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An Analytical Study of Interrelationship of Lending Models, Problems and Performance of Micro Businesses

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Abstract

Economic empowerment of micro entrepreneurs through development of micro businesses is the best option for reducing the severity of poverty. It serves twin objective firstly creation of jobs and contributes in economic growth. However high rate of loss making micro businesses, throttle the merits of micro business development. The pivotal objective of this research is to study the relationship if any, between problems faced by micro entrepreneurs; performance of micro business and the lending model. Qualitative and Quantitative- a mixed method approach; structured questionnaire and focus group interview (FGI) were used as a means to gather data from 722 micro entrepreneurs of Malwa region of Madhya Pradesh (MP). Descriptive statistics and ANOVA were used for data analysis and the findings reveal that there is significant difference exist among groups formed on the basis of lending model. It revealed that marketing and management issue is critical for micro entrepreneurs belong to Self Help Group (SHG) and Individual lending model in comparison of Joint liability Group (JLG) model. Furthermore the new finding is that performance of micro business of maximum entrepreneurs following SHG model and Individual lending model is towards breakeven to profitability category whereas performance of micro business of maximum entrepreneurs of JLG model is in profitable category. ***.*** *Policy implication at Government level is required is modification to be introduced for achieving flexibility in SHG model and for prospective researchers the scope of research is in investigation of successful practices of micro businesses.*

Key words: Micro enterprise, Microfinance, Lending model, sustainability, Micro entrepreneur.

Introduction

"Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little"- Adam Smith.Microfinance is the device which overcomes all the barriers of accessibility of money by deprived population and promotes the inclusive growth (Reed, 2013). The key obstacle in accessibility of loans is moral hazard and incapability to provide collateral and it is feasible due to the group lending models with unique feature of collective guarantee and peer monitoring. And for this reason RBI bestowed priority status to micro finance because "Microfinance as per RBI is provision of thrift, credit and other financial services and products of very small amount to the poor in rural, semi urban and urban areas for enabling them to raise their income levels and improve living standards. Micro finance institutions are those which provide these facilities" (Source: RBI Master Circular dated, 31Jan.2011). Many studies substantiated that microfinance considerably contribute in micro enterprise development (Augsburg et al. 2012; Banerjee et al, 2013) and micro enterprise development assist in generation of large scale employment which is presently the critical need of the country.

Several types of institutions are providing microfinance services primarily it includes mainstream financial institutions i.e. commercial banks, regional rural banks, cooperative banks and small finance banks and alternative financial institutions that is institutions registered as trust, society or company and they are commonly known as micro finance institutions (MFI). In this research paper 'funding institution' the common term used for all type of microfinance providing institutions. And microfinance services is offered through various lending models (credit lending mechanism) namely individual lending models and group lending models like self help group bank linkage progamme/model (SBLP), joint liability group model (JLG), Grameen Model etc. In individual lending model loan is offered to individual but in group lending models, loan is offered to every member of the group and they are mutually and individually responsible for the loan. And size of group differ on the basis of type of model for instance in SHG model the minimum number of members in a group is ten and maximum number is twenty and the group are formed by assistance of any agency like bank, NGO or self etc. After formation of SHG, members of group starts saving and provide internal loan to members on the basis of their urgency of needs and when group become matured then loan is offered by any funding institution. In JLG model the minimum number of member in a group is four and maximum number is ten members. Every member of JLG is eligible for accessing separate loan from any funding institution but they have to sign and execute inter-se document which make them jointly responsible for all loans availed by group members.

Funding institutions are using various lending models for offering microfinance services to micro entrepreneurs for starting of micro enterprises. Micro enterprise as defined by Ministry of micro, small and medium enterprise (MOMSME) is on the basis of investment and different limit of investment is decided for manufacturing and service providing units. For micro enterprise engage in manufacturing the limit of investment in plant and machinery is Rs. 25 lakh and if micro enterprise engage in service providing business then limit of investment in equipment is Rs. 10 lakh.

