# Welfare Impacts of Microfinance on Entrepreneurship and Financial Sustainability: A Case Study on Islamic and Conventional Micro Financing

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### **Abstract**

There is tremendous growth of microfinance industry in Pakistan both in terms of active borrowers and gross loan portfolio. The present study has examined the structure of both the conventional and Islamic microfinance programmes to measure its welfare impacts on entrepreneurial development and financial sustainability. Primary data is collected from 625 recipients who received loan from Akhuwat Foundation and JSW in Gujranwala division. The findings reveal that all the respondents have not invested loan in business and around one-third still lack the business. The multivariate analysis shows that microfinance loan has no significant impact on net profits and financial sustainability. The other factors i.e. saving, enterprise experience and location matters for earning more profits.

**Key words:** Microfinance, Entrepreneurship, SMEs,

## Introduction

Microfinance is known as microcredit, comprises of financial service i.e. loans, savings and insurance for low income groups who don't have access to formal financial institutions. The aim of microfinance is to provide investment and business opportunities for low-income groups through better access to financial resources (Navajas et al., 2000). Ultimately, its users will outgrow these smaller loans and improve their businesses and wellbeing. Most of the microfinance schemes operate both through individuals and communities and have their ultimate impacts on economic growth through market determined business enterprises, SMEs development and poverty alleviation (Saul and Susanna, 2016). While the concept has been used globally for centuries, Anarchist Lysander Spooner in 18th century wrote about the role of micro credit as an approach to poverty alleviation through entrepreneurial activities. In 50s and onward donors like World Bank and many others initiated poverty eradiation projects in low income countries through concessional loans and grants. Bangladesh's Dr. Muhammad Yunus was the pioneer of the modern microfinance system, who introduced a crowd-funding based micro-lending formal system. While working at Chittagong University in the 1970s, Dr. Yunus started to offer small loans to poor basket weavers in 1970s and after a decade effort he succeeded to establish the Grameen Bank in 1983 to reach a much wider audience (Caramela, 2018). With passage of time, microfinance services expanded their portfolio by adding more financial services including insurance, savings, training, marketing etc Initially NGOs were the key players, latter other commercial institutions also jumped into keeping in view tapping huge market and heavy demand in low income countries. . It is worth to note that most of the targeting groups of microfinance situate around poverty line and from lowincome groups as they may fulfil their basic needs and have aspiration to improve their lives, chronic poor are usually not targeted by microfinance schemes (De and Morduch, 2004).

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The estimates of World Bank reveal that microfinance industry is around 100 billion and 200 million clients worldwide. The supporters of microfinance claim that it is the modern way of employment generation, entrepreneurship, poverty eradication and economic growth. The target groups are the low-income groups who are usually not served by the conventional system (Otero, 1999; Badugu and Vivek, 2016). However, the concept not went out of critic. The opponents consider that micro-loans are smaller than the traditional bank loans with high interest rates. The loans are also not sufficient to start substantial business and serves only basic needs, like food and shelter, which eventually lead to more debt (Caramela, 2018).

Muslim community might have reservation on conventional microfinance due to existence of interest rates. Around 72 percent of the Muslims avoid conventional financial services, even when they are available (Honohan, 2008). In these countries, Islamic Microfinance has been progressively growing because it is based on Islamic principles of not charging interest rate (Rahman, 2007). The main ideology is to share the risks of losses on both the investor and borrowers by promoting social benefits. Interest free microfinance has different ways; renowned methods are *Musharaka*, *Mudaraba* and *Murabahah* (Segrado, 2005).

Pakistan, a country of 210 million populations, has been facing high poverty and unemployment rates. Being an informal economy, majority of the population lacks access to formal financial services. Small and Medium Enterprises (SMEs) has a vast potential of microfinance as their share in total enterprises is 90 percent and significantly contributes in GDP. However, they are informal, low productive, lacks technology, facing high risks of closure and is constrained by resources. The microfinance sector has witnessed an unprecedented growth in Pakistan as the active borrowers are more than 5.5 million with a gross loan portfolio (GLP) of Rs. 203 billion in 2017. Currently more than 40 formal microfinance providers are operational including 24 microfinance institutions, 11 banks and 5 rural support programmes. Despite positive development, targeting is far below the potential size customers and current penetration rate stands around 11.5 percent (PMN, 2017).

