Journal of Poverty, Investment and Development
ISSN 2422-846X An International Peer-reviewed Journal
Vol.32, 2017

Efficiency and Productivity of Microfinance Institutions of Ethiopia: A Case Study on Specialized Financial and Promotional Institution (SFPI)

GIDAY GEBREHIWOT GEBREMICHAEL
Ph.D. Scholar
School of Management Studies Punjabi University, Patiala, India

A. S. CHAWLA, (Ph.D)
Professor in School of Management Studies Punjabi University, Patiala, India

Abstract
Ethiopia has an estimated population of more than 90 million. Agriculture is the mainstay of the economy and approximately 83.2% of the country's population live in the rural areas. Ethiopia is one of the least developed countries. The per capita income of the country is only USD 550 during the current period. Poverty and food insecurity are the main challenges and fundamental issues of economic development in Ethiopia. To address the issues of development and food insecurity, several micro finance institutions (MFIs) have established and have been operating towards resolving the credit access problem of the poor. The motivating philosophy of this paper is that unless MFIs become viable and sustainable financial institutions, they can never fully realize their objective of reaching a greater number of poor people. In light of this, this paper has attempted to look at the Financial and Operating Performance of Specialized Financial and Promotional Institution (SFPI) at firm level and compare against the Industry Average (I.A) from Efficiency and Productivity. The major theme of this study is to examine the institutional-level Efficiency and Productivity of SFPI.Data for the study were from secondary sources and various ratios and indicators were used to measure the performance of SFPI. Fifteen years data from 2000 to 2014 were used to see the trend in its performance and revealed through tables, figures and ratios. The major finding of the study indicates that, SFPI's productivity of the staff and credit officers has decreased from year to year. Number of active borrowers per staff has gone down from year to year. Similarly, the borrowers to credit officer ratio / borrowers per loan officer has decreased from year to year until 2010. However; SFPI's Number of Active Borrowers per Loan Officer has shown a continuous incremental during the year 2011 to 2014 as compared to industry average. During the period of 1999 up to 2010 SFPI were scoring lower number of active borrowers per loan officers. On average SFPI has been able to serve only 461.69 active borrowers per loan officer during the study period which is lower than the average number of active borrowers per loan officer of the Industry Average (508.13). So, it is possible to say that on average SFPI is inefficient and unproductive than the industry average by using the productivity and efficiency measures. Similarly, the average cost per borrower for the Industry Average is 15.93% for SFPI which is higher than the average cost per borrower of the Industry Average (8.72%).This rate is very high compared to the industry average thus SFPI operates at highest cost per borrower compared to the industry average. So SFPI is not efficient in comparison to the operating expense ratio of the industry average. Therefore, SFPI is required to adjust its policy that affect the poor achievements may be factored into, ineffectual Human Resource Management (HRM) and high operating costs resulting from cost-inefficiency. The higher cost per borrower is a measure of inefficiency achieved by SFPI compared to other microfinance institutions in the same industry during the study period. Finally, the financial ratios independently are not enough to measure the performance of microfinance institutions. Thus, alternative financial measures such as Data Envelopment Analysis (DEA) and adjustment of the financial statements of the Microfinance Institutions (MFIs) shall be considered by further researchers.
Keywords: Efficiency, Productivity, Microfinance

Statement of the Problem

The Ethiopian economy has been state controlled through a series of industrial development plans since the Imperial Government of Haile Selassie. Under state socialism (1974-91), popularly referred to in Ethiopia as the 'Derg regime', Financial institutions were directed to finance some public projects that may not have passed proper financial appraisal.(Yesuf, 2010). Following the down fall of the Derg regime a new policy have been proposed and implemented to promote the development of the country.

Now, Ethiopia strives to grow and to become under the category of the countries which have middle income societies. Thus; now is the time for Ethiopia to escape from poverty.

So, to achieve such an objective, the financial sector especially the microfinance institutions play an important role by helping the poor who have no access to other financial institutions. In consideration of this, the federal government of Ethiopia has adopted a strategy to support them in their expansion.

