



**A Comparative Study of the Microcredit Operations
of
The Mann Deshi Mahila Sahkari Bank
&
The Bandhan Bank**



H. K. Khare

Dr Ajit Kumar

Dr Ashish Srivastava

Members of Faculty

Co-operative Banking Channel

College of Agricultural Banking

University Road

Reserve Bank of India

Pune

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INDEX

	Page
<i>Executive Summary</i>	2
<i>Acknowledgements</i>	4
I. Introduction	5
II. Financial Inclusion and Inclusive Growth	5
III. Background of the Study	6
IV. Brief profile of the banks studied	7
V. Review of Literature	9
VI. Objectives of the study	12
VII. Methodology	12
VIII. Analysis and Interpretation	13
A. Financial Efficiency Analysis	
B. Operating Efficiency Analysis	
C. Strategic Efficiency Analysis	
IX. Conclusion	26
X. Recommendations	27
XI. Limitations of the Study	28
<i>Major Findings</i>	29
<i>References</i>	31

A Comparative Study of the Microcredit operations of the Mann Deshi Mahila Sahkari Bank and the Bandhan Bank

Executive Summary

Empowering people by providing access to affordable banking services is the basic objective of financial inclusion. Recognizing the importance of microcredit in the financial inclusion initiatives, the College Advisory Committee (CAC) in its 56th meeting had advised the CAB to conduct a study to have a better understanding of costs, prices, nuances and challenges of the micro-credit business.

This comparative study presents an analysis of the microcredit operations of the Mann Deshi Mahila Sahkari Bank and the Bandhan Bank to understand the similarities and differences while serving at the bottom of the pyramid between an urban co-operative bank (UCB) and a commercial bank. Interaction with the borrowers of both the banks generally conveyed a sense of satisfaction and happiness regarding the microcredit and the doorstep services offered by these two banks. However, focus of the study was to understand the importance of the scale and delivery models on the cost of microcredit and to examine the interest rates charged from the point of view of the commercial viability.

The study pointed out that, notwithstanding the cost of funds which was the largest component of the overall cost of microcredit, what really mattered was to have a lower per borrower operating cost and a higher proportion of high-yield earning assets to the total assets. The Bandhan Bank with a high efficiency in the use of financial resources primarily because of the use of Inter-bank Participation Certificates (IBPC) and a high CD ratio, coupled with a lower per borrower operating cost and a well guided strategic focus gained substantially as evident from its high return on asset at 4.47% and return on equity at 28.51% for the year 2016-17. The Mann Deshi Bank, on the other hand, despite having a lower cost of funds and a lower operating cost to total average assets

than the Bandhan Bank had a lower return on assets at 0.57% and return on equity at 7.33% mainly due to higher per borrower operating cost and lower CD ratio. It was, however, found that even after adjusting the impact of the IBPC transactions from the financial performance of the Bandhan Bank, the approximate value of the net profit margin, and return on equity of the Bandhan Bank were not very much different that of the Mann Deshi Bank, but the Mann Deshi Bank still had a lower return on assets due to its comparatively lower CD ratio and a lower proportion of high interest bearing microcredit in its total loan portfolio.

The study therefore, demonstrates that microcredit is a viable, sustainable, and profitable business not only from the social point of view but also from the commercial point of view and it is possible to provide affordable lending under the microcredit model. To be able to do that, it is important for the banks operating in this area to be nimble in the use of resources and with a certain scale of operations and financial acumen, it is possible to successfully run a microcredit business.

The study has examined and explained in detail the financial, operating, and strategic factors involved in the microcredit business from the point of view of efficiency, costs, and prices. It provides useful insights about the microcredit operations and identifies certain benchmarks which could be used for developing suitable business strategies in this area.

Acknowledgements

The study draws upon the academic and technical work done in this area by the academicians, practitioners, and researchers and owes an intellectual debt to them. We would like to thank Smt. Madhumita Sarkar Deb, Principal, College of Agricultural Banking (CAB) for providing us the opportunity to work on this important area.

We are indebted to Smt. Chetna Gala Sinha, Chairperson, Mann Deshi Mahila Sahkari Bank, and Shri Chandra Shekhar Ghosh, Managing Director, Bandhan Bank for facilitating our work. We would like to place on record our sincere thanks to Smt. Rekha Kulkarni, CEO, Mann Deshi Mahila Sahkari Bank, Smt. Arpita Sen, Functional Head, Investor Relations, and Shri Soumyajit, Regional Head of the Bandhan Bank for providing all the relevant information in a timely manner.

While conducting the study, we interacted with the borrowers, field-level functionaries, branch and head office officials of both the banks. We thank them for their time and useful information provided during the course of interactions.

We also thank our colleagues for the valuable suggestions and help in carrying out the study.

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H. K. Khare
Dr Ajit Kumar
Dr Ashish Srivastava

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I. Introduction

Providing access to affordable banking services to a vast segment of the hitherto unbanked population is the basic objective of financial inclusion. In developing countries like India, access to banking services, especially to the poor, underprivileged and low-income groups is a prerequisite for inclusive growth, poverty alleviation and social cohesion. Availability of easy and cost-effective banking services for savings, investments and credit enables the people to break the chain of poverty by using credit for various productive and consumption purposes. Financial inclusion initiatives serve as an effective engine of social change and as such, have assumed a prime place in public policy with a view to achieving inclusive growth in India. Moreover, financial inclusion is being increasingly seen as a business opportunity for banks to expand the stable retail deposit base and operations and at the same time, it is being recognised as a step for strengthening financial stability. A number of banks and microfinance institutions are actively working in this area and the extension of affordable credit to the people has been a priority for the Government and Reserve Bank of India for the past several years. The College of Agricultural Banking (CAB) actively contributes to the capacity building in the developmental banking arena through its various on-campus and off-campus programmes and extension initiatives. It also undertakes several studies from time to time to understand the bottlenecks and to suggest a way forward. This study is one of such initiatives.

II. Financial Inclusion and Inclusive Growth

Indian economy has been on a growth trajectory primarily on the strength of industrial and services sectors. However, limited access to affordable financial services such as savings, loan, remittance and insurance in the rural areas and unorganised sectors has been hindering the achievement of the full potential of growth impetus in these areas

and resulting in the consequent socio-economic inequality. Access to affordable financial services, especially deposit, credit and insurance enlarges livelihood opportunities and empowers the poor to take charge of their lives. Such empowerment aids social and financial stability. Apart from these benefits, financial inclusion also imparts formal identity, provides access to the payments system and to savings safety net like deposit insurance. As such, the scope of financial inclusion is much broader and hence, it is considered to be critical for achieving inclusive and sustainable growth in the country.

Further, the financial inclusion ensures empowerment of the people through the schemes of financial literacy and their participation in the institutional credit, deposit and remittance services. The microcredit provided through the doorstep all-women group-lending model is an effective tool of women empowerment while helping to improve the quality of lives of a large cross-section of people. However, to be successful, the microcredit operations have to be commercially viable for the banks without exorbitantly charging the borrowers. With this premise, this study was undertaken. Specific objectives of the study have been incorporated in the Section VI of this report.

III. Background of the Study

A study on the financial inclusion and microcredit was conducted in one of the slums of Pune (Khairawadi) in July 2017 by two CAB summer interns from New Castle University and Boston University under the guidance of one of the authors of this study. It was observed that while almost all the surveyed slum dwellers had deposit accounts with mainstream commercial banks, 70% of the respondents did not avail credit from them. For the credit products, most of them went either to a co-operative bank or to a non-banking financial company, possibly because they could not obtain the credit facilities from the commercial banks. As a result of the Jan Dhan Yojna of the Government of India, the population surveyed had opened their savings accounts with the commercial banks but that did not automatically led to an access to the credit facilities.

The College Advisory Committee (CAC) in its 56th meeting had advised the CAB to conduct a study on the financial inclusion models adopted by the co-operative banks. Initially, it was decided to study the financial inclusion model of a cooperative bank, namely, Ashtha Mahila Bank. The preliminary enquiry about the bank, however, revealed that the work done by the bank was not of a high significance. It was, therefore, decided to conduct a study of the microcredit operations with a doorstep delivery services and the interest rates charged by the Mann Deshi Mahlia Sahkari Bank, Satara and to compare it with the rates on similar products offered by the Bandhan Bank, a newly established commercial bank offering banking services at the bottom of the pyramid.