Attributable to various incentives and schemes, micro enterprises are growing at faster pace and at present there are 630.52 lakh micro enterprises are operational and providing employment to 1076.19 lakh persons in India. And average growth rate of micro enterprises is above 10% but in some states like MP growth rate is not at par with national growth rate. MP has only 26.42 lakh micro enterprises and providing employment to 48.80 lakh persons i.e. 4% share out of total micro enterprises in India (Source: Annual Report- 2017-18, MOMSME). And to investigate the true reason of slow growth we tried to identify the problems and challenges of micro enterprises, we conducted research and it reveal that problems faced by micro entrepreneurs are viz marketing issues; management skills; lack of resources; local business environment and high cost of inputs in our previous research (Chouksey, 2018). And to investigate further the key objective of this research paper is to study the relationship if any, between problems faced by micro entrepreneurs; performance of micro businesses and the lending model. Performance of micro businesses is described in terms of profitable micro businesses, breakeven micro businesses, and micro businesses in loss. And next is lending model and all funding Institutions in Malwa region following various lending models like – Joint Liability Groups, Self Help Groups (SHG), Individual lending Model and others are considered

Socio economic background and rationale of the study

This research is based in Malwa Region of MP and as per MP Government it is made up of ten districts namely Agar Malwa, Shajapur, Ujjain, Indore, Dewas, Barwani, Dhar, Ratlam, Neemuch and Mandsaur. Population below poverty line (BPL) in MP is above 32% but in Malwa region maximum districts like Barwani, Dhar have population below poverty line is above 44%. Most of the population of Malwa region is employed in agriculture sector and revenue generation from this sector is quiet uncertain due to various reasons, it is essential to shift working population towards micro business creation. (Harvie, 2003) and it is validated that livelihood crisis can be resolved through creation of micro business by offering microfinance services with training and capacity building. With above 44% of population is economically active, Malwa region has 69423 MSME which is very less, it is just approximately 05 MSME per 1000 population (Source: census, 2011).

Introduction section is followed by second section literature review discusses the theoretical and empirical literature relevant to the lending models, problems of micro entrepreneurs and performance of micro enterprises. Third section research methodology discusses the sampling technique, sample size, respondent profile, sources of data, variables of the study and tools used for data analysis. The fourth section finding and discussions presents the analysis of data and discussion on major findings of the research and fifth section presents the conclusion and states the policy implication and last section is reference section.

Objective of the study

- To study the relationship if any, between 'problems faced by entrepreneurs', 'performance of micro business' and the 'lending model' followed by funding institutions.

Literature review

Growth, success and sustainability of micro enterprises are critical for employment generation and their significant contribution in gross domestic product of country. But the major barrier is lack of finance and banks are reluctant to finance micro enterprises due to various reasons but the prime reason is inability to provide collateral. And this problem was overcome by group lending models in which Grameen lending model was first introduced by Yunus, 2008 and in group lending models collective responsibility of loan repayment by all the members of group resolve the problem of moral hazards (Morduch & Armendariz, 2005). Similar views expressed by (Banerjee, Besley, & Guinnane, 1994; Otero & Rhyne, 1994) on this matter that mutual responsibility of loan repayment reduces the default rate and enhances the possibility of getting future loans. Group lending model has considerable impact on repayment of loans as depicted by the research of (Crabb & keller, 2008; Janda & Turbat, 2013) that it improves sustainability of funding institution and it further reveal that lending to females is more effective and have less default rate. As per (Bahar, 2001) in this model all decisions are taken with consent of all group members. In their research (Gine & Karlan, 2008) they highlighted that group lending models have certain adverse effect also that some good clients avoid taking loan due to mutual responsibility of group and moreover authors experimented and reveal that if clause of mutual responsibility is eliminated then also default rate remain same as it was earlier when group liability was applicable. (Montgomery, R, 1996) contend that there is more peer pressure in group lending model. (Madajewicz, 2005) stated that in group if any micro entrepreneur is outstanding performer then group lending model is not suitable because loan amount is fix on which group members can jointly guarantee and due to that it become difficult for outstanding micro entrepreneur to get more loan.

