



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 Issue: XII Month of publication: December 2020

DOI: https://doi.org/10.22214/ijraset.2020.31944

www.ijraset.com

Call: © 08813907089 E-mail ID: ijraset@gmail.com



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429

Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

### A Study on Growth and Distribution of Microfinance in India

Pratik Nayak
BIMM, Sri Balaji University

### Abstract

- 1) Purpose- There is huge biased penetration of microfinance in India. The study is taken in order to explain these imbalance using the macro variable at state level
- 2) Variables-The independent variables are state level macro variable- population density, literacy rate, per capita income, female participation in workforce, bank branch per100/km^2. Dependent variable is microfinance penetration(MPI)
- 3) Findings-There is no significant relationship between microfinance penetration and selected state level macro variable
- 4) Methodology- Secondary sources has been used to collect data and multiple regression test is performed to find the relationship between dependent and independent variable
- 5) Research Limitations- Whole research work is based on secondary data selection of macro variable used in this study is arbitrary and the set of variables are not exhaustive.
- 6) Originality Value- Effort has been made to explain the huge geographical skew of microfinance which will help in identify factors which need attention for developing the MFIs in states which are lagging behind

Keywords: microfinance, penetration, macro variable, geographical skew

### I. INTRODUCTION

Microfinance is a very broad term used to refer to financial services provided to low-income and poor customers, which have been excluded from the traditional banking system - banking unbanked. It is generally used for micro credit / micro loans but also includes micro insurance, micro savings and other financial services. Microfinance is playing an important role in financial inclusion in India, which has come into existence to serve smaller and more overlooked sections of society. Commercial banks, small finance banks, microfinance institutions, NBFCs, not-for-profit, microfinance institutions are the major players providing microfinance in India. MFIs were able to grow rapidly and expand their portfolio. But they did so without spending time that was previously invested in carefully building relationships with customers with customer selection, training, staff orientation, and system development. The growth and success of MFIs increased competition and created problems for both MFIs and their customers. Most of these MFIs began to be concentrated in markets that were developed and established. This is because they wanted to take advantage of the impact of training and screening of customers already done by existing lenders. Therefore, each one landed to target the same set of customers. An important feature of the growth of microfinance institutions in India has been wide regional disparity. There is a large amount of disparity in the spread of microfinance across the country. Reports and studies analyzing the development of Indian microfinance suggest that MFIs have ventured into South Indian regions compared to other regions. The concentration of microfinance in the three southern states Andhra Pradesh, Karnataka and Tamil Nadu is comparatively much higher than other states of the country

### A. Research Problem

Does state level macro variable explain the biased penetration of microfinance in India?

- B. Research Objective
- 1) To analyze the growth and distribution of microfinance in India
- 2) To analyze the biased penetration of microfinance using the selected state level macro variables
- 3) To identify relationship between microfinance penetration and selected state level macro variables



### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

### II. LITERATURE REVIEW

### A. Impact of Microfinance

(Sinha, 2009) Microfinance in India is provided mainly through two modes one is SBLP (Self Help Group Bank Linkage Model) and other through MFIs (Microfinance institutions). In SBLP model SHGs are formed by banks/formals agencies/ NGOs and financed by banks. In MFI mode SHGs are formed and financed by MFIs itself which are in financed through different sources. Among the two SBLP mode is dominant and have the greater outreach. SBLP mode is run by the government whereas MFI mode is privately managed with some institutions regulated by RBI. (Sarumathi & Mohan, 2011) found that microfinance brought, psychological and social empowerment than economic empowerment. Impact of micro finance is appreciable in bringing confidence, courage, skill development and empowerment. (Ferdousi,2015) found that microenterprise loans have increased entrepreneurs' incomes and innovation. Findings suggest that larger loans increase income, but less innovative business practice might threaten such income. (dash, prasad, & koshy, 2016) found that microfinance programs have empowered women socially, economically, and politically. Microfinance builds mutual trust and confidence among women, which will encourage them to approach formal financial institutions to meet their various financial requirements. (Mazeed & Dalpadal, 2019) Microfinance has significantly developed the business in the rural areas by providing the adequate and enough loan facilities to them.

### B. Outreach of Microfinance

(KPMG, 2019) Microfinance loan portfolio has grown from `26200cr. to `187400 cr. showing a CAGR of nearly 48% also client portfolio has increased from 140lakh to 440lakh at 20% CAGR during the FY14-19. Though showing tremendous growth most of the penetration is concentrated to few States, can be seen by the fact that top 5 states accounts for 52% of the total loan outstanding and top 10 states accounts for 84% of the total loan outstanding. Thereby leaving the major market underpenetrated. (Dhar, 2016)In this study a state wise index of microfinance penetration is calculated on the basis of some predetermined dimensions. According to it there is high level of penetration in south India where Karnataka is leading with an MPI value of 2.48. "The MPI value of more than one indicates that as the microfinance clients are in the numerator, so the clients acquired are more than proportional to the total population." MPI is found to be lower in northern region with Jammu& Kashmir having the lowest MPI of 0.04. (Zerai & Rani, 2011) concluded that there was no tradeoff between outreach to the poor and operational sustainability of MFIs. However the study revealed that there was a strong positive correlation between the number of active borrowers and operational sustainability of MFIs.