IV. Brief profile of the banks studied

(A) Mann Deshi Mahila Sahkari Bank

Originally started as a credit society in the year 1993, Mann Deshi Mahila Sahkari Bank received its banking licence from the Reserve Bank of India in the year 1997. The bank began with 550 members, initial capital of Rs 6 lakh and initial staff strength of seven. Today, after about 20 years of its existence, the bank has 7 branches, 24,978 members, 68 staff members and a total capital of Rs. 543.70 lakh. The bank had started with a motto of serving the poor, downtrodden and financially excluded women of the area. After twenty years of its existence, the bank continues to serve the same set of people with an average loan ticket size of Rs. 41,800/- per borrower. Following is a description of the bank's microcredit products.

1. Group Loans (4 to 7 women)

Loan Amount	Rs.10000, Rs.12000, Rs.15000, Rs.18000 and Rs.20000, Rs.30000, Rs.35000 and Rs.40000.
Frequency of repayment	Weekly and monthly
Rate of Interest	26% per annum
Tenure	One year for loan up to Rs.15000 and 1.5 year and two year for loan above Rs.15000.

2. Weekly Market Product

Doorstep cash credit is a product purely to cater needs of weekly market vendors. Credit Limit is Rs. 20000.00, however, initially the drawing power is restricted to Rs. 10000.00 and is later increased as per enhancement schedule and based on the credit requirement. Interest at 26% per annum is applied on reducing balance of the outstanding amount and the repayment is done on weekly basis.

(B) Bandhan Bank

Originally started as an NGO in the year 2001 and later on transformed into a non-banking financial company, Bandhan Bank finally received a banking licence on June 17, 2015. The public shareholders of the bank include, among others, International Finance Corporation (IFC), Small Industries Development Bank of India (SIDBI) and an arm of the GIC, the sovereign wealth fund of Singapore. While as a bank, Bandhan is permitted to have pan-India presence, its special focus remains on eastern and north-eastern parts of India. 58% of its branches are in rural and semi-urban locations while 27% are in urban and 15% in metro locations. The niche market of the bank is people who remain outside the periphery of the formal banking ecosystem. The objective of the bank is to work towards the goal of financial inclusion and help promote better education, healthcare and self-employment opportunities.

As on March 31, 2017, the bank had 840 branches, 2443 doorstep service centre (DSC), 105 lakh customers and 24,220 employees. Its advances and deposit stood at Rs 23,543 crore and 23,229 crore respectively as on March 31, 2017. The shareholder's fund was 4,446 crore as on March 31, 2017.

Although the bank has a plethora of financial products both on liability and asset side, microcredit products with doorstep service remains its key product and the USP. To be eligible for availing loan facilities under micro banking, the customers compulsorily hold savings bank accounts with the linked bank branch. Around 4-6 DSCs are linked to a bank branch to provide prompt services. The DSC officials, called DSOs, visit the

doorstep of borrowers for collection of repayment as well as small deposits. Normally, one DSO caters to the 4 to 5 groups per day in a weekly cycle.

Interaction with the borrowers in both the banks conveyed a sense of satisfaction and happiness about the availability of credit and doorstep service. Notwithstanding the higher rates of interests, the women borrowers were generally satisfied with a feeling of empowerment. Following is a brief description of Bandhan Bank's microcredit products.

Microcredit Product	Minimum Amount (Rs.)	Maximum Amount (Rs.)	Rate of Interest	Duration up to (Yr)	Purpose
Suchana Loan	1,000-	25,000-	18.40%	1	Income generating activities
Srishti Loan	25,001-	1,50,000-	18.40%	2	Expanding business
Suraksha Loan	1,000-	10,000-	10.52%	1	Emergency health needs
Sushiksha Loan	1,000-	10,000-	10.52%	1	Education of children

V. Review of Literature

Review of the existing literature is important to understand the existing body of work, questions investigated, methods employed, and conclusions drawn and accordingly, helps to prepare a suitable plan of action for any further study. While there is an abundance of literature on microcredit and financial inclusion, the affordability aspect of financial inclusion on credit products has mostly been examined only from beneficiaries' perspective and not much work has been undertaken to analyse the same from the lender's perspective.

The credit cost analysis of the microcredit products of Mann Deshi Mahila Sahkari Bank done by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (2014)¹ brought to the fore the affordability aspect of interest rate from lender's perspective. One of the authors of this study also did some further supplementary analysis on the

costing aspect of the microcredit product of the bank designed for vegetable vendors of the weekly market. It was found that despite the product attracting very high-interest rate, it was not adequately remunerative for the bank.

Utilizing the data from Eastern Europe and Central Asia, Caudill, Gropper, and Hartarska (2009)² showed that the MFIs are found to generally operate with lower costs the longer they are in operation. However, given the differences in operating environments, subsidies, and organizational form, this finding of increasing cost-effectiveness may not aptly characterize all MFIs and estimation of a mixture model reveals that roughly half of the MFIs are able to operate with reduced costs over time, while the other half do not.

Shankar, S. (2007)³ observed that MFIs, in order to reduce direct transaction costs, increase the number of groups per square kilometre. In order to reduce indirect costs, MFIs should minimize the number of layers of fixed costs in their system and examine alternative revenue-generating activities that can be undertaken with minimal incremental costs. Further, the regional variation in transaction costs that the study has found is an important factor that suggests that no uniform view can be taken on the rates charged by MFIs in different regions.

Rosenberg, Gonzalez, and Narain (2009)⁴ observed that the decline in operating costs is a major contributor to the decline in interest rates that borrowers for the microcredit pay. They found no substantive empirical evidence of a widespread pattern of borrower exploitation by abusive MFI interest rates. However, they found a strong empirical support for the proposition that operating costs are much higher for tiny microloans than for normal bank loans, so sustainable interest rates for microloans have to be significantly higher than normal bank interest rates.

Valentina Hartarska, Xuan Shen, Roy Mersland (2013)⁵ evaluated the efficiency of microfinance institutions (MFIs) using a structural approach which also captures these institutions' outreach and sustainability objectives. They estimated economies of scale

and input price elasticities for lending-only and deposit-mobilizing MFIs using a large sample of high-quality panel data. The results confirmed the conjectures that improvements in efficiency can come from the growth or consolidations of MFIs, due to substantial increasing returns to scale for all but profitability-focused deposit-mobilizing MFIs. Their results supported the existence of a trade-off between outreach and sustainability.

Woolcock (1999)⁶ addressed the issue of group-lending design. Analysing five cases of MFI failures in Ireland, Bangladesh, and India, he concluded that group performance depends on MFI lending policies, cost structures, nature and extent of social relations among group members, and MFI staff.

Bhatt and Tang (2001)⁷ discussed group lending under the frameworks of incomplete information theory and transactions cost theory. Based on their analysis, they offered recommendations for setting-up and managing an MFI.

Conning (1999)⁸ constructed a theoretical model for targeting the poor and achieve financial self-sufficiency. Using data from 72 MFIs, it was found that sustainable MFIs that target poorer borrowers must charge higher interest rates, have higher staff costs, and are less leveraged than those targeting less poor borrowers.

Hollis and Sweetman (1998)⁹, however, analyzed mid-19th-century Irish loan funds and find that MFIs were able to lend to the poor at competitive interest rates without subsidies. These Irish MFIs combated informational and enforcement problems while operating at a surplus in a market that formal sector banks would not serve.

Indirect evidence that the poor may not mind paying high-interest rates can be drawn from Perry (2002)¹⁰ where MFI clients borrowed funds to become moneylenders, presumably successfully lending at rates higher than their MFI charges.

The present study is an attempt to examine the costs and prices of the microcredit operations by undertaking a comparative analysis of the above two banks. The question

under examination is to find out the composition and appropriateness of the financial and operating costs as also the prices of the microcredit products for sustainable operations.