The establishment of sustainable MFI that reach a large number of rural and urban poor who are not served by the conventional financial institutions, such as the commercial banks, has been a prime component of the new development Strategy of Ethiopia. (Wolday, 2000).

Financial and operating performance of a company being one of the major characteristics indicates competitiveness, potentials of the business, economic interest of the company's management and reliability of present and future contractors. Therefore, identification of the MFIs weaknesses and strengths through financial and operating performance indicators has great contribution to the management, shareholders, the public, (customers of the microfinance institutions), the regulators (the government bodies) and the economy as a whole. The objective of almost all of the microfinance institutions in Ethiopia is poverty alleviation. To achieve this objective microfinance institutions should be financially viable and sustainable.

Regardless of the increasing trust on microfinance to reduce poverty in Ethiopia there has been amazingly some work undertaken to evaluate their performance. Therefore, Performance concept relating to Microfinance Institutions (MFIs) is a vital and crucial issue for many reasons such as: to ensure donors or / investors effective and efficient utilization of billions of dollars injected in Micro-Finance (MF) programs, also help regulators in controlling and monitoring the MFIs.

A number of studies have been conducted on microfinance institutions. Most of the prior studies focus on assessment of the impact of MFIs on poverty alleviation, impact of MFIs on women's empowerment, the role of microfinance on agricultural productivity, and impact of microfinance institutions on children's education. There are also some studies carried out even on this issue but, the area of Financial and Operating Performance of MFIs in Ethiopia specifically SFPI is not thoroughly researched.

Thus, this paper has attempted to look at the Financial and Operating Performance of SFPI as a whole and Solidarity group compare against the Industry Average (I.A)[1] based on the following parameters of measuring financial performance:

1. Sustainability and Profitability
2. Portfolio Quality
3. Efficiency and Productivity
4. Outreach level

The financial performance indicators are usually ratios extracted from the financial reports (Balance Sheet, Income Statement and Portfolio Report).

Microfinance has been viewed as one way of dealing with poverty by expanding services to the poor and low income persons that do not have access to the formal financial institutions.

Microfinance offers poor people access to basic financial services such as loans, savings, money transfer and micro insurance services. People living in poverty, like everyone else, need a diverse range of financial services to run their businesses, build assets, smooth consumption, and manage risks.

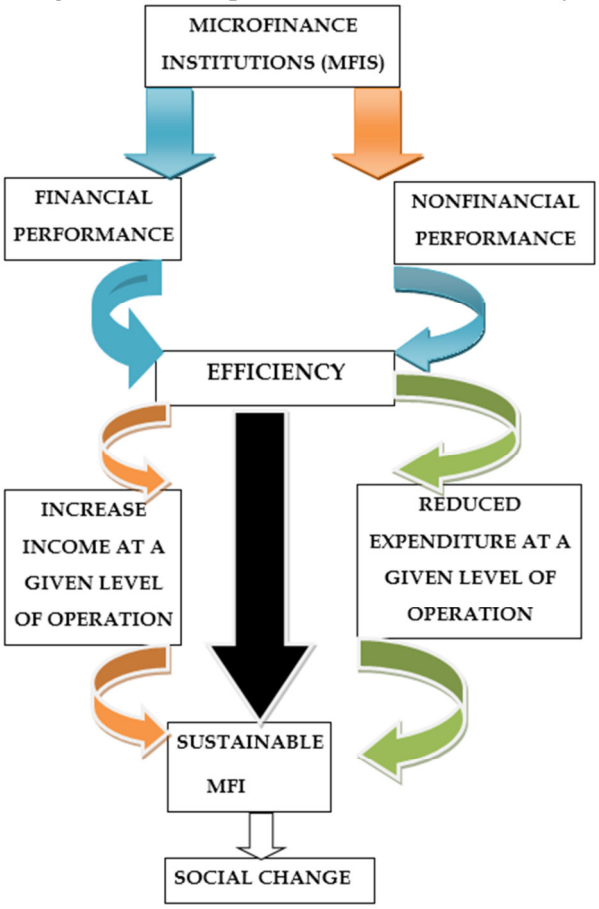
Microfinance is the chance to the poor never had. The typical microfinance clients are low income persons that do not have access to the formal financial institutions. Generally, the contribution of microfinance institutions for the development of the country's economy is viewed as multidimensional: such as, poverty eradication, women's empowerment, creating job opportunity, finance mobilization and so forth. Thus, the motivating philosophy of this paper is that unless MFIs become viable and sustainable financial institutions, they can never fully realize their objective of reaching a greater number of poor people. It is therefore, important to assess the institutional-level financial and operating performance of SFPI and compare to the Industry Average.