### C. Issues & Challenges

(Rangarajan, 2008) Currently financial system has vast geographical presence in India. However the poorer sections of the society are still not able to access the financial services by organized financial system. The committee has studied the reasons for such financial exclusion of poor and made some recommendations like opening the more branches of commercial bank in rural areas, simplification of loan granting procedure etc. for more financial inclusion and greater reach. (Dey, 2015) Highlights the various challenges faced by microfinance and MFIs in India. It states that higher interest rate charged to the customer, high loan defaults ratio, low literacy, lack of awareness, geographical limitations, low client retention ratio are the major challenges and reason for low outreach. (Nasir, 2013) The paper discovered the prevailing gap in functioning of MFIs such as practices in credit delivery, lack of product diversification, customer overlapping and duplications, consumption and individual loan demand with lack of mitigation measures, less thrust on enterprise loans, collection of savings/loans and highest interest rate existing in micro finance sector.( Anand et al.,2011) highlighted the Institutional Challenges in Micro Finance Sector. To be successful in the market, the Micro Finance Institution's marketing strategy must meet the customer's requirements.

- 1) Research Gap: A lot of research has been done proving the benefits of microfinance and its biased penetration in India. An effort has been made here to explain this biased penetration using selected state level macro variable. This will help in identify factors which need attention for developing the MFIs in states which are lagging behind.
- 2) Hypothesis
- a) Null Hypothesis (H0): There is no significant relationship between microfinance penetration (MPI) and the state level macro variables.
- b) Alternate Hypothesis (H1): There is significant relationship between microfinance penetration (MPI) and the state level macro variables



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429

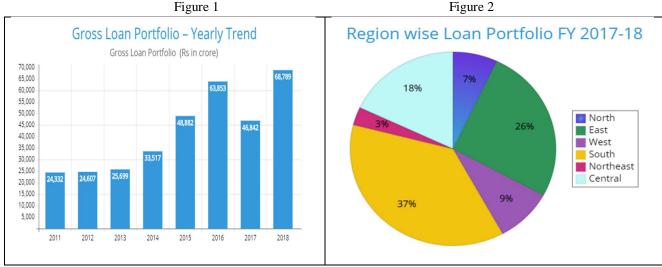
Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

### III. RESEARCH METHODOLOGY

Study is based on secondary sources of data collected from the various reports of GOI, NABARD, RBI, Sa-Dhan etc. There are 28states and 8 union territories but only 33 observations are taken due to non availability of data on union territories of Daman & Diu, Lakshadweep and Dadra & Nagar Haveli. The dependent variable is microfinance penetration (MPI) denotes a state's share of MFI clients relative to total MFI clients in the country. The independent variables are state level macro variable- population density, literacy rate, per capita income, female participation in workforce, bank branch per100/km^2. The data then collected is analysed using SPSS application where Multiple Linear Regression test is performed to find the relation between them.

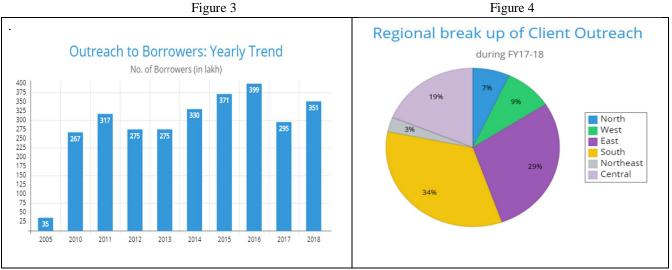
### IV. ANALYSIS OF DATA

### A. Geographical Presence



Source: The Bharat Microfinance Report 2018

As of March 2018, the total loan portfolio outstanding of MFIs has reached 68,789 crore. GLP in 2017-18 has increased to 68,789 crore from 46,842 crore, there is a growth of 47%. The high growth in 2017-18 is due to the fact that MFIs have overcome the after effects of demonetization successfully. Among the regions, South still dominates the overall loan portfolio outstanding of MFIs with 37% followed by East with 26%. Central and West have a share of 18% and 9% respectively. While North and Northeast have least portfolio share of 7% and 3% respectively.