Keeping in view high youth bulge and potential of MFIs in promoting SMEs finance, Pakistan has vast untapped entrepreneurial potential that can be unleashed by promoting SMEs. Realizing the potential, the government has considered microfinance as a policy tool to promote entrepreneurship and to improve the life of low income groups. Various studies in Pakistan has observed the welfare impacts of MFIs on employment and wellbeing i.e. Rauf and Tahir (2009), Ali and Ashan (2010), Noreen et al. (2011), Ali et al. (2015), Qazi et al. (2015), Mahmood et al. (2016) and many others, however, a comparative analysis on conventional and Islamic microfinance is still missing. Further, welfare impacts on financial sustainability are not explored. The present study is the unique that it has used the primary survey from benefiting households of conventional and Islamic microfinance and aims to gauge the income and financial sustainability impacts of microfinance.

The rests of the study is organized as follow. Section 2 provides a brief review of literature on both the conventional and Islamic microfinance followed by an overview of microfinance progress in Pakistan in section 3. Both the data collection and methodology are detailed in section 4. Results are discussed in section 5 and 6, followed by conclusion and policy recommendation in the last section.

### A Review of Literature on Microfinance

Microcredit is defined as a credit provided to the lower income groups, free of collateral through institutionalized mechanism. Microfinance is the formal schemes and programmes, through microcredit, savings, insurance, money transfers, and other financial products, designed to improve the well being of poor and lower income groups through better access to saving and services loans (Schreiner, 2000). "Microfinance primarily refers to financial services such as microfinance, savings, deposits, loans, payment services, money transfers, and insurance which are provided to people; who operate small or micro enterprises where goods are produced, recycled, repaired or sold who provide services such as labour, farmers, tailors and cobblers and get wages or commission; who rent out small portion of land, vehicles, machinery, livestock and tools; and to other groups of people, both urban and rural areas, at the local levels of developing countries" (Robinson, 2001).

According to Murray and Boros (2002), microfinance has several characteristics including; small short-term loans, payment schedules attribute frequent instalments, instalments made up of both principal and interest, short processing period for acquiring loan along with simple application procedures. In addition, no collateral is required contrary to formal banking practices. Instead of collateral, microfinance intermediaries use alternative methods, such as the assessments of client's repayment potential by running cash flow analysis. Another beauty of microfinance is the targeting to women with the belief that it will improve their empowerment and freedom. Various models of microfinance differ on conceptually but having the unique aim to provide financial services to poor and lower income groups.

## **Conventional Models of MFIs**

Various conventional models are effective around the globe. For example, the Grameen bank model has used the group lending approach to reduce non-payment risks. A group is comprised of 5 to 8 members, they could be neighbours or those who can understand each other well and recognize their needs. Being a cultural society in South Asia, if one member of the group will not pay instalment, the whole group will be responsible, thus member of the group are jointly responsible and accountable for the repayment of each other's loans. To ensure repayment, peer pressure and joint liability works very well. The entire group will not be eligible for further loans, even if one member of the group becomes a defaulter (Sengupta and Aubuchon (2008).

FINCA Microfinance Model is another initiative that has used banking system in rural areas to generate financially sustainable solidarity groups. FINCA trains small community groups to form community credit enterprises (CCE). John Hatchwas first developed this model in Bolivia during the 1980s. In this model, 40 to 60 members, which are usually women made a group and work with FINCA as a village bank. The village bank is given the loan for further lending to individuals. The funding agency organizes the election of a management committee, developed the rules and regulations and give training to its members to govern the village bank. The first individual loan which is usually US\$ 50 is repaid on a weekly basis. These instalments are consisting of equal amount of principal and interest payment and divided over a four-month period. The village bank collects these payments at regular basis and at the end of loan period it pay back the entire loan principal plus interest to the implementing agency. If the village bank repays in full loan's amount then it is eligible for a second loan. If the village bank is unable to pay the amount due, the implementing agency stops further credit until reimbursement is made (Fotabong, 2011).