- **Objective of the Study**

  The general objective of the study is focusing on the assessment of the efficiency and productivity level of SFPI in comparison with the Industry Average (I.A) for the period covering from 1999 to 2014 from neutral and academician point of view.

[1] For the purposes of this paper, Industry Average (I.A) were defined as the summation of DECSI, ACSI, OCCSSI, OMO and SFPI then divided by five:

Figure 1.1. Conceptual Framework of the Study



Source: *Researcher's Owen Design*

Efficiency and Productivity

Efficiency and productivity indicators are performance measures that show how well the institution is streamlining its operations. Productivity indicators reflect the amount of output per unit of input. These indicators reflect how efficiently the MFI is using its resources, particularly its assets and its Personnel. (Alemayehu, 2008)

Efficiency indicators also take into account the cost of the inputs and/or the price of outputs. Since these indicators are not easily manipulated by management decisions, they are more readily comparable across institutions than the profitability indicators such as return on equity and return on assets. On the other hand, productivity and efficiency measures are less comprehensive indicators of performance than those of profitability**.** Microfinance institutions have much lower rates of efficiency than commercial banks because on a dollar per dollar basis microcredit is highly labor intensive: a hundred-dollar loan requires about as much administrative effort as a loan a thousand times larger. In an MFI, administrative costs may be $15, $20, or even $30 for each $100 in the loan portfolio, so the efficiency ratio is 15%, 20% or 30%, whereas in commercial bank efficiency ratios of 1.5%, 2% or 3% are common. Economies of scale have much less impact on efficiency in MFIs than is usually believed because of the high variable costs of the microcredit technology. If the loan portfolio of an MFI exceeds $2 to $3 million, growth does not seem to bring significant efficiency gains and small MFIs can often be more efficient than their much larger peers. (Tor Jansson ,2003) This paper includes the following indicators of measuring productivity and efficiency: Operating Expenses, Cost per Borrower, Personnel Productivity, Loan Officer Productivity, average outstanding loan size, and other expense ratios.

Generally; ratios related to efficiency and productivity are summarized as follows:

No.	*ratio name*	*Formula*	*explanation*
1	***loan officer productivity***	***number of active borrowers /number of loan officers***	***Measure the average caseload of each loan officer. This is a common ratio, but is difficult to compare among MFIs when their definition of loan officer vary.*** MFIs may also substitute the number of loans outstanding as a surrogate for number of active borrowers and the number of financial services officers for loan officers.
2	***personnel productivity***	***number of active borrowers /Number of personnel*** ***Number personnel of active clients/Number of***	Measures the overall productivity of total MFI human resources in managing clients who have an outstanding loan balance and are thereby contributing to the financial revenue of the MFI. Alternatively, the MFI may wish to measure the overall productivity of MFI personnel in terms of managing clients, including borrowers, savers, and other clients. This ratio is the most useful ratio for comparing MFIs.
3	Average disbursed loan size	***value of loan disbursed/total number of loans disbursed during period***	***Measure the average loan size disbursed to clients. MFIs should be care full to distinguish between disbursed loan size and outstanding loan size.***
4	***Average outstanding loan size***	***gross loan portfolio/Number of loans outstanding***	***Measure the average outstanding loan balance by client .which may be significantly less than the average disbursed loan size. It is frequently compare to per capita GDP as a rough proxy for the income level of a MFIs clientele.***
5	***operating expense ratio***	***operating expense/Average gross loan portfolio***	***This ratio is the most commonly used efficiency indicator for MFIs. it includes all administrative and personnel expenses.*** MFIs that provide smaller loans will compare unfavorably to others, even though they may be serving their target market efficiently. Likewise, MFIs that offer savings and other services will also compare unfavorably to those that do not offer these services, if gross loan portfolio is used as the denominator. Therefore, average total assets is the more appropriate denominator for Financial intermediaries when calculating the operating expense ratio.
6	Cost per borrower ***cost per client***	***operating expense/Average number of active borrowers*** ***operating expense/Average number of clients***	***Provide meaningful measure of efficiency for MFIs, by determining the average cost of maintaining an active borrower or client.***