On the contrary (Cull et al., 2007) stated that individual lending model is more profitable in comparison of other models and similarly (Mersland & Storm, 2014) uncover in their research that individual lending model is having low cost in comparison of group lending model. (Satysai, K.J.S, 2008) cost of lending i.e. transaction cost depends on various factors like forming group, capacity building and distribution cost of loan etc and it is varied in different lending models. As per the study of transaction cost of different lending models (Puhazhendhi, V, 1995) unearth that transaction cost mainly depend on capacity building of groups, if capacity building is conducted through employees of funding institution then transaction cost is less but if forming of group and capacity building is outsource to Non Government Organization then transaction cost is more. (Shankar, 2007) so transaction cost comprises of salary of field workers and capacity building of numbers of groups and if transaction cost is more loan become, more costly for micro entrepreneurs and it raises default rate and adversely affect the performance of micro enterprises.

In Madhya Pradesh JLG model is more prevalent in comparison of other group lending model as it is revealed in the research of (Mendoza, M, 2009) and it is due to several factors namely availing loan is less complex and least time consuming, small size of group, better peer pressure and low default rate in this model because of suitable supervision by all group members in comparison of SHG model. Whereas another research (Swain & Floro, 2010) bring to light the ineffectiveness of SHG lending model and state that though huge number of poor people become member of SHG model but they are not different in economic terms then non members and equally vulnerable. Performance of micro enterprises is somewhat related to lending model and if lending model is not suitable then it affect the performance of micro enterprises negatively and (Saumila, 2014) the key concern of small and micro enterprises is to uphold the performance in for longer period. Beside that problems and performance of micro enterprises have inverse relation, if problems increase then performance of micro enterprises gets deteriorated.

Performance of micro enterprise are adversely affected due to various problems like non availability of business information, required infrastructure, capital and lack of competent managers (Kumunge et al., 2014) and one of the reason of collapse of small and micro enterprise is absence of market need of their products (Griffith, 2014). (Mukerjee, 2018) other research point out that MSME confront the issue of short of application of advanced technology and it is essential to emphasize on up gradation of technology, enhancing export competitiveness and technology transfer. (Kinyua, 2014) performance improves with increase in number of years of operation and furthermore revealed in research that lack of infrastructure didn't affect the performance considerably but certain factors certainly affect the performance in positive manner are availability of finance, skills required to manage business and environmental factors. (Saini, 2014) another issue which is preventing the sustainability and growth of micro enterprise is either resources are highly expensive or lack of resources.

There is short of literature which illustrates the interrelationship among variable namely lending model, problems and performance of micro enterprises specially region wise so it is not feasible to compare the research result with findings of parallel studies.

Methodology

Qualitative and Quantitative- a mixed method approach was used, as research problem has both qualitative and quantitative aspects. Multi stage proportionate sampling technique was applied to collect data from micro entrepreneurs who had taken loan through various lending models namely SHG model, JLG model, Individual lending model and others. Sample size is calculated by using sample size calculator of creative research software and data is collected through structured questionnaire and focus group interview (FGI) from these micro entrepreneurs of Malwa region. 100 FGI was conducted with the help of structured questionnaire and moderator for SHG model. In which number of respondents in each interview were five and their trainer- who form the group and supporting in capacity building were selected as moderator. In case of JLG model 40 interviews were conducted and minimum member in each interview were 04 and 62 interviews were conducted of individual lending model. Total number of respondent were SHG-500, JLG-160 and individual 62 i.e. 500+160+62= 722 micro entrepreneurs and total number of interviews were 100+40+62= 202 cases, but 2 questionnaire were incomplete and removed from further analysis so final number of cases were 200.

Categorical Variables in the Study:-

- ***Lending model***: Institutions following various lending models like – Joint Liability Groups, Self Help Groups, Individual lending Model and others are considered.
- ***Diverse Level of Performance of Micro enterprises***: Performance of micro enterprises is characterized in terms of profitable micro enterprise, breakeven micro enterprise, and micro enterprise in loss.