## **Islamic Microfinance Models**

According to Islamic law (sharia), the interest rates (Riba) are prohibited on money lending. However, borrowers can share the profit with lenders (Duhmale, Sapcanin). The Islamic microfinance model encourages lenders to take profit share rather than interest rate by sharing the risk between the lender and buyer. The Islamic model provides loan to poor masses without interest. Obaidullah (2008) has explained the two Islamic microfinance instruments. First is the *charity based model*, where the objective is to target the chronic poor masses who cannot fulfil their basic necessities and require financial assistance on basic needs' consumption smoothening. Under the *Waqaf*, funds collected under zakat and sadqa can be utilised for such destitute. *Qard-e-Hasna* is another form of interest free loans for the needy peoples where in case of lending institute, it may only charge its operational cost from borrower. Second is the *profit based model* that has various further following forms.

Under the *Murabaha* system, the lender buys assets for its client and then sells at a fixed profit margin. Due to asymmetric information, it is important for both parties to know the price and cost of this transaction for minimising the probability of exploiting. *Mudaraba* and *Musharaka* are the partnership based models where the former implies the partnership between two parties in a way that one party (MFIs) provides the funds (rab-ul-mal) while other party (client) provides the managerial skill in implementation of a project. Profits are divided according to the predetermined rates, set at the time of contract, while in case of loss the financier party (MFIs) bears the loss of capital. In *Musharaka*, both parties (MFIs and client) invest in both capital and in management, and profit share is based on pre-agreed ratios set at the time of contract. The loss sharing strictly depends on the proportion of capital invested. In Islamic MFIs this product is very productive because the MFIs will not only provide capital but will also help in management problems.

*Ijara* is an Islamic renal model in which income generating assets are given to the clients at predetermined rate and intervals. Under this contract the ownership of the asset remains with MFIs but the clients use the assets against rent. *Takaful* is an Islamic insurance and it is most important and useful for clients of MFI institutions. The clients of MFIs are unable to save for uncertain events in the future, so *Takaful* give an opportunity to secure your future. *Takaful* is a non-profit model and under this model all members provide joint guarantees. In *Takaful* model, the fund money is used to help the participant of the joint fund in problematic times; sickness, death or business loss.

## **Welfare Impacts of Microfinance**

There is a debate in literature whether microfinance initiatives improve economic wellbeing through entrepreneurship development, poverty reduction and job creation. In favour of entrepreneurship development, Samer et al. (2015) found that availability of microcredit led improvement in informal SMEs and income. MkNelly and Christopher (1996) made an experimental study in Thailand and the results of Randomized Control Trial (RCT) shows that microfinance led improvement in income generating strategies among the participants. Mahajan and Bharti (1996) found that besides support in small business, microfinance helped households in consumption smoothening due to 'consumption credit'.

The opponents consider that amount is not sufficient to develop sustainable businesses. Karnani (2011) argued that skills and creativity matters more for entrepreneurship rather than access to microcredit in developing countries. Mahajan (2005) considered that business management, technical skills and market linkages matter for entrepreneurship development

rather than loan. Poor household might not run business successfully due lack of their basic needs fulfilment. Most of them resided in rural areas where they lack infrastructure and market linkages. Roodman and Uzma (2006) found no significant improvement in income for the beneficiaries of microfinance in Bangladesh.

Regarding household wellbeing impacts of microfinance, again the welfare impacts are mixed in literature. Zaman (2000) found that it can help in reducing household vulnerability by providing emergency support, smoothing consumption, promoting enterprises and contribution in women empowerment. Dunn (1999) found that there is 13 percent less poverty among the microfinance clients in peru. Similar impacts were found by Wood et al. (1997) for Bangladesh and Mustafa and Ismailov (2008) for Pakistan.