Source: Consultative Group to Assist the Poorest (CGAP):

METHODOLOGY

In the study, data collected from five Microfinance Institutions namely; DECSI, ACSI, OMO Microfinance, OCCSSI and SFPI. Non-probability purposive sampling technique were employed to select the Microfinance Institutions. Fifteen years financial data have been considered in the study. The study is based on secondary data which is collected from the annual report of the studied Microfinance Institutions, National Bank of Ethiopia and journals. For the purpose of analysis the ratio and graphical analysis techniques are used.

RESULTS AND DISCUSSIONS

Efficiency and Productivity

Table 1.1:- Productivity and Efficiency Measures

Indicator /Year	Operating Expense/ Loan Portfolio		Personnel Expense/ Loan portfolio		Average Loan Balance per Borrower		No of Active Borrowers per Loan officer		Depositors per staff Member	
	SFPI	Industry Average	SFPI	Industry Average	SFPI	Industry Average	SFPI	Industry Average	SFPI	Industry Average
1999	36.21%	**16.39%**	11.30%	**9.51%**	114.00	**203.60**	276.00	**393.00**	118.00	**212.60**
2000	26.17%	**14.59%**	10.01%	**8.81%**	119.00	**199.40**	270.00	**350.00**	120.00	**217.00**
2001	21.16%	**12.69%**	9.24%	**7.98%**	121.00	**206.00**	283.00	**347.00**	122.00	**215.60**
2002	19.33%	**12.00%**	9.21%	**7.28%**	138.00	**213.60**	336.00	**403.40**	139.00	**219.00**
2003	18.25%	**10.83%**	8.90%	**6.11%**	180.00	**221.00**	415.00	**597.60**	180.00	**232.00**
2004	15.54%	**9.20%**	7.80%	**5.06%**	176.00	**235.80**	408.00	**741.00**	176.00	**164.40**
2005	12.89%	**7.40%**	5.90%	**4.15%**	191.00	**229.80**	531.00	**566.40**	191.00	**197.60**
2006	12.40%	**6.50%**	5.03%	**3.57%**	208.00	**228.20**	581.00	**522.80**	208.00	**168.40**
2007	12.02%	**6.53%**	5.40%	**3.59%**	220.00	**232.20**	468.00	**578.20**	220.00	**241.60**
2008	13.00%	**6.89%**	8.21%	**4.16%**	186.00	**235.60**	427.00	**616.80**	198.00	**235.20**
2009	15.48%	**7.03%**	7.65%	**4.16%**	164.00	**236.20**	433.00	**563.00**	167.00	**252.60**
2010	6.54%	**5.08%**	4.09%	**3.38%**	171.00	**229.00**	480.00	**532.80**	172.00	**231.40**
2011	12.70%	**6.52%**	7.99%	**4.53%**	189.00	**226.80**	518.00	**511.20**	201.00	**268.20**
2012	11.59%	**6.27%**	7.51%	**4.37%**	174.00	**182.60**	574.00	**472.00**	175.00	**271.20**
2013	10.30%	**5.60%**	6.72%	**4.00%**	174.00	**177.40**	719.00	**474.20**	176.00	**277.40**
2014	11.30%	**6.09%**	7.57%	**4.23%**	176.00	**169.40**	668.00	**460.60**	181.00	**284.60**
Average	**15.93%**	**8.72%**	**7.66%**	**5.31%**	**168.81**	**214.16**	**508.69**	**461.13**	**171.50**	**230.55**

Source: Researcher's own computation from MIX Market Inc. website (www.themixmarket.com).