Source: The Bharat Microfinance Report 2018

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429

Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

The total number of clients served by MFIs stood at 351 lakh as on 31 March, 2018. Number wise client outreach in 2017-18 has increased to 351 from 295 lakh, there is a growth of 19%. Client outreach of MFIs had grown substantially from 2005 to 2011, reaching a level of 317 lakh. This trend slowed down during 2012 and 2013 and the number of clients slumped to 275 lakh. The trend reversed in 2014 with a growth and reached a level of 330 lakhs. This trend continues in 2016 with a huge rise in clients/borrowers to an all-time high of 399 lakh. Out of the total client base of 351 lakh, Southern region alone contributes to 34% followed by 29% in East and 19% in Central region whereas West and North have 7% and 9% of total outreach respectively. Northeast has the least client outreach numbers with 3%.

Figure 5 Figure 6 MFI Branch Network - Yearly Trend Regionwise branch network FY 2017-18 20,000 18.750 17.500 25% 16,250 15.000 13.750 12,500 North 11,250 East 10,000 West 8,750 South 7,500 Northeast 6.250 Central 5.000 3,750 2,500 1,250 2011 2012 2013 2014 2015 2016 2017

Source: The Bharat Microfinance report 2018

The MFIs in India had been consolidating their operations to cope with the effects of transition taking place in the sector. While 2012 and 2013 witnessed a decline in the branch network, the trend was arrested in 2014. In 2014 -15, MFIs have expanded their branches, posting a marginal growth of 4.57 %. In 2016-17, total branch network of the MFIs was 10,233. Number wise, branch network in 2017-18 has increased to 14,026, there is a growth of 37%.. The eastern region have the highest no. of branches 29percent followed by southern region having 24 percent branches, central region with 25% branches.

As we can see there is huge geographical skew in penetration of microfinance in India most of them are concentrated in southern region. This paper tries to find the reason for such biased penetration using some selected state level macro variable. Multiple Regression Analysis technique is used in evaluating the impact of two or more Independent Variables on Single dependent Variable The dependent variable is microfinance penetration (MPI) denotes a state's share of MFI clients relative to total MFI clients in the country. For this data have been taken from the Bharat microfinance report, 2018. The independent variables are state level macro variable- population density, literacy rate, per capita income, female participation in workforce, bank branch per100/km^2. With the help of regression analysis we will find out that how much change in dependent variable due to the change in independent variable

### B. Statistical Analysis

Table 1: Model summary

Regression Statistics			
Multiple R	0.280		
R Square	0.078		
Adjusted R Square	-0.092		
Observations	33		



### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

Table 2: Regression analysis

	Coefficients	Standard Error	t Stat	P-value
Intercept	.080	.088	.903	.374
Literacy Rate	.000	.001	180	.859
Female workforce participation rate	001	.001	687	.498
Per capita income	-8.101	.000	742	.465
Bank Branch/100Km^2	.000	.000	470	.642
Population density	2.627	.000	.243	.810

Multiple regression equation is

MPI= 0.080+ 0.00\* (literacy rate)-0.001\* (female workforce participation rate - 8.101\* (per capita income) + 0.00\* (bank branch/100KM $^2 + 2.2627*$  (population density)

### C. Interpretation

Let's start interpreting the multiple regression data with table 1

- 1) Multiple R: It is the correlation coefficient. It measures the strength of the linear relationship between the variables. For example, a value of 1 means a perfect positive relationship and a value of zero means no relationship at all. In this case the multiple R is 0.280 which implies that the relationship is on the lower side.
- 2) R square: It is the coefficient of determination which explains how much change in the dependent variable is caused by the independent variables. In this case its 0.078 which can be implied to only 7.8% change in MPI can be explained by the five selected state level macro variables.
- 3) Adjusted R Square: It is just like the above one except it is proved to be more reliable when more than one independent variable is included.
- 4) Observations: it is the number of observations involved in this case it is 33.

Now coming to the table2, in here first is coefficients which tell us about if there is one percent increase in the independent variable, by how many percent will dependent variable change.

- a) With every 1% increase in literacy Rate, MPI will have no change
- b) With every 1% increase female workforce participation Rate, MPI will decrease by .001%
- c) With every 1% increase in per capita income, MPI will be decreases by 8.101%
- d) With every 1% increase in bank branch/100km^2, MPI will have no change
- e) With every 1% increase in population density, MPI will increase by 2.627%

### D. Hypothesis Testing

Now let's do the hypothesis testing from the results we have got, if the p-value is greater than 0.05, it implies we will accept the null hypothesis. Now by looking at table two above we can see that the p value for all the independent variables is more than 0.05 hence resulting in acceptance of null hypothesis that is there is no significant relationship between the dependent variable and independent variable. Which implies that the independent variable (state level macro variable) do not have any effect on dependent variable.