The opponents consider that microfinance did not have impact on poor households, it can only improve the life of non-poor borrowers who can use microfinance in better way (Wood et al., 1997). Banerjee et al. (2014) suggested that majority of the clients of microfinance were poor, uneducated and lacks business experience and it might undermine the positive impacts. The literature also showed mixed impacts on Bangladesh. Khandker (1998) found positive impacts, whereas Morduch (1998) considered nominal impacts on poverty reduction by pointing out that most of the studies who found significant impacts lack homogenous targeted and controlled groups. According to Yunus (2003), "Microfinance is not a miracle cure that can eradicate poverty in one fell swoop. But it can alleviate poverty for many and reduce its severity for others. Combined with other innovative programmes that improve people's potential, microfinance is a crucial tool in our search for a poverty free world".

## Microfinance in Pakistan

The history of microfinance is quite long in Pakistan. The pioneer initiative was Comilla pilot project in East Pakistan in 1960s. Being an agrigarian economy, the state established Agricultural Development Bank in 1961 to improve agriculture productivity by providing subsidised loans to farmers. Village Aid was another initiative in early 60s for provision of technical skills and financial assistance to cottage and small scale industries. Latter, the government commissioned conventional rural support programs namely Agha Khan Rural Support Program in northern Areas and Orangi Pilot Project in Karachi during 1980's to alleviate poverty. AKRSP was implemented during 1990's with the establishment of National Rural Support Program (NRSP) and Sarhad Rural Support Program (SRSP). These programs channelized subsidized loans and financial services to the poor people living in rural areas.

Realizing the importance of microfinance as an effective tool for poverty alleviation, the government launched Microfinance Sector Development Program in 2000. The program was mandated to provide financial services to the poor people on sustainable basis. Under this program the Government of Pakistan commissioned Khushali Bank, the first microfinance bank in 2000. Khushali bank was mandated to provide conventional subsidized loan with or without collateral to the deprived class of people.

**Table 1: Microfinance Analysis in Pakistan** 

Years	Micro credit		Micro Saving		Micro Insurance	
	Active Borrowers (in millions)	Value (billions Rs)	Active Savers (in millions)	Value (billions Rs)	Policy Holders (in millions)	Sum insured (billions Rs)
2010	1.9	27.5	3.6	12.7	2.7	33.7
2011	2.2	33.9	4.3	18.2	2.7	32.1
2012	2.6	46.6	5.2	30.0	3.2	41.8
2013	2.8	50.8	5.1	29.3	3.2	43.6
2014	3.5	94.5	13.2	52.9	4.3	73.5
2015	4.2	152.5	15.8	77.3	5.5	128.9
2016	5.2	171.0	25.2	147.5	5.3	167.9
2017	5.5	202.7	31.0	186.9	7.3	198.7

Source: Pakistan Microfinance Network and Annual PRSP Reports

Microfinance sector has witnessed an unprecedented growth since 2000 in Pakistan. Microfinance received a further boost with the establishment of the Pakistan Poverty Alleviation Fund (PPAF) in 1999 as an apex funding body for the sector. Promulgation of the Microfinance Ordinance 2001 further strengthening the micro finance ecosystem by providing a framework for creating privately owned specialized Microfinance Banks (MFBs) under the supervision of the State Bank of Pakistan (SBP). Presently there are various government and private organisations including microfinance institutions, banks and rural support programmes, both conventional and Islamic modes that have been providing financial services. Pakistan is among the leading countries who issued regulations for branchless banking in 2008 that helped in digitizing financial inclusion. Industry infrastructure has been strengthened by the establishment of the Microfinance Credit Information Bureau (MF-CIB) which includes not just the regulated MFBs but all microfinance practitioners in the industry. Currently the microfinance sector has reached to 5.5 million active borrowers with a gross loan port folio of Rs. 293 billion. 31 millions are the active savers 7.3 million are the micro insurances (Table 1).

Women are the important stakeholder of microfinance industry as their client share out of the total borrowers is more than half. It is worth mention that some organisations explicitly targets only the women. As shown in Table 2, the average loan size significantly increased overtime, it was Rs. 19 thousand in 2010 and goes up to 55 thousand in 2016. The services are also expanding overtime with more spread of branches as well as deployment of staff. Currently the sector has been providing jobs to more than 36,000 individuals. Portfolio quality is also sound as the assets are rising overtime. Overall the figures in Table 2 reveal tremendous growth in the sector.