The **average loan balance per borrower** indicates the efficiency of MFIs in selling the loans. Loans are the main product of most microfinance institutions. Thus, all things being equal, the more loans are sold, the better for profitability and operational sustainability. The above table for this variable shows that the mean average loan balance per borrower for MFIs in Ethiopia is $214.16 indicating the microfinance industry in Ethiopia provides, on average, 214.16 USD for a borrower still the average loan per borrower for SFPI clients is 168.81 USD WHICH is too much below the average loan per borrower of the Industry Average in Ethiopia. The maximum amount of the average loan balance per borrower is $236.20 while the minimum is $16940 that can be given for a single borrower. However, according to a study by the Lafourcade, Isern, Mwangi, and Brown (2005), an average loan balance for African countries was 307 USD even on 2005. Compared to this figure, after all these years, the average Ethiopian MFI"s average loan balance per borrower is 214.16 USD. Based on this, MFIs in Ethiopia offer the smallest average loan balances of all African regions, in absolute terms when compared to this figure.

The **cost per borrower** shows the efficiency of MFIs in servicing the finance to the borrowers at the lowest possible cost. The lower this value, the more it implies that the institutions are efficient in serving the borrowers.

As shown on Table 5.4, the operating cost has decreased from 36.21% in 1999 to 6.54% in 2010 but at the end of 2014 SFPI registered 11.30% per Birr in outstanding portfolio. The mean of this variable for the selected microfinance institutions stands at 0.1593 for SFPI and 0.82 for the Industry Average. The maximum and minimum value for the variable is also .3621 and 0.0654 respectively for SFPI and the maximum and minimum value for the variable is also 0.1639 and 0.0508 respectively for the Industry Average (I.A). This indicates that MFIs in Ethiopia are incurring on average .872 USD to serve a single borrower. Based on this we can say that they are efficient/inefficient comparing with the bench mark for the variable. However, an average figure for cost per borrower in African countries was 0.65 USD (Lafourcade et al, 2005). For Ethiopian MFI, when compared to this average it is the largest. This indicates that Ethiopian MFIs are inefficient in terms of the cost per borrower relative to its African peers. The same study (Lafourcade et al, 2005) indicates that MFIs in the East African countries are the most inefficient in terms of the cost per borrower compared to the other African regions.

Table 5.4 also indicates that SFPI's productivity in terms of number of active borrowers per staff is lower than the industry average all over the periods covered by the study. At the industry level productivity in terms of number of active borrowers per staff share is 214.16 on average while at SFPI number of active borrowers per staff is only 168.81 on average. However, the borrowers to credit officer ratio / borrowers per loan officer has increased 270 in 2000 to 719 in 2013.