### V. RESULTS AND DISCUSSIONS

### A. Findings

We have found out that there is no significant relationship between the dependent variable i.e., microfinance penetration in India (MPI) and independents variables population density, literacy rate, per capita income, female participation in workforce, bank branch per100/km^2. It means that penetration of microfinance doesn't depends on these factors which is a good sign as microfinance is aimed at improving the lives of poor and providing services in backward areas where these variables are generally on a lower side. The people which microfinance cater generally have lower literacy rate, have lower income, do not have good access to formal financial institutions, have lower connectivity which make it difficult for Microfinance institutions to serve these people.

## Todalisa Science in Applied Scie

### International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 8 Issue XII Dec 2020- Available at www.ijraset.com

### B. Conclusion

As there is huge imbalance in geographical presence of MFIs in India and most of the clients and loan portfolios are concentrated in southern and eastern region. Microfinance program has been seen as a tool to alleviate poverty and empowerment but its benefits has not reached all corners of the nation. Using state level macro variable an effort has been made to explain the reason for such biased penetration. In the study we have find there is no significant relationship between the dependent variable i.e., MPI and independent variable which are literacy rate, per capita income, population density, bank branch/100km^2 and female workforce participation rate which is a good sign as microfinance is mostly targeted towards for the rural poor people to help them with their finance needs. Generally in that area these variables are on a low level. So the study explains that the biased penetration is not due to these factors.

### C. Limitations & Suggestions

The study has some limitations, selection of macro variable used in this study is arbitrary and the set of variables are not exhaustive. Use of some other set of variables may be done which might have given some other results. Further, research can be carried forward by choosing (Sa-dhan, 2018)different macro variables and primary data, also by applying more statistics tool to test them.

### REFERENCES

- [1] (n.d.). Retrieved june 13, 2020, from shodhganga: http://shodhganga.inflibnet.ac.in/bitstream/10603/3031/11/11\_chapter%203.pdf
- [2] dash, m., prasad, v. m., & koshy, c. (2016). Women empowerment through microfinance services. Dash, M., Prasad, V. M., & Koshy, C. J. (2016). Wome Journal of Applied Management and Investments, 5 (1), 20-25.
- [3] Dey, D. S. (2015). challenges and issues of microfinance in India. Journal of economics and sustainable development, 6 (7), 195-198.
- [4] Dhar, P. (2016). Microfinance Penetratio in India: A state wise analysis. International Journal of Interdisciplinary Research in science society and culture, 2 (2), 86-96.
- [5] Fersdousi, F. (2015). impact of microfinance on sustainable entrprenurship development studies research, 2 (1), 51-63.
- [6] Ganlea, J., Kuumuori, K., & Segbefia Yao, A. (2015). Microcredit: Empowerment and disempowerment of rural women in Ghana. pp. 335-345.
- [7] Ghate, p. (2008). Microfinance in India: A State of the Sector Report, 2007. New delhi: Microfinance India Publications.
- [8] KPMG. (2019). Microfinance- contributions to financial inclusion, opporunity and challenges ahead. India: KPMG.
- [9] Mazeed, S. A., & Dalpadal, C. (2019). Role of Microfinance and Microcredit in Transforming the Rural India. International Journal of Innovative Technology and Exploring Engineering (IJITEE), 8 (11), 4266-4268.
- [10] NABARD. (2017-18). Status of Microfinance in India. NABARD.
- [11] Nasir, S. (2013). Microfinance in India: Contemporary Issues and Challenges. Middle-East Journal of Scientific Research, 15 (2), 191-199.
- [12] Rangarajan, D. (2008). Report of the committee on financial inclusion in India. Government of India.
- [13] responsAbility. (2016). Microfinance market outlook- development, forecasts and trends. responsAbility.com.
- [14] Sa-dhan. (2018). The Bharat Microfinance Report. new delhi: Sa-dhan.
- [15] Sarumathi, s., & Mohan, k. (2011). Role of Micro Finance in Women's Empowerment. Journal of Management and Science, , 1 (1), 1-10.
- [16] Sinha, F. (2009). status of microfinance in India. Institute of microfinance(InM).
- [17] Sravani, M. (2013). role of technology in microfinance sector in India. International Journal of Social Science & Interdisciplinary Research, 2 (9), 107-111.
- [18] T.S Anand et al. (2013) "Institutional Challenges in Micro Finance Sector".
- [19] Zerai, B., & Rani, L. (2011). Dash, M., Prasad, V. M., & Koshy, C. J. (2016). Women empowerment through microfinance services. Journal of Applied Management and Investments, 5(1), 20-25. Research Journal of Finance and Accounting, 2 (11), 32-41.









45.98



IMPACT FACTOR: 7.129



IMPACT FACTOR: 7.429



### INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call: 08813907089 🕓 (24\*7 Support on Whatsapp)