# **Data and Methodology**

As detailed in introduction that aim of present study is to observe the welfare impacts of both the conventional and Islamic microfinance. We have selected the Akhuwat Foundation, an Islamic mode of microfinance and Jinnah Welfare Society (JWS), an operational body of Pakistan Poverty Alleviation Fund (PPAF) that works under the conventional microfinance by following Grameen bank model.

JWS initiated microfinance operations in 1990 in Gujranwala and has been working with PPAF and many others including KIVA (a US based NGO) for microcredit, enterprise development, agriculture financing, SMEs, health insurance etc. Currently the organisation is working in 6 districts, 29 active offices, 37 thousand microfinance clients and more than 6

billion disbursements. The loan amount ranges from Rs. 15 to 60 thousands, and next loan depends on the repayment of previous loan. JWS follows the Garameen Bank microfinance model where loan is issued to a group of 10-15 individuals based on social collateral. The organization charges 20 percent of the principal amount as interest fee and 3 percent in terms of insurance fees. The length of repayment varies by product-to-product; however, loan is repaid every month in fixed instalments through commercial bank.

Akhuwat Foundation is an Islamic mode and was initiated in 2001. Almost all process of group loans takes place in Mosques and Churches where a group is comprises of 3 to 5 members. Loan amount ranges from Rs. 12 to 70 thousands. According to Amjad (2015), the decision of using Mosques and Churches is due to more involvement of self-accountability and saving operational cost of establishing offices. At the time of receiving loan, applicants pay 5 percent of loan as membership fee and 1 percent of total amount for loan insurance. In case of death or permanent disability, the repayment is waved off. A comparison of both the organisations in terms of operational business is placed in Annex A

Table 2: Microfinance Industry Performance Snapshot (2010-2017)

Years	Women Borrowers (% share)	Average Loan Size (Rs in 000)	Branches (in numbers)	Total Staff (in numbers)	Total Assets (billion Rs)
2010	56	18.5	1,405	12,005	35.8
2011	59	20.2	1,550	14,202	48.6
2012	58	22.3	1,460	14,648	61.9
2013	58	26.0	1,606	17,456	81.5
2014	57	28.0	1,747	19,881	100.7
2015	56	46.5	2,754	25,560	145.1
2016	55	55.3	2,367	29,413	225.3
2017	49	-	3,533	36,053	330.4

Source: Pakistan Microfinance Network and Annual PRSP Reports

Keeping in view the operational activities of JSW in Gujranwala Division, we selected Gujranwala Division for the analysis. We met the senior management of both the organisations in early 2017 and briefed them in detail on potential study areas. After getting permission and list of active women borrowers, the data is collected from 4 districts under the survey of 'Entrepreneurship and Financial Sustainability of Microenterprises (SEFSM)' in 2017 through random sampling. The active borrowers who received loan for enterprise development and were in the third loan cycle, were selected, as they hold sufficient experience and have the potential to prove welfare impacts. A total of 625 households are interviewed by following two-stage stratified random sampling method at 95 percent confidence level and 7 percent standard error. Union council was taken as the primary sample unit (PSU) and 31 union councils (both rural and urban keeping in view the proportional distribution of active borrowers) were selected. A specified number of households 18-22 were randomly selected from each of the PSU.

District	Selected	Targeted Population		Sample size	
	Tehsils	JWS	Akhuwat	JWS	Akhuwat
Gujranwala	Gujranwala	3487	974	147	128
Sialkot	Daska, Sialkot	2179	470	70	60
Gujrat	Gujrat	1746	675	64	64
Hafizabad	Hafizabad	1307	471	44	48
Total		8719	2590	325	300

Table 3: Sample Size by Both MFIs in Gujranwala Division

Source: JWS and Akhuwat Foundation

The questionnaire was structured into English by covering wide range of topics including personal characteristics, and business related (types of enterprises, sales, profit, employment and financial constraint) information, MFIs behaviour and wellbeing of household. For ease identification it was divided into 9 sections. All the interviews were made at the door-steps of sampled women and a limited team of two members completed field activity in 4 months. The respondents were given a detailed brief on objectives of the study before interview. Overall it remained a pleasant experience and observed good cooperation by respondents on their views on microfinance programme.