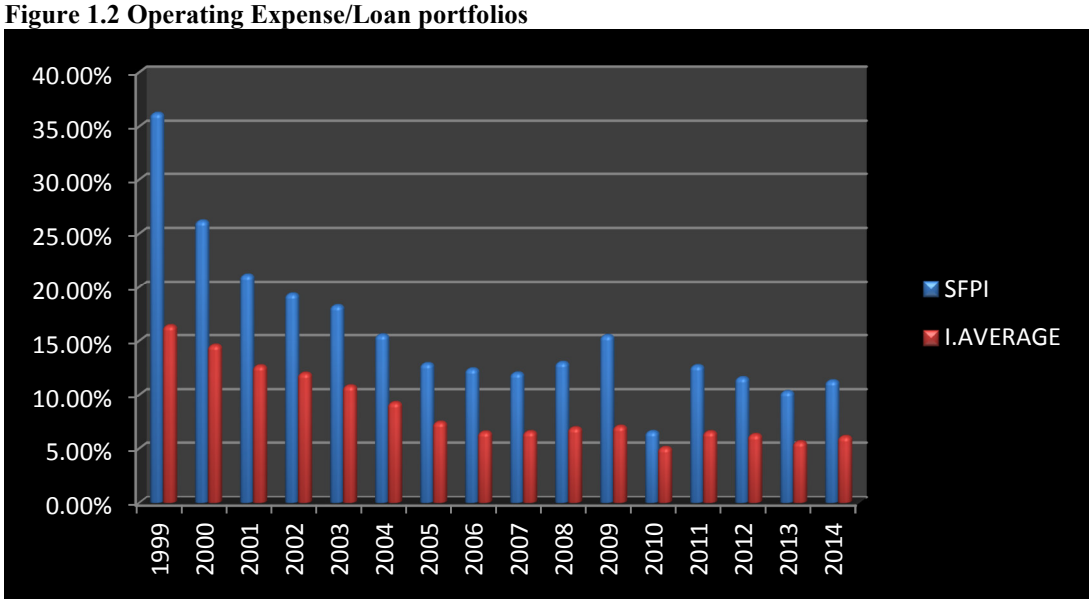
On average SFPI has been able to serve only 461.69 active borrowers per loan officer which is lower than the average number of active borrowers per loan officer of the Industry Average (508.13). Hence it is possible to say that on average SFPI is inefficient and unproductive than the industry average by using the

productivity and efficiency measures.

As shown on Table 5.4 above, the operating expense ratio of SFPI is higher than the Industry average all over the periods covered by the study. On average SFPI had operating expense ratio of 15.93% which is higher than the average of operating expense ratio of the Industry, i.e. 8.72%. This rate is very high compared to the industry average. So SFPI is not efficient in comparison to the operating expense ratio of the industry average. Therefore, SFPI is required to adjust its policy that affect the poor achievements may be factored into, ineffectual Human Resource Management (HRM) and high operating costs resulting from cost-inefficiency. The higher cost per borrower is a measure of inefficiency achieved by SFPI compared to other microfinance institutions in the same industry.

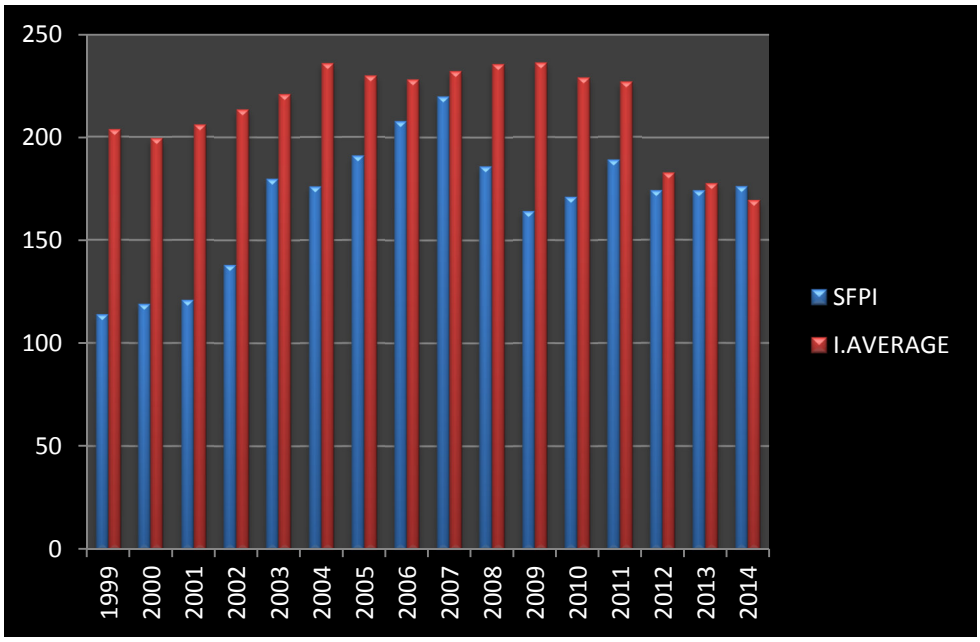
Operating expense ratio, according to CGAP (2003), is the most commonly used measure of microfinance efficiency. It measures how an MFI"s management has been efficient in reducing operating costs at a given level of operation. The lower the operating expense ratio will indicate efficiency in microfinance institutions" cost reduction strategy. An MFI is operating at lower cost, which means, all things being equal, efficient. The operating expense ratio for the Ethiopian microfinance industry shows 0.872 in its mean. This indicates that on average they are incurring 8.72 cents in operating expense for each dollar in the gross loan portfolio. Some highly efficient institutions incur operating expense of 16.39 cent for each dollar in the gross loan portfolio. On the other hand, SFPI as an institution is incurring an average operating expense of 15.93 cents for each dollar on their gross loan portfolio which is above the mean operating expense of the industry average.