VI. Objectives of the study

This study is intended to present a comparative analysis of the financial, operational and strategic efficiency in the micro-credit operations of the Bandhan Bank vis a vis the Mann Deshi Mahila Sahkari Bank, both providing credit at the bottom of pyramid especially to women beneficiaries. Besides assessing the costs and interest rates in both the banks, the study also focuses upon the delivery models and operational practices with reference to the following aspects.

- (1)** Factors leading to the variation in pricing by the two lenders of similar products (Mann Deshi and Bandhan Bank), albeit with a large variation in the volume, from the financial, operational, and strategic angles.
- (2)** The minimum required markup on interest rates for a viable and sustainable doorstep delivery of microcredit products.
- (3)** The minimum threshold business volume for commercially viable microcredit operations.

VII. Methodology

For the purpose of the study, select branches and service delivery locations of the Mann Deshi Bank were visited by the team of faculty members conducting the study. In addition, the head office and a couple of doorstep delivery centres of the Bandhan Bank at Kolkata were also visited. The study is primarily based on the secondary data gathered from the respective banks and the analysis made thereof. The following steps were involved in the conduct of the study.

- Visits were made to the Pune based branch of Mann Deshi Mahila Bank and Bandhan Bank to obtain some basic inputs on various credit products of the bank, its cost structure and client profile.
- Visits were made to the head office/branches/ DSCs of the Bandhan Bank in Kolkata to gather detailed information about the selection of niche market for the bank, loan products, pricing of loan products, loan sanctioning process, delivery mechanism and loan recovery process etc.
- Examination of the comparative cost of funds and the operational cost of the two entities were undertaken.
- Assessment was made about the impact of scale (volume) on the costs and profits.
- A comparative analysis was undertaken about the financial, operational, and strategic efficiency of both the banks.
- A random survey of bank's clients was made to understand their approach towards bank's product and cost structure and its acceptance by the customers.

VIII. Analysis and Interpretation

Since the objective of this study was to understand the cost structure and pricing of the microcredit products of the Bandhan Bank and the Mann Deshi Mahila Sahkari Bank, a comparative performance analysis based on their respective financial parameters for the year 2016-17, was undertaken with focus on the followings aspects.

A. Financial Efficiency Analysis

B. Operating Efficiency Analysis

C. Strategic Efficiency Analysis

(A) Financial Efficiency Analysis

The objective of the analysis of financial efficiency was to examine the comparative financial cost structure of the two banks, which includes cost of funds, operating cost, and credit risk premium.

(I) Composition of Funds and Cost of Funds

An analysis of the composition of funds (Figure – 1) reveals that as on March 31, 2017, the Bandhan Bank had 59.39% of its funds from the term deposits, 25.88% from CASA deposits, 16.63% from equity, and remaining 8.10% from borrowings. In contrast, the Mann Deshi Bank did not have any borrowings but it relied on term deposits to the extent of 76.47%, 15.18% on CASA deposits, and 8.35% on its equity. Being a new commercial bank, a lower ratio of CASA deposits and certain borrowings continuing from its NBFC days was quite natural in case of the Bandhan Bank. In case of the Mann Deshi Bank, a lower proportion of current balances probably resulted due its lower-middle income client base. Being a co-operative bank, its comparatively thin equity base was also a normal phenomenon due to lack of market opportunities for raising capital.

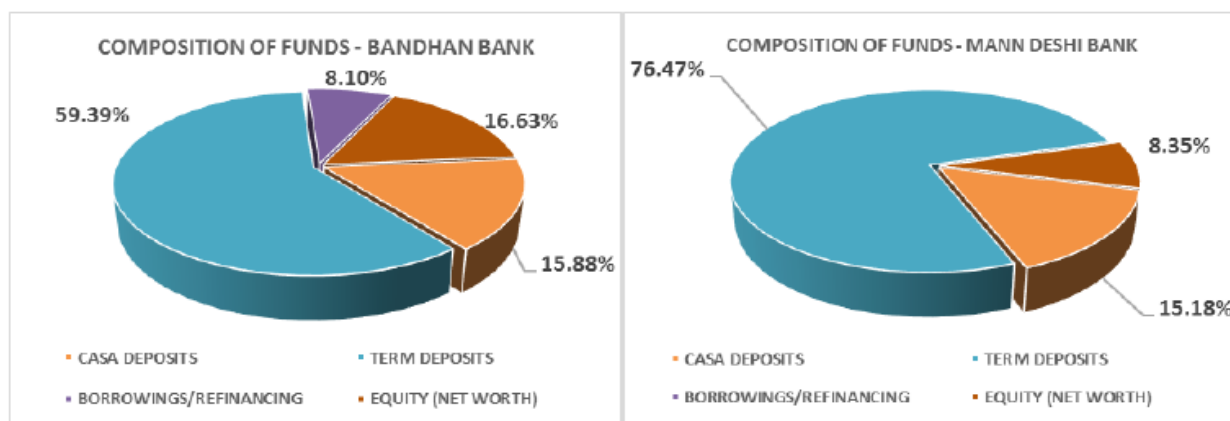


Figure 1: Composition of Funds

As per the information provided, the Bandhan Bank loaded 20% expected returns on its equity. The same parameter was also applied in case of the Mann Deshi Bank in order to have a comparative figure of the cost of funds. The data reflected that the total cost of funds as on March 31, 2017, was 9.74% in case of the Bandhan Bank and 8.69% in case of the Mann Deshi Bank. A further break-up of the cost of funds between cost of CASA and term, deposits, cost of borrowings, cost of equity is provided in the Figure -2.

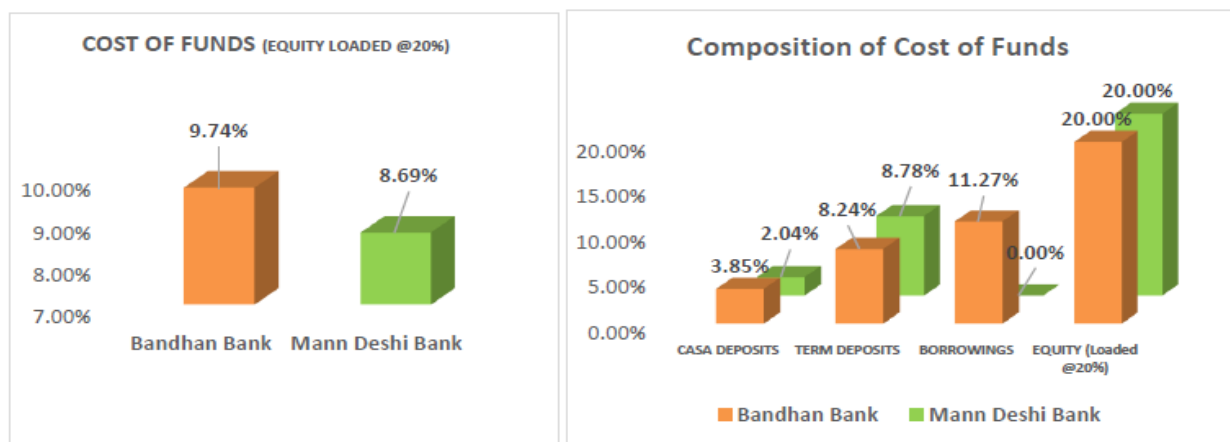


Figure 2: Cost of Funds and its Composition

(II) Operating Cost

Besides the funding cost, the operating cost as a proportion to average total assets is another significant component of the lending cost. The analysis showed that for the year 2016-17, there was not much difference in the operating cost ratio between the two banks despite huge variation in their respective balance sheet sizes. While the Bandhan Bank had an operating cost ratio of 4.11%, it was at 3.65% in case of the Mann Deshi Bank. However, the Mann Deshi Bank has a comparatively higher proportion of operating expenses to the loan and advances at 6.47%, mostly due to its smaller size of loan portfolio, and lower Credit-Deposit ratio (Mann Deshi Bank had a gross CD ratio of 63.59% as compared to 101.35% in case of the Bandhan Bank) as compared to the ratio of operating expenses to the loan and advances at 4.34% in case of the Bandhan Bank (Figure-3). A further insight into the operating cost is presented in the segment on the analysis of operating efficiency.