# The Methodological Framework

For making a comparison on conventional and Islamic microfinance, we managed in-depth interviews with the management of both the organisations and retrieved information on selection of clients, service charges /interest rate, repayment mechanism and overall working of the organisation. The respondent's information were also analysed over their experiences of working with both the MFIs.

One limitation of the survey was that we lack baseline information as ideally for impact evaluation, there should be some baseline information for making comparison. However, we attempted to overcome the limitation by capturing information from the sampled households at the time of enterprise initiation, before microfinance intervention and at the time of survey. To analyze the impact of MFIs on enterprise development, we have used the profit as proxy of entrepreneurship by following Ferdousi (2015). The following equation is estimated:

$$ENT_{i} = \beta_{0} + \beta_{1}EC_{i} + \beta_{2}FI_{i} + \beta_{3}MT_{i} + \beta_{4}status_{i} + \varepsilon_{i}$$

Where  $ENT_i$  represents profit earned during last one year (in 2016) as the proxy of entrepreneurial development,  $EC_i$  is the vector of variables of enterprise characteristics (education of manager, work experience of enterprise and location),  $FI_i$  is the financial information of enterprise (retained earnings, personal funds, and other sources as part of capital for current year),  $MT_i$  represents whether enterprise use modern techniques or not (marketing, business plan),  $status_i$  is whether enterprise took loan from conventional or Islamic mode and  $\varepsilon_i$  is the error term. The impact of MFIs on entrepreneurship development is estimated through OLS regression model where log of net profit (after subtracting operating expenses) is used as dependent variable.

Regarding the welfare impacts, we have analyzed the employment provision both at time of establishment of enterprise and at the time of survey. The welfare impact at household level is measured through current wellbeing status (expenditures on education and other accessories, income and saving levels) and durable assets.

Financially sustainability refers the ability of enterprises to maintain its financial capital and infrastructure capital over the long-term. We have measured financial sustainability through operating surplus ratio (OSR) that measures the level to which revenues are raised to cover operational expenses only or are available for capital funding purposes.

Operating Surplus Ratio = 
$$\frac{\text{Operating Ravenue-Operating Expense}}{\text{Total OperatingRavenue}}$$

If the value is above 50 percent that means enterprises generate substantial revenues which are helpful in offsetting past or future operating deficits. The determinants of financial

sustainability are estimated through following equation where logistic regression model is used:

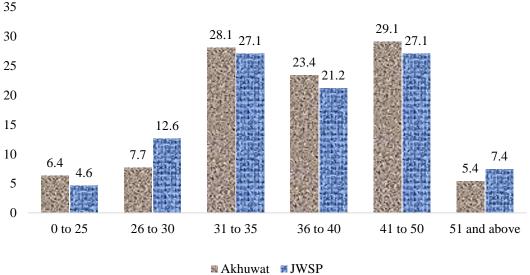
$$FS_i = \beta_0 + \beta_1 FI_i + \beta_2 EC_i + \beta_3 MT_i + \beta_4 status_i + \varepsilon_i$$

Where dependent variable  $FS_i$  represents whether the enterprise have financial sustainability or not as measure through OSR,  $FI_i$  is the vector of financial information (capital information, retained earning etc), ECi represent enterprise characteristics (firm size, age of enterprise)  $MT_i$  measures whether enterprise uses modern technology or not (business plan and marketing),  $status_i$  shows whether the enterprise took loan from Islamic or conventional mode of MFI and  $\varepsilon_i$  is the error term. Since dependent variable is binary in nature, therefore logistic regression model is applied.