Figure 1.2 Operating Expense/Loan portfolios



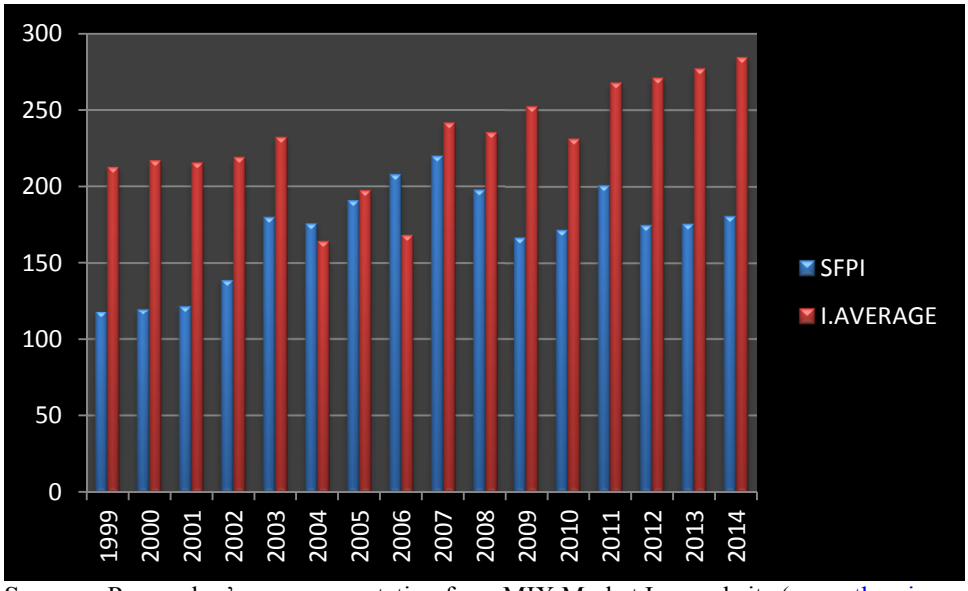
Source: -Researcher's own computation from MIX Market Inc. website (www.themixmarket.com)

Figure 1.3No of Active Borrowers per staff member



Source: -Researcher's own computation from MIX Market Inc. website (www.themixmarket.com).

Figure 1.4 Depositor per Staff member



Source: -Researcher's own computation from MIX Market Inc. website (www.themixmarket.com)

REFERENCES

WoldayAmha (2000) "Review of Microfinance Industry inEthiopia".

Wolday A. (2008) A decade of microfinance institutions (MFIs) development in Ethiopia: Growth, performance, impact and prospect (2008-2017). Occasional Paper No. 2, AEMFI. Addis Ababa.

Yaron Jacob, (1995).Successful Rural Finance Institutions, Discussion Paper, vol. 150, Washington, D.C., World Bank,

Yesuf legas, 2010 performance evaluation of the commercial bank of ethiopia: pre and post liberalization Unpublished MSc. Thesis, Department of Accounting and Finance, Mekelle University.

Yunus, Muhammad (1999), "Banker to the poor-micro-lending and the battle against world poverty", New York, Public Affairs

Zaid Negash and et al. (2002). Microfinance Theory Policy and Experience: Mekelle, Ethiopia.

Tilahun (2013); Determinants of Microfinance Sustainability in East Africa.