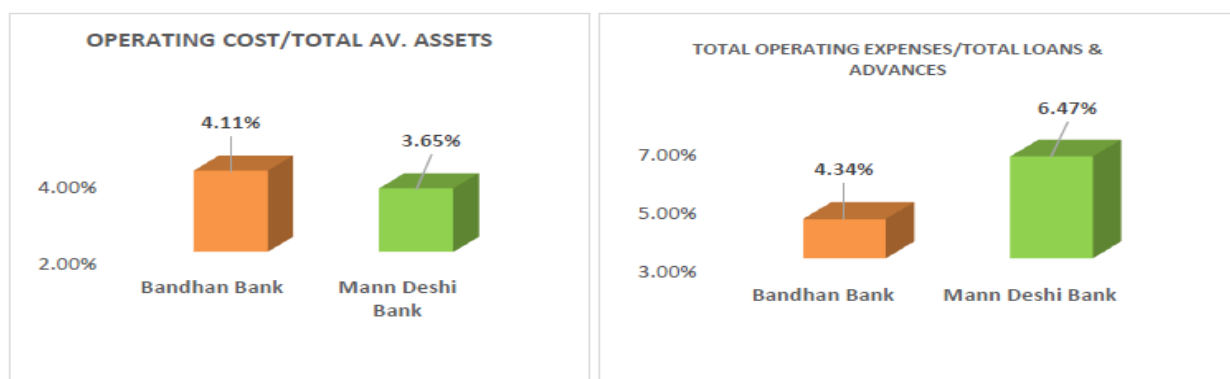


Figure 3: Operating Cost to Average Total Assets and to the loans and advances

(III) Credit Risk Premium

Credit risk premium is the third and final important component of the lending cost. Based on the NABARD default data, the following computation methodology broadly used by the Bandhan Bank provides a fair estimate of 5.09% as the credit risk premium for the microlending which should be loaded while pricing the microloans. The Mann Deshi Bank did not use any such calculations but the same number was used in their case also to facilitate a comparison.

Expected Default Rate	4.50%
Recovery Rate (Unsecured Segment)	0%
Std. Dev. (SD) of the Default rate	0.85%
Expected Return on the Net Worth	20.00%
Income Tax Rate	34.61%
Risk-Free Rate	7.63%
Hurdle Rate <i>[Return on Net Worth/(1- Tax rate) – Risk-Free Rate]</i>	22.95%
Expected Loss Charge <i>[Default Rate*(1-Recovery Rate)]</i>	4.50%
N (Confidence Interval)	3
Capital at Risk <i>[N*SD*(1-Recovery Rate)]</i>	2.55%
Return on CAR <i>[Capital at Risk *Hurdle Rate]</i>	0.59%
Credit Risk Premium	5.09%

(IV) Total Cost of Lending for Microcredit Segment

Considering cost of funds, operating cost, and credit risk premium, the total cost of lending was computed for both the banks (Figure -4).



Figure 4: Total Cost of Lending

It could be observed that the total cost of lending which should ideally be the minimum rate of interest charged was 18.94% for the Bandhan Bank and 17.43% for the Mann Deshi Bank. As such, the cost of lending in case of the Mann Deshi Bank was lower compared to Bandhan bank by about 1.51%. This was mainly due to the lower cost of deposits and also a comparatively lower operating cost as a percentage to average assets in the Mann Deshi Bank. In order to reduce the lending rates further, the cost of lending should come down in all its three components. Against the backdrop of the above assessment, the actual rate of lending and returns have been juxtaposed in order to assess the financial efficiency.

(V) Costs and Profitability/Returns Analysis

In order to further understand the costs, pricing and returns, we look at the following ratios based on the information provided by the banks for the financial year 2016-17 (Figures - 5, 6, 7, and 8).

- (i)** Average interest charged on lending
- (ii)** Net interest margin
- (iii)** Ratio of earning assets to total assets
- (iv)** Loan loss provisions to the operating profit
- (v)** Actual return on net worth
- (vi)** Return on assets
- (vii)** Credit Deposit ratio

It can be observed from the Figure–5 that as against the total cost of lending (including credit risk premium) of 18.94% for the Bandhan Bank and 17.43% for the Mann Deshi Bank, the actual average rate of interest charged by them on loans during 2016-17 was 15.96% and 15.88% respectively. Currently, the Bandhan Bank' rate of interest is 18.40% and 10.52% on its microcredit products. Mann Deshi Bank's rate of interest is 26% on its microlending products. More than 90% of the loan portfolio in the Bandhan Bank was in form of the microcredit only and hence, its average returns on loans at 15.96% is not too far from its peak lending rate.

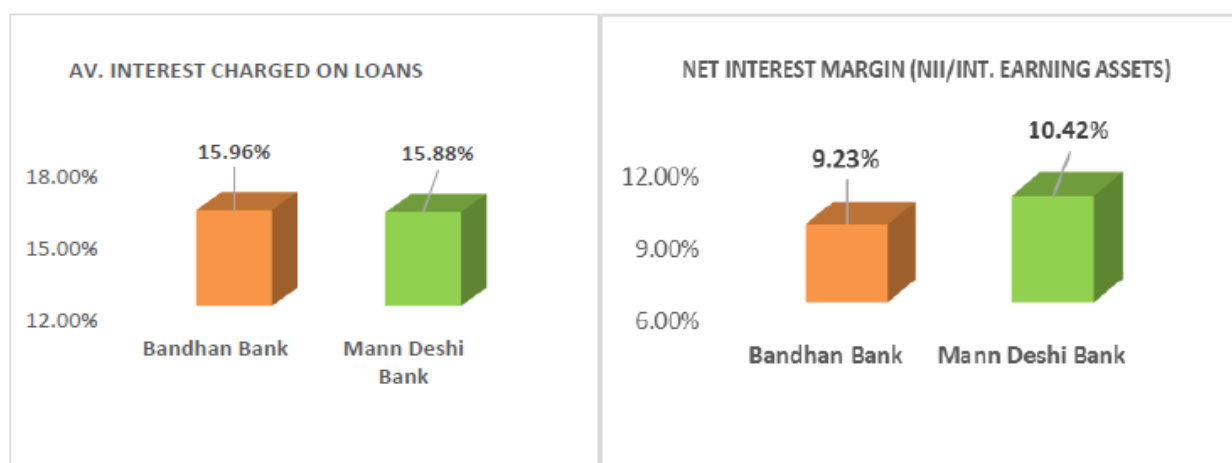


Figure 5: Average rate of Interest Charged on loans and Net Interest Margin

However, in case of the Mann Deshi Bank, only about 30% of its total loan portfolio comprised of the microcredit and hence, its average return on loans at 15.88% was way below its peak rate of 26%. Further, the net interest margin (NIM) of the Bandhan Bank and Mann Deshi Bank was at 9.23% and 10.42% respectively.

The Mann Deshi Bank had a ratio of earning assets to total assets at 85.47% as compared to 77.10% for the Bandhan Bank. However, the return on assets and return on the net worth were negatively impacted in case of the Mann Deshi Bank as 26.36% of its operating profit was consumed by the loan loss provisions. This ratio was 7.75% in case of the Bandhan Bank (Figure–6).

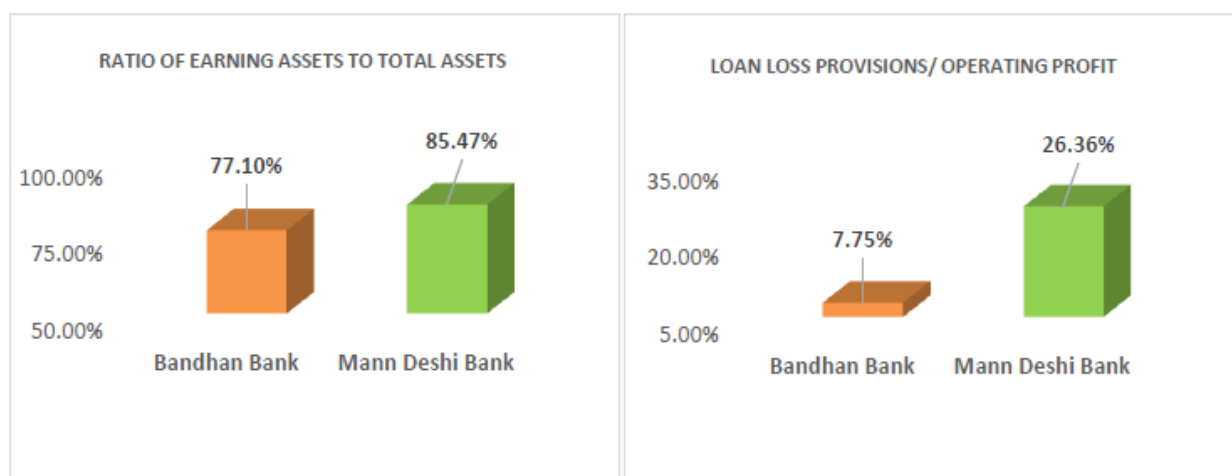


Figure 6: Earning Assets and Loan Impairments and Profitability

This coupled with a comparatively lower CD ratio (Figure-8), the Mann Deshi Bank had earned 7.33% tax adjusted return on its net worth and 0.57% return on assets (ROA) whereas, the similar numbers for the Bandhan Bank were 28.51% and 4.47% respectively (Figure-7).