# Results: Analysis Socio-demographic Characteristic of Recipients

Though not listed in table, all the recipients of JSW were female, in Akhuwat their share was 78 percent. Most of them were married, 90 percent in case of Akhuwat and 96 percent in case of JSW. Around 80 percent of the microfinance recipients in both groups were in the ages of 31 to 50 years at the time of SEFSM survey (Figure 1). It is worth mentioning that though recipients were women, however as they told, they took loan for their husbands and sons.

Figure 1:% Distribution of Respondents in Various Age Groups at the Time of Survey



Source: Estimated from SEFSM 2017 micro dataset

The educational profile of microfinance recipients shows that majority of the recipients of both the Akhuwat and JSW are the uneducated or less educated. 53 percent of the respondents were uneducated (43% in case of Akhuwat and 63% in case of JWS), 21 percent studied upto 9<sup>th</sup> grade (36% Akhuwat and 26% JWSP). Only 15 percent (20% Akhuwat and 11% JWSP) have matric or above education. It reveals that Akhuwat has comparatively targeted more educated group as compared to the JSW (Figure 2).

62.8 70 60 50 40 21.7 20.6 20.1 30 14.7 10.8 20 10 0 Un-Educated 1 to 5 6 to 9 10 and above ■ Akhuwat ■ JWSP

Figure 2: % Distribution of the Respondents by Education Level

Source: Estimated from SEFSM 2017 micro dataset

# **Enterprise and Loan Portfolio History**

We found that Akhuwat is fairly a young organisation as compared to JSW as 92 percent of the Akhuwat's recipients are those who received microcredit loan of upto Rs. 100 thousands; however this percentage is 44 for JSW. Overall 23 percent of the sampled recipients have received loan below Rs. 50 thousands (43% in case of Akhuwat and 6% for JSW), followed by 43 percent in the range of above 50 to 100 thousand (50% for Akhuwat and 38% for JSW). 45 percent of the sampled Akhuwat recipients have taken loan only two times and rests have taken from 3 to 5 times. In case of JSW, 19 percent have taken loan upto 2 times, 75 percent from 3 to 5 times and rests 7 percent for more than 5 times.

As reported by that 49 percent of Akhuwat and 62 percent from JWSP respondents, they already have some business before entering into microfinance credit and they acquired loan for expansion and up-gradation of business. Though the purpose of acquiring loan was to invest on businesses; however, not all the recipients made this commitment. 52 percent of the Akhuwat's recipients reported that they invested loan for investment, the percentage is 43 for JSW. The reasons of not investing were house construction, family commitments and marriages (Table 4).

Table 4: Percentage of Recipients by Investment of Loan in Business

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Status	Akhuwat	JWS	Overall			
Loan invested in business (%)	51.5	42.5	46.8			
Uses of loan instead of business (9	Uses of loan instead of business (% distribution)					
Home maintained	57.7	76.5	67.8			
Family commitment	27.8	18.3	22.6			
Marriage	11.3	5.2	8.0			
Loan Payback	2.1	0.0	0.9			
Medical Purposes	1.0	0.0	0.5			
Total	100	100	100			

Source: Estimated from SEFSM 2017 micro dataset

## **Characteristics of Enterprises**

As mentioned earlier that more than half of the recipients reported that they already own some business before entering into MFIs, the analysis reveals that microcredit led expansion

in business with more percentage for Akhuwat than the JSW (Table 5). In case of Akhuwat, more percentage of recipients reported that they operate business themselves. One reason of not investing, besides consumption, is observed that they took loan from some of their family member.

Table 5: Information on Micro Enterprises by Source of MFIs

<b>Characteristics of Enterprises</b>	Akhuwat	JWSP	Overall	
Business exit before taking loan (%)	49.4	61.5	56.2	
Business exist at present (%)	63.7	71.0	67.8	
Business operated by recipients (%)	63.7	25.2	41.8	
Individual business (%)	95.0	93.5	94.2	
Business places (percentage distribution)	•			
Inside home	33.0	36.5	34.1	
Outside home	2.6	8.2	5.6	
Local market	36.8	25.6	31.7	
Mobile	27.6	29.6	28.5	
Location of outputs commodity (percentage distribution)				
Same village or town	5.3	26.1	15.1	
Surrounding areas	76.3	50.0	63.8	
Cities	18.4	23.9	21.0	
Total	100	100	100	

Source: Estimated from SEFSM 2017 micro dataset

Most of the businesses are operated from home or from the local market or the mobile business as people have small investment, therefore, they cannot operate in main markets. Their output is also usually sold in local markets as reported by more than two-thirds of them (Table 5). Though not listed in table, the monthly revenue and profit was found much closed for both sorts of microfinance recipients, monthly revenue and profit for Akhuwat case was 48 thousand and 20 thousand respectively, and for JSW, it was 56 and 23 thousands.