Variable Measured on Interval Scale

- ***Problems and challenges of Micro enterprises*****:** To ascertain the problems and challenges of micro enterprises 20 variables were selected and the measurement of these variables was done on 5 point likert scale - “very small problem”, “small problem”, “average problem”, “big problem”, and “very big problem”. Subsequent to collection of data, factor analysis was conducted and the five factors extracted as problems and challenges of micro entrepreneurs viz marketing issues; management skills; lack of resources; local business environment and high cost of inputs in our previous research (Chouksey, 2018).
- ***Statistical test used for data analysis:*** The descriptive statistics were used to analyse the normal distribution of the data and for the analysis of relationship if any, between micro entrepreneur’s diverse level of performance and their problems, we used mean, maximum and minimum values and standard deviation. And Analysis of variance test is applied to analyse the relationship among the lending model and performance of micro businesses with all the five factors namely Marketing Issues, Management Skills, Lack of Resources, Local Business Environment and High Cost of Inputs.
- ***Secondary data collection:*** Secondary data gathered from diverse sources. Contact details and other information of micro entrepreneurs of all lending models were gathered from branch of CB, RRB, Cooperative banks as well as for NBFC MFI and NGO MFI. Moreover secondary data is collected from different reports published by viz state level Banker’s committee (SLBC), Census, World Bank, MSME, Nabard, State Government, Private Agencies, Journals, Books, and articles of news paper, websites, conferences etc.

Finding & Discussion

Growth and sustainability of micro businesses is very crucial for employment generation and economic growth of economically active poor population and we tried to find out is there any effect of lending model on performance of micro businesses and interrelationship between lending model, performance and problems of micro businesses.

Above descriptive table depicts the mean and standard deviation of groups based on lending model and all the five factors. If we go through the descriptive table specifically the mean in relation to all data values, it revealed that marketing issue is the major issue, the mean of Self Help Group (SHG) and Individual lending model is significantly higher than the Joint liability Group (JLG) shows that marketing issue is more problematic for entrepreneurs of SHG model and Individual lending model in comparison of JLG model. Furthermore the mean of Self Help Group (SHG) and Individual lending model is significantly higher than the Joint liability Group (JLG) shows that performance of micro business of maximum entrepreneurs of SHG model and Individual lending model is towards breakeven to profitability category whereas performance of micro business of maximum entrepreneurs of JLG model is in profitable category**.**

Analysis of variance test is applied to the lending model and performance of micro business with all the five factors.

Result is significant in three variables firstly marketing issues, secondly management issues, lastly Performance of micro business.

- The ANOVA result for among the groups based on lending model with in comparison of marketing issues reveals that the between group mean square (the variation explain by the model) is 166.346 (332.691/2) and within group mean square 14.241 (2800.184/197). The F ratio is 11.703 (166.346/14.241) and *P* value is less than 0.05 indicate that the difference in the mean scores of the three groups is statistically significant.
- The result here indicate that there is significant difference exists among the different groups based on lending model within comparisons of management issues as noted by a probability value of which is less than 0.05. The mean of SHG model and Individual lending model is significantly higher than the JLG model.
- Result here indicate that there is no significant difference exists among the different groups based on lending model within comparisons of Lack of resources as noted by a probability value of 0.779.
- Result here indicate that there is no significant difference exists among the different groups based on lending model within comparisons of Local business environment as noted by a probability value of 0.749.

- Result here indicate that there is no significant difference exists among the different groups based on lending model within comparisons of High cost of inputs as noted by a probability value of 0.107.
- The key interpretive element of interest in the above ANOVA table is that, based on a P=0.004, a significant difference (or differences) exists within comparisons of performance of micro business among the three groups based on lending model.

The above ANOVA results indicate that the groups based on lending model are significantly differed with regard to three factors i.e. marketing issue, management issues and performance of micro business. The three hypotheses are confirmed.

Flexibility in SHG model as far as number of members is concerned is to be introduced. It is difficult to achieve consensus in groups with more than ten members, beside that there is condition of six month saving by all members of SHG for grading of group and after getting matured then only loan is provided to them, in such situation it is problematic for micro entrepreneurs and even for funding institutions because they have to face stiff competition with funding institutions adopting JLG lending model.