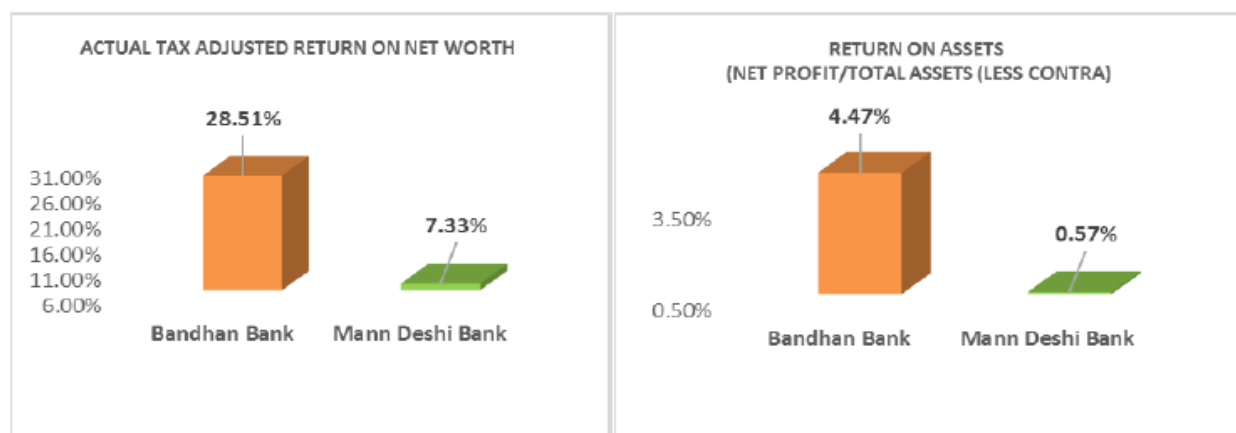


Figure 7: Return on Net Worth and Assets

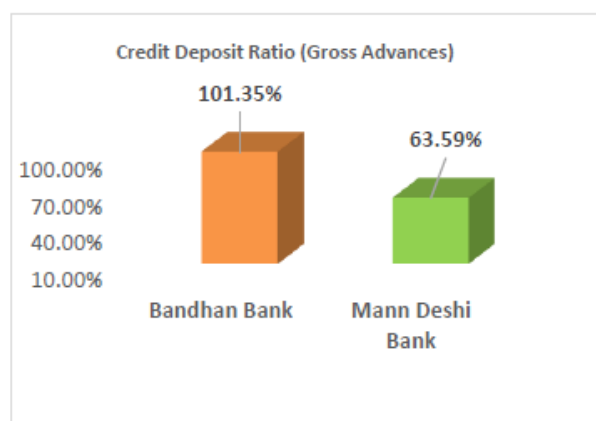


Figure 8: Credit Deposit Ratio

As such, it is apparent from the foregoing analysis that the by earning 28.51%, the Bandhan Bank exceeded its expected return on the net worth which at 20% was loaded into the funding cost computations, whereas the same was lower in the case of Mann Deshi Bank despite having a lower cost of lending, and higher rate of interest on loans. This has been mainly due to its

comparatively lower CD ratio, and lower proportion of high yield microcredit portfolio in its total loan portfolio. As such, the Bandhan Bank fared better than the Mann Deshi Bank in terms of financial efficiency despite having a higher funding and operating cost. However, the superior financial efficiency in the Bandhan Bank has been mainly contributed by its issuance of Inter Bank Participation Certificate (IBPC) with risk participation. By issuing the IBPC, it has been able to boost its income not only by the gains out of the IBPC issuance but also by leveraging the size of its gross credit portfolio. The Mann Deshi Bank did not have access to IBPC market.

Bandhan Bank – Issue of IBPC with risk participation

Issuance of IBPC with risk participation amounting to Rs 9200.00 crore during 2016-17 has helped the bank to leverage its credit portfolio to clock a high CD ratio of 101.35%. A high CD ratio, higher proportion of microcredit in the loan portfolio, coupled with high NIM (9.23%), contained operating cost (4.11%), and low loan-loss provisions to operating profit (7.75%) have led to efficiency gains in the utilisation of financial resources in the Bandhan Bank and resulted in a superior financial performance (ROA – 4.47%, RoE 28.51%). However, as the Mann Deshi Bank did not have regulatory permission to access the IBPC market, to facilitate a comparison, we carry out the following approximate deconstruction analysis to assess the financial performance of the Bandhan Bank without the IBPC transactions.

	Description	Crore / (%)
A	Gain on the IBPC booked in the P/L Account	263.32
B	Total amount of the IBPC issued during 2016-17	9200.00
C	IBPC outstanding as on March 31, 2017	6679.12
D	Return on redeployed funds generated by the IBPC (Av. Return on lending – variable operating cost)* *As against the ratio of total operating cost to average assets at 4.11%, certain elements of the operating cost were treated as relatively fixed such as, Rent, taxes, & lighting, depreciation on property, repairs & maintenance, directors fee, auditors fee, and 50% of the miscellaneous other operating expenses. After adjusting for these, the relatively variable operating cost ratio was computed as 2.95% which was adjusted from the average return on loan at 15.96% to arrive at the figure of 13.01%.	13.01%
E	Total average assets	24865.24
F	Net average assets (total av. assets – av. IBPC issued)	19959.50
G	Actual reported net profit	1111.95
H	Adjusted net profit (excluding post-tax return on the redeployed funds generated by the IBPC) [G - (B*D)*(1-t)]	334.10 (t ~ 35%)
I	Adjusted net profit margin [H/Total Income]	7.73%
J	Adjusted return on assets (net of IBPC) [H/F]	1.67%
K	Adjusted return on net worth [H/Net Worth]	8.57%

Undertaking the above deconstruction analysis, we observe that after excluding the tax-adjusted impact of the additional returns due to the benefit of leverage (additional funds boosting the gross loans), the return on assets (ROA) of the Bandhan Bank comes down from 4.47% to 1.67%, which is still a handsome return in the banking industry.

The RoA of the Mann Deshi Bank stood at 0.57% as explained in the foregoing paragraphs (Figure – 9).

Following the same pattern, after excluding the approximate tax-adjusted impact of the additional returns due to the benefit of leverage (additional funds boosting the gross loans), the RoE and the net profit margin also came down from their respective high levels at 28.51% and 25.74% to 8.57% and 7.73% and resided somewhat in the range of the Mann Deshi Bank's numbers (Figure - 10 and 11).

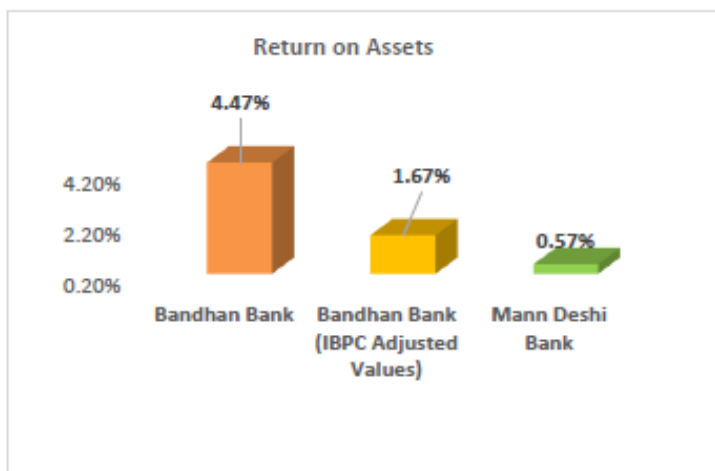


Figure 9: Comparative Position of ROA

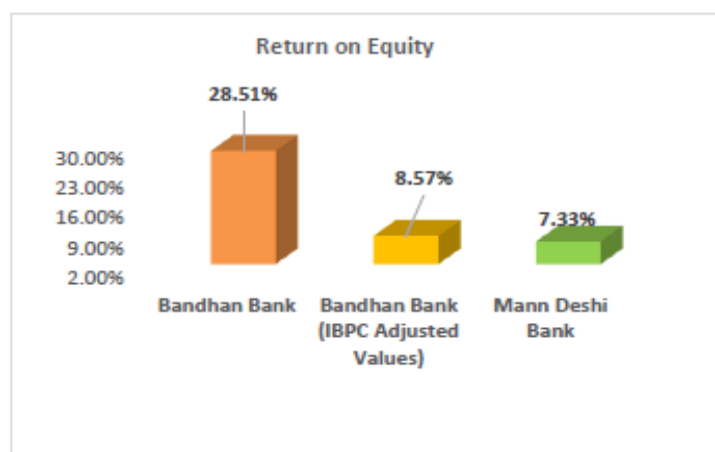


Figure 10: Comparative Position of ROE

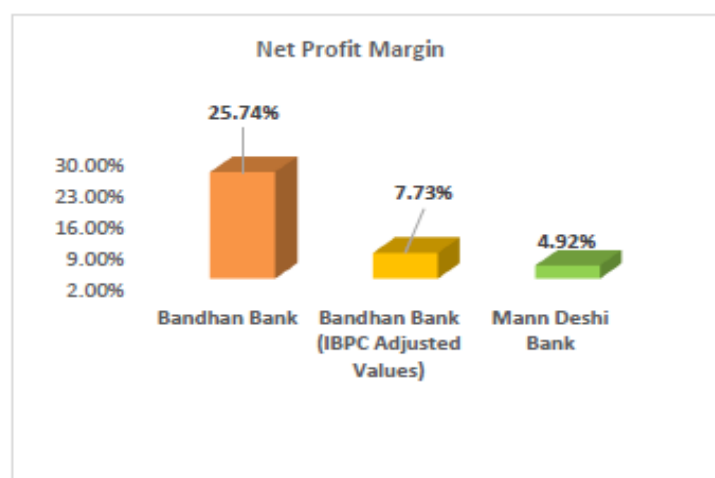


Figure 11: Comparative Position of Net Profit Margin

(B) Operating Efficiency Analysis

Microcredit operations essentially involve group lending through the field work and door-step delivery and as such, the analysis of the operating efficiency has been done with a view to understand the costs relating to field level operations and efficiency in the use of the field level functionaries. It also provides an insight into the impact of the scale on the operating efficiency which finally culminates into the financial performance. Both the banks lend only to women in groups, though the Mann Deshi Bank has an additional weekly-market credit limit product. The analysis of the operating efficiency is based on the information provided by the respective banks.

(I) Average Group and Loan Size

It is seen from the Figure – 12 that the Mann Deshi Bank had smaller group sizes which comprised on an average 5 members in contrast to the 15 members per group on an average in the Bandhan Bank.

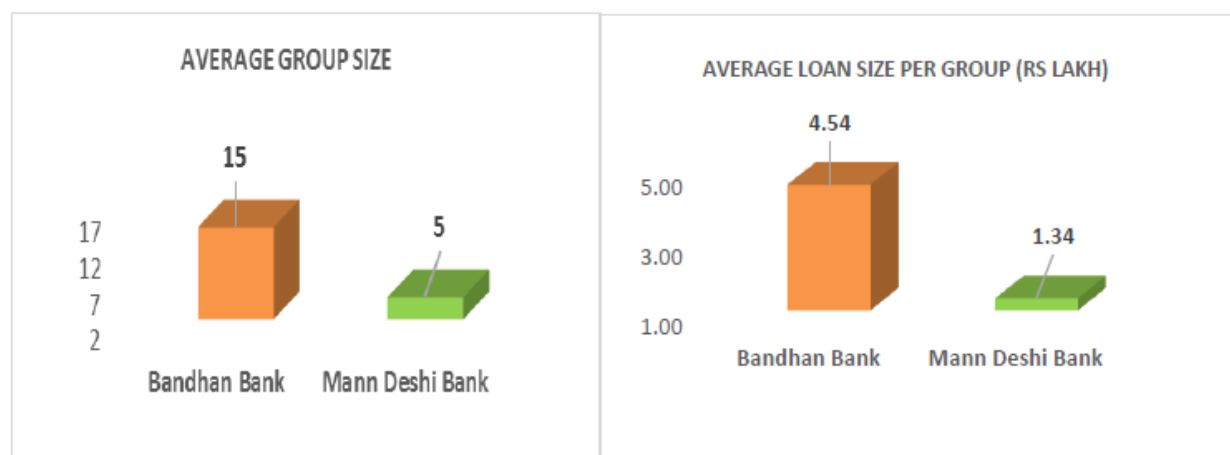


Figure 12: Average Group Size and Loan Size in Microcredit

Further, the average loan size per group was Rs 1.34 lakh in Mann Deshi Bank and Rs 4.54 lakh in the Bandhan Bank. The maximum limit for the microcredit segment was Rs 1.50 lakh per borrower in the Bandhan Bank, whereas, as per the extant exposure norms applicable to UCBs, the Mann Deshi Bank could lend up to Rs 3.00 lakh per borrower (total amount of such unsecured loans not exceeding 10% of its previous

year's total assets) and further Rs 0.40 Lakh per borrower (total amount of such unsecured loans not exceeding 25% of its previous year's total assets).

(II) Average Loan and Borrowers per Field Staff

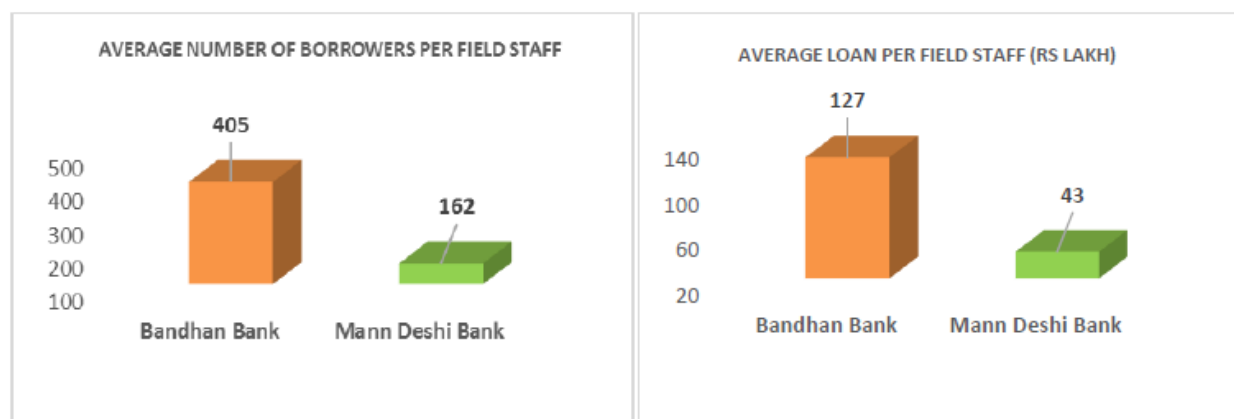


Figure 13: Average Loans and Borrowers per Field Staff

Further, it is apparent from the Figure – 13 that the Bandhan Bank had the benefit scale and operating efficiency as it had microloans amounting to Rs 127 lakh per field staff as compared to Rs 43 lakh per field staff in case of the Mann Deshi Bank. While one field staff handled 405 borrowers in the Bandhan Bank, the corresponding number was 162 in the Mann Deshi Bank. It shows that there was much scope for expanding the base of microcredit in the Mann Deshi Bank both in terms of the value and volume. Within the extant exposure norms on the unsecured advances, it could have lent approximately up to Rs 3500.00 lakh in aggregate (including a total of Rs 2500 lakh comprising loans up to Rs 0.40 lakh). As against this, it had a total of Rs 1603 lakh in form of unsecured microcredit as on March 31, 2017.

(III) Average Annual Emoluments of the Field Staff and Per Borrower Cost of a Field Staff

The Figure – 14 reveals that the Mann Deshi Bank paid average annual emoluments per field staff at Rs 1.62 lakh in comparison to Rs. 1.41 lakh per annum paid to the field staff in the Bandhan Bank. Owing to a lower scale of operations, the high per unit

operating cost and comparatively higher emoluments to the field staff had resulted in a high per borrower annual cost of a field staff at Rs 1002.00 in Mann Deshi Bank as compared to Rs 349.00 in case of the Bandhan Bank. As such, the Bandhan Bank had a superior operating efficiency due to its economies of scale and economies of scope.

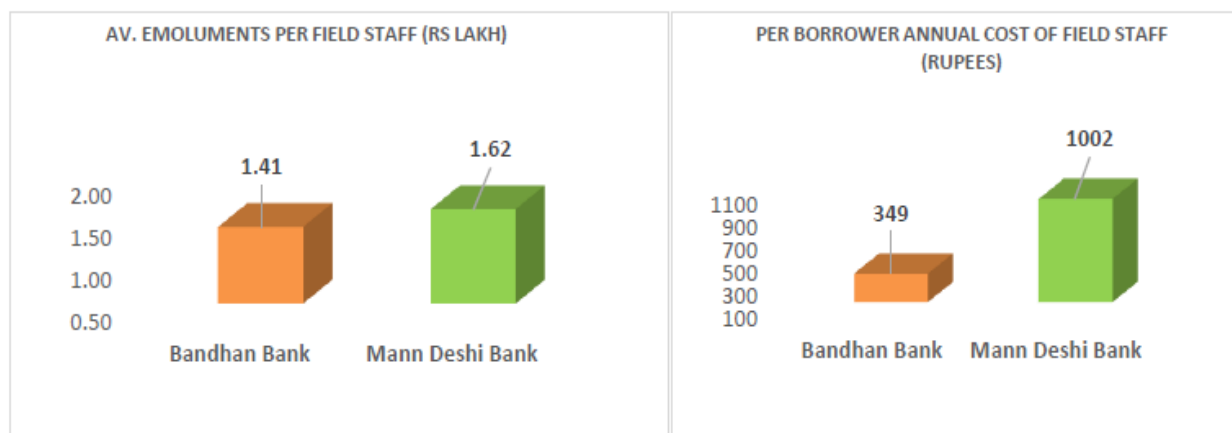


Figure 14: Emoluments of the Field Staff

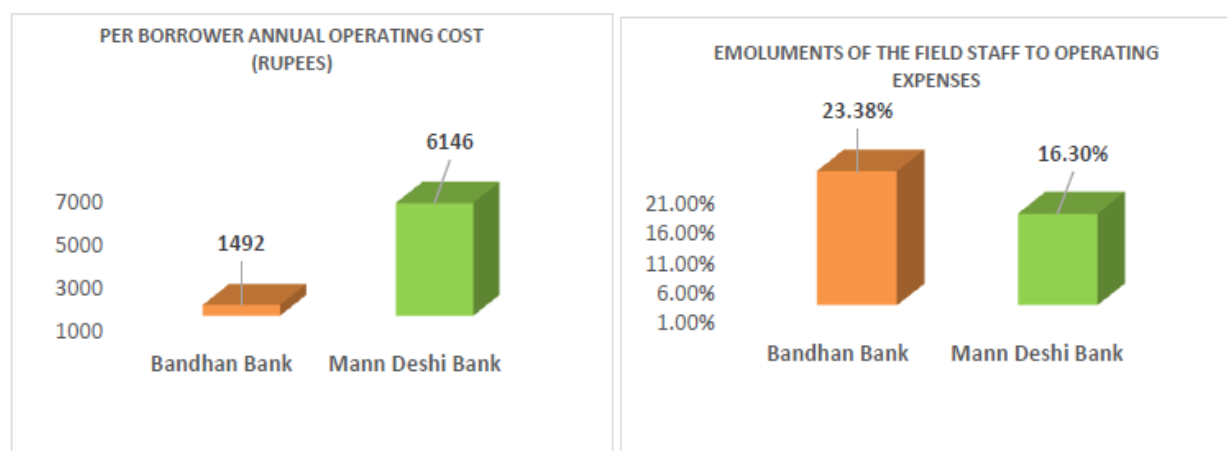


Figure 15: Field Staff Emoluments to the Operating Expenses & per borrower operating cost

However, it can be seen from the Figure – 15 that despite having a lower per head cost of the field staff in the Bandhan Bank, the emoluments of the field staff consumed 23.38% of their operating expenses, whereas the field staff emoluments contributed 16.30% of the operating expenses of the Mann Deshi Bank. This shows that the Mann Deshi Bank needed to look at its cost structure to economise on its miscellaneous operating expenses which added up to 37% of its total operating expenses, second highest after the staff expenses at 44% during the year 2016-17. In addition, the Figure-

15 also shows that the per borrower annual operating expenses were high in the Mann Deshi Bank at Rs 6146.00 as against only Rs 1492.00 in the Bandhan Bank. As such, there was scope for expanding the volume of operations without increasing the aggregate operating cost in case of the Mann Deshi Bank.

(C) Strategic Efficiency Analysis

Strategic efficiency refers to the timely actions, directions, and decisions from the top management with a vision and foresight to ensure efficient and effective utilization of resources and achievement of organisation objectives. When rightly oriented, the strategic efficiency catalyses and translates into the financial and operating efficiency. The following table presents a comparative analysis of the strategic focus of the banks under study and its impact on the bank's overall performance.

Strategic Focus/ Decision	Impact	Effectiveness		Ref. Section
		Bandhan	Mann Deshi	
Group lending to women with doorstep service for collection.	Low credit delinquency, women empowerment.	Effective	Effective	IV
Continued customer retention through gradual limit increases	Growth in business volume and customer loyalty	About 100% retention	About 80% retention	IV
Use of Micro-ATM	Ease of transaction and customer trust.	Effective	Effective	IV
Lowering the cost of deposits/ funds	Lower cost of lending and better margin	Not very effective at present	Good but scope for improvement	VIIIA
Increasing the customer base	Better margins and improved returns	Effective	Scope for improvement	VIIIB
Optimum utilization of financial resources – High CD ratio	Maximum returns on the financial resources deployed	Highly effective	Scope for improvement	VIIIA
Optimum utilization of financial resources – Leverage through the IBPC	Enhancing return of assets and return on equity	Highly effective	Not available	VIIIA

IX. Conclusion

The comparative analysis of financial, operating and strategic efficiency provided very useful conclusions. It was observed that despite having a lower cost of funds and lower operating cost as a percentage of average total assets and charging a higher rate of interest on the microcredit, the Mann Deshi Bank had lower returns on assets and return on equity than the Bandhan Bank. This was mainly due to high efficiency in the use of financial resources in the Bandhan Bank primarily because of the use of IBPC and a high CD ratio, coupled with a large customer base with lower per borrower operating cost and a well guided strategic focus. However, the Mann Deshi Bank had a very small balance sheet size and no regulatory permission to access the IBPC market. As such, in order to facilitate a real comparison, an approximate deconstructed analysis of the Bandhan Bank was also undertaken by netting off the impact of the IBPC transactions. A summary of certain important comparative parameters is as below.

Particulars (Rs Lakh) 31 March 2017 / (2016-17)	Bandhan Bank	Bandhan Bank (After adjusting the impact of IBPC transactions)	Mann Deshi Bank
Capital & Reserve	444645.53		807.00
Deposits	2322865.79		8942.00
Advances	2354329.00	1683907.79	5685.93
Cost of Funds (%)	9.74%		8.69%
Operating Cost (%)	4.11%		3.65%
CD Ratio (%)	101.35%	72.49%	63.59%
Per Borrower annual cost of field staff (Rs.)	Rs 349.00		Rs 1002.00
Interest charged on microcredit	18.40%, 10.52%		26.00%
Average Return on Lending	15.96%		15.88%
Net Interest Margin (NIM)	9.23%		10.42%
Net Profit Margin	25.74%	7.73%	4.92%
Return on Assets	4.47%	1.67%	0.57%
Return on Equity	28.51%	8.57%	7.33%

It could be seen from the above table that after taking away the impact of the IBPC transactions from the financial performance of the Bandhan Bank, its adjusted value of the Net Profit Margin, and Return on Equity were not very much different from the Mann Deshi Bank as was the case with the absolute numbers. However, the return on assets (ROA) of the Mann Deshi Bank was less than the Bandhan Bank mainly because of its lower proportion of high-yield earning assets in its loan portfolio and also due to a lower CD ratio. As such, efficient utilisation of assets, high CD ratio, better proportion of high interest bearing microloans in the total loan portfolio, and a lower per borrower cost of servicing were the key differentiators.

However, it is quite pertinent to note that the Mann Deshi Bank was able to achieve this performance by charging a higher interest rate of 26% as compared to the peak interest rate of 18.40% by the Bandhan Bank. Therefore, given its present level of financial and operating efficiency and scale of operations, it might not be possible for the Mann Deshi Bank to reduce the rate of interest on its microcredit portfolio. To be able to do that it has to roughly double the number of its microcredit borrowers from the prevailing level of approximately 6000 to 12000 without putting any additional pressure on the aggregate operating cost. In the case of Bandhan Bank, on the other hand, with the advantage of a kind of leveraged lending using the proceeds of IBPC, its sizeable scale and operating efficiency, there was scope for further reducing the rate of interest on microcredit operations.

X. Recommendations

The study demonstrated that the microcredit is a highly viable and profitable business not only from the social point of view but also from the commercial point of view and it is also possible to provide an affordable lending under the microcredit model. A combination of financial, operating, and strategic efficiency is needed to be successful in this area. It is important for the banks operating in this area to be nimble in the use of resources. With a certain scale of operations and financial acumen, it is possible to successfully run the microcredit business. This study provided certain benchmarks which could be used for developing suitable business strategies in this area.

XI. Limitations of the Study

This study attempts to analyse the cost and pricing of the microcredit products with a doorstep delivery model. The focus of the study was to understand the importance of the scale and delivery model on the cost of microcredit and to assess the interest rates charged from the point of view of the commercial sustainability. The study has been successful in examining and explaining the financial, operating, and strategic factors involved in the microcredit business from the point of view of the efficiency, costs, and prices. However, like any piece of academic and technical work, this study is also not free from certain limitations, which to some extent constrain the explanatory resolve of the work undertaken.

First, both the banks under analysis also had other credit products besides the microcredit. However, no separate or segmented books of accounts were maintained and hence, it was difficult to carry out an analysis exclusively for the microcredit segment. To a certain degree, this problem was addressed by obtaining additional information from the respective banks, though all the information gaps could not be fully addressed. Second, the banks selected for the comparative analysis had large variation in terms of their scale of operations and the business volume. The common size ratio analysis method helped to overcome this problem to a large extent. Third, the Bandhan Bank had access to the IBPC market while the Mann Deshi Bank did not have such opportunity and hence, their returns were not really comparable. In order to have a meaningful comparison, the financial benefits accrued to the Bandhan Bank from the IBPC transactions were netted off from its reported financial results. However, such adjustments were broadly in the nature of a back-of-the-envelope calculation just to facilitate a comparative analysis and the same in no way reflected precise numbers based upon the actual books of accounts. As such, some minor estimation errors are possible in the numbers depicted in Figures – 9, 10, and 11. Paucity of time always remains a constraint in any analytical work and this study is no exception.

However, it is believed that this study will provide some useful insights about the microcredit operations and will assist in formulation of appropriate business strategies.

A Comparative Study of the Microcredit operations of the Mann Deshi Mahila Sahkari Bank and the Bandhan Bank

Major Findings

1. Lending to women groups, albeit without the use of self-help group (SHG) model, was the predominant form of microcredit operations in both the banks.
2. Interaction with the borrowers of both the banks generally conveyed a sense of satisfaction about the credit delivery and doorstep services.
3. Both the banks were using micro-ATM machines for customer servicing and had borrower retention in the range of 80 - 100%.
4. The Mann Deshi Bank charged rate of interest at 26% as compared to the peak interest rate of 18.40% by the Bandhan Bank for microcredit.
5. Cost of funds was 8.69% in case of the Mann Deshi Bank as compared to 9.74% in case of the Bandhan Bank, factoring a 20% expected return on the equity during the year 2016-17.
6. The Bandhan Bank had the operating cost to total average assets ratio of 4.11%, which was 3.65% in case of the Mann Deshi Bank. However, the ratio of operating expenses to the loan and advances was at 6.47% for the Mann Deshi Bank, as compared to 4.34% in case of the Bandhan Bank.
7. More than 90% of the loan portfolio in the Bandhan Bank was in form of the microcredit, while in case of the Mann Deshi Bank, about 30% of its loan portfolio comprised of the microcredit.
8. The net interest margin (NIM) of the Bandhan Bank and Mann Deshi Bank was at 9.23% and 10.42% respectively.
9. In case of the Mann Deshi Bank 26.36% of its operating profit was consumed by the loan-loss provisions. This ratio was 7.75% in case of the Bandhan Bank
10. The Mann Deshi Bank had earned 7.33% tax adjusted return on its net worth and 0.57% return on assets (ROA) whereas, the similar numbers for the Bandhan Bank were 28.51% and 4.47% respectively.
11. Issuance of IBPC with risk participation amounting to Rs 9200.00 crore during the year helped the Bandhan Bank to boost its income and leverage its credit portfolio to clock a

high gross CD ratio of 101.35% (Mann Deshi Bank – 63.59%). The Mann Deshi Bank did not have access to the IBPC market.

12. The group sizes in the Mann Deshi Bank comprised on an average 5 borrowers in contrast to an average of 15 borrowers per group in the Bandhan Bank. The average loan size per group was Rs 1.34 lakh in the Mann Deshi Bank and Rs 4.54 lakh in the Bandhan Bank.
13. The Bandhan Bank had microloans amounting to Rs 127 lakh per field staff as compared to Rs 43 lakh per field staff in case of the Mann Deshi Bank. While one field staff handled 405 borrowers in the Bandhan Bank, the corresponding number was only 162 in the Mann Deshi Bank.
14. The Mann Deshi Bank paid average annual emoluments per field staff at Rs 1.62 lakh in comparison to Rs. 1.41 lakh per annum paid to the field staff in the Bandhan Bank.
15. The per borrower annual cost of a field staff was Rs 1002.00 in the Mann Deshi Bank as compared to Rs 349.00 in case of the Bandhan Bank. Per borrower annual operating expenses were at Rs 6146.00 in the Mann Deshi Bank as against Rs 1492.00 in the Bandhan Bank.
16. The emoluments of the field staff consumed 23.38% of the operating expenses in the Bandhan Bank, whereas the same contributed 16.30% of the operating expenses of the Mann Deshi Bank due to higher proportion of other expenses.
17. A high gross CD ratio (101.35%), high proportion of microcredit in the loan portfolio, high NIM (9.23%), contained operating cost (4.11%), lower per borrower cost of servicing (Rs. 349 per annum), and lower loan-loss provisions to operating profit (7.75%) led to efficiency gains and were key differentiators in the Bandhan Bank.
18. The banks operating in the microcredit arena needed to be nimble in the use of resources and achieve economies of scale and economies of scope.
19. To be able to reduce the rate of interest on its microcredit portfolio, the Mann Deshi Bank has to roughly double the number of its microcredit borrowers from the prevailing level of approximately 6000 to 12000 without putting any additional pressure on the aggregate operating cost. In the case of the Bandhan Bank, there was scope for passing on its efficiency gains by reducing the rate of interest on the microcredit operations.
20. The study demonstrated that the microcredit is a viable, sustainable, and profitable business and it is possible to provide affordable lending under the microcredit model.

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