## Results: Entrepreneurial Development and Financial Sustainability

Micro enterprises play a significant role in provision of jobs and to improve livelihood. The access and provision of microfinance to these enterprises may help them in improving their skills, business development and financial sustainability. In this section we have attempted to measure the impact if microfinance facility on entrepreneurship development and financial sustainability. The entrepreneurship development is measured through the net profit earned in last one year, whereas financial sustainability is the ability of enterprises to maintain its financial capital and infrastructure capital over the long-term. We have measured financial sustainability through operating surplus ratio (OSR). If the value of OSR is above 50 percent that means enterprises generate substantial revenues which are helpful in offsetting past or future operating deficits. It is worth mentioning that analysis is carried out only on those who currently own enterprises. As shown in Table 5, only 68 percent of the sampled respondents reported that they currently own enterprise.

The dependent variable is the log of net profit earned in 2016 and the regression analysis is used to measure the impact of microfinance on entrepreneurship development. The results in Table 6 shows that impact of microfinance capital used in 2016 on entrepreneurship development is not significant. Similarly the dummy variable, whether the loan is taken from Akhuwat or JSW, also shows that there is no significant impact of both sorts of microfinance on entrepreneurship development. The findings suggest that microfinance may offer

insufficient amount to make a positive impression or loan is not utilized properly by the enterprises. Other reason could be the lack of proper business skills. The results indicate that personal saving and retained earnings have significant positive impact on profit by 5 and 4 percentage points. Similarly the enterprises, who have taken loan from other sources, have a negative impact on net profit by 6 percentage points as they have to repay their loan and thus operational activities will be worse off.

Regarding the other characteristics, the results show that age of enterprise matters a lot on earning profit. Similarly location of business also has impact on profit. The enterprises who have been working in industrial area or at some fixed place have a positive impact on net profit as compared to those who are working inside home. The impact is not significant who are mobile or have been working in local market.

Table 6: Impact of Microfinance on Entrepreneurial Development—Regression Analysis

Regressors	Coefficient	t-stat
Microfinance capital (yes =1)	0.282	0.73
Type of MFIs $(JWSP = 1)$	-9.304	-1.00
Personal saving of last year (yes =1)	0.056***	3.51
Retained earnings (yes =1)	0.400***	3.03
Other loan amount (yes =1)	-0.060**	-2.14
Education of manager (in years)	-0.188	-0.34
Location (urban =1)	0.556	0.10
Age of enterprises(on years)	0.083***	1.67
Firm size (no. of employed workers)	5.074	0.92
Marketing (yes =1)	-1.794	-0.07
Business plan (yes =1)	7.654	1.39
Out-side home/inside home	1.449	0.130
Industrial area/inside home	33.114**	2.15
Local market/inside home	8.257	0.900
Mobile/inside home	4.317	0.34
Road-side/inside home	-5.341	-0.65
Another fixed place/inside home	68.741***	2.600
Constant	11.695***	42.19
N	285	
R-Squared	0.2359	9

<sup>\*\*\*</sup> shows significant at 1%, \*\* significant at 5%, \* significant at 10%,

Source: Estimated from SEFSM 2017 micro dataset

Regarding the financial sustainability, we have detailed in methodology that financial sustainability refers to ability of enterprises to maintain its financial capital and infrastructure capital over the long-term. We have used operating surplus ratio (OSR) to measure financial sustainability. The estimates show that 44 percent of the enterprises are financial sustainable as their OSR value is above 50 percent, the rests are financially not-sustainable.