Conclusion

Diverse lending models employed by funding institutions for providing microfinance to micro enterprise has considerable importance and it effect the performance and problems of micro enterprises as revealed in this research. The unique findings highlighted that performance of micro enterprises using JLG model is in profitable category and magnitude and intensity of marketing and management problems are also less. It is critical for sustainability and growth of funding institutions, their microfinance programmes and micro businesses to introduce modification in existing lending models specially SHG model and individual lending model and this will ultimately effective in controlling the various problems of micro businesses. For prospective researchers the scope of research is in investigation of successful practices of micro businesses

Reference- I

1. Augsburg, B., Haas, R. De., Hamgart, H., & Meghir, C. (2012). "Microfinance at the Margin: Experimental Evidence from Bosnia and Herzegovina."European Bank for Reconstruction and Development, working paper 146, pp 1-40.
2. Bahar, H (2001). "Financing for Micro Enterprises, Small, Medium Sized and Cottage Industries: Bangladesh Perspective." ESCAP-ADB Workshop on Mobilizing Domestic Finance for Development: Reassessment of Bank Finance and Debt Market in Asia and the Pacific
3. Banerjee, A., Duflo, E., Glennester, R., & Kinnan, C. (2014). "The Miracle of Micro Finance? Evidence from a Randomized Evaluation." MIT Department of Economics, Working paper series.
4. Chouksey, A. (2018). "An Empirical Study of Key Factors Influencing the Performance of Micro Enterprises." SJCC Management Research Review, Vol.8 (2), ISSN 2249-4359.
5. Cull, R., Demirguc-Kunt, A., & Morduch, J. (2007). "Financial performance and Outreach: A Global Analysis of Leading Micro Banks." Economics Journal, Vol.517 (117), pp107-133.
6. Crabb, P. R., & Keller, T. (2006). "A Test of Portfolio Risk in Microfinance Institutions." Faith & Economics, Vol.47 (48), pp 25-39.
7. Gine, X and Karlan, S, D (2008). "Peer Monitoring and Enforcement: Long term Evidence from Micro Credit Lending Groups With and Without Liability." Working paper, Department of Economics, Yale University, New Haven, USA.
8. Griffith, E. (2014). "Why Start Ups Fail According to their Founder (online)." Available through http://fortune.com/2014/09/25/ why start ups fail according to their founder/ accessed on 30/11/2018.
9. Harvie, C. (2003). "The Contribution of Micro Enterprises to Economic Recovery and Poverty Alleviation in East Asia." Economics Working papers 03-07, University of Wollongong, pp 1-21, Australia.
10. Janda, K., & Turbat, B. (2013). "Factors Influencing Portfolio Yield of Microfinance Institutions in Central Asia." MPRA paper no. 49549, University of Prague.
11. Kinyua, A.n (2014). "Factors Affecting the Performance of Small and Medium Enterprises in the Jua Kali Sector in Nakuru Town, Kenya." IOSR Journal of Business and Management (IOSR-JBM). Vol. 16(1) Ver. IV, pp 80-93
12. Kumunge, M.S., Njeru, A & Tirimba, O. I. (2014). "Factors Affecting the Performance of Small &Micro Enterprises in Limuru Town of Kiumbu County, Kenya." International Journal of Scientific & Research Publications, Vo.4 (12), pp1-20.

