladesh. World Development. 24(4): 635-653.
- Hays, W. R. 1973. Statistics for the social sciences. Holt, Ripchart & Winston. New York. p 675
- Jacob, Y, M. Benjamin and S. Charitonenko. 1998. A Promoting Efficient Rural Financial Intermediation. The World Bank Observer. 13(2):147-170.
- Lincoln, Y.S and Guba. E.G. 1985. Naturalistic inquiry. Beverly Hills. CA: sage. 246-250
- Mahjabeen, R. 2008. Micro financing in Bangladesh: Impact on households, consumption and welfare, Journal of Policy Modeling. (30): 1083-1092
- Mallick, R. 2002. Implementing and evaluating the micro credit in Bangladesh Development in Practice. 12(2) Microfinance Institutions Journal of Small Business Management 45(1): 23-41
- Mosley, P and L. Steel. 2004. Microfinance, the Labor Market and Social Inclusion: A Tale of Three Cities, Social Policy and Administration. 38 (07): 721-743
- Oksan, B. 2008. What Political Science can Contribute to and Learn From the study of microcredit. International Studies Review. 10: 525—547
- Poliinger, J. J, J. Outhwaite and H. C. Guzman. 2007. The Question of Sustainability for Pakistan Micro-finance Network. Performance Indicators Report: 2004
- Rahman, Aminur. 1999. A Micro-credit Initiatives for Equitable and Sustainable Development: Who Pays? World Development. 27(1): 67-82.
- Schreiner M. 2001. Informal Finance and the Design of Microfinance. Development in Practice 1(5): 637-640
- Sekaran, U. 2003. Research Methods for Business: A Skill Building Approach. John Wiley and Sons, New York. Pp: 263-288
- Tull and Hawkin. 1993. Research Methods for Business and Management. Practice Hall Inc. pp:176-185
- Woller, G.M. and W. Woodworth. 2001 Microcredit as a Grass-Roots Policy for International Development. Policy Studies Journal. 29(2): 267-282
- Woller G.M. and W. Woodworth. 2001. Microcredit and Third World Development Policy, Policy Studies Journal. 29(2): 265-266
- Zohra.Bi.and S.Panday.2011. Comparison of performance of Micro finance institutions with commercial banks in India. Australian Journal of Business and Management Vol.1 No.6 [110-120] September -2011

#### **Acknowledgement;**

I am really thanks full to Professor Zohra.Bi and Professor Shyam Lal Dev Pandey .from their research paper ( titled comparing the performance of MFIs Vs. other financial institutions)I got the basic idea about the current research work in Pakistani prospective, and how it can be evaluated. At the same time all of the co authors also participated in finalizing this research paper.

Author & Co Authors;

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

## CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