13. Mersland, R., & Strom, R. O. (2008). “Performance And Governance In Microfinance Institutions.” 33rd EIBA Annual conference "International Business, Local Developments and Science-Technology Relationships" University of Catania, Italy.
14. Mendoza, M. (2009). “Addressing Financial Exclusion through Microfinance: Lessons from the State of Madhya Pradesh, India.” The journal of International Policy Solutions, Vol.2, pp 25-35.
15. Morduch, J & Armendariz, B (2005).”Rethinking Banking”. The Economics of Microfinance. PHI Learning Pvt. Ltd. pp 9-11.
16. Mukerjee, S. (2018). “Challenges to Indian Micro Small Scale and Medium Enterprises in the Era of Globalization.” Journal of Global Entrepreneurship Research, Vol.8 (28) https://doi.org/10.1186/540497-018-0115-5.
17. Madajewicz, M, (2005). “Can Microcredit Reduce Poverty? The Effect of the Loan Contract on Loan Size.” In Patrick Bolton & Howard Rosenthal, eds., Credit Markets for the Poor. New York: Russell Sage.
18. Montgomery, R (1996). “Disciplining or Protecting the Poor? Avoiding the Social Costs of Peer Pressure in Micro-Credit Schemes.” Journal of International Developments, Vol.8 (2), pp 289-305.
19. Otero, M., & Rhyne, E (1994). “The New World of Microenterprise Finance: Building Healthy Financial Institutions for the Poor.”West Hart Ford, CT: Kumarian Press.
20. Puhazhendhi, V (1995). “Transaction Costs of Lending to the Rural Poor-Non Governmental Organisation and Self-help Groups of the Poor as Intermediaries for Banks in India.” Foundation for Development Co-operation, Brisbane, Australia .
21. Reed, L. (2013). Vulnerability: State of the Microcredit Summit Campaign Report 2013. Washington, DC: Microcredit Summit Campaign.
22. Saini, A. (2014). “*Problems and Prospects of MSME in India*.” Coventry University, United Kingdom.
23. Satyasai, K.J.S, 2008. “Rural Credit Delivery in India. Structural Constraints & some Corrective Measures.”Agriculture Economics Research Review. Vol.21, pp 387-394
24. Saumila, M. (2014). “Performance Management through Innovative Capability in SMEs.” D.sc Lappeenranta University of Technology, Finland.
25. Shankar, S. (2007). “Transaction costs in group microcredit in India.” Management Decisions, Vol.45 (8), pp 1331-1342. Doi10.1108/00251740710819069.

26. Swain, R. B; & Floro, M. (2010). "Reducing vulnerability through microfinance: Evidence from Indian Self Help Group Programme." Working paper 2010:23, Uppsala University, Sweden, Issn1653-6975.

27. Yunus, Muhammad. (2008). "Creating a world without poverty. Social Business and the future of capitalism". Public affairs. New York,

Reference- II

- Available from https://msme.gov.in/sites/default/files/MSME-AR-2017-18-Eng.pdf/12/01/2019
- Available from https://www.censusindia.gov.in/2011 census/ 30/08/2018

Table I: Descriptives

			n	Deviation	Error	Confidence Interval for Mean			k
						er Bound	er Bound		
keting Issues	G		51	3		44	57		0
			00	6		84	16		0
	vidual		25	2		85	66		0
	l		75	7		21	28		0
agement Issues	G		40	8		7	94		0
			0	1		3	6		0
	vidual		87	5		5	78		0
	l		35	4		1	98		0
k of Resources	G		30	5		02	58		0
			25	9		68	81		0
	vidual		58	9		71	44		0
	l		00	2		05	94		0
al Business Environment	G		71	9		06	36		0
			75	4		56	93		0
	vidual		71	7	6	41	00		0
	l		50	2		30	69		0
n Cost of Inputs	G		85	5		3	57		0
			5	4		2	47		0
	vidual		74	7		0	08		0
	l		00	6		1	38		0
ormance of micro business	G		8			1	5		
			0				0		
	vidual		3			0	7		
	l		0			3	6		

Table II: **ANOVA Result For Problems of Micro Business, Performance and Lending Model**

		Sum of	df	Mean	F	Sig.

		Squares		Square		
Marketing Issues	Between Groups	332.691	2	166.346	11.703	**0.000***
	Within Groups	2800.184	197	14.214		
	Total	3132.875	199			
Management Issues	Between Groups	116.309	2	58.154	5.501	**0.005***
	Within Groups	2082.446	197	10.571		
	Total	2198.755	199			
Lack of Resources	Between Groups	2.246	2	1.123	.250	0.779
	Within Groups	885.754	197	4.496		
	Total	888.000	199			
Local Business Environment	Between Groups	3.057	2	1.529	.289	0.749
	Within Groups	1042.443	197	5.292		
	Total	1045.500	199			
High Cost of Inputs	Between Groups	26.286	2	13.143	2.260	0.107
	Within Groups	1145.714	197	5.816		
	Total	1172.000	199			
Performance of micro business	Between Groups	5.236	2	2.618	5.770	**.004***
	Within Groups	89.384	197	.454		
	Total	94.620	199			
*. The mean difference is significant at the 0.05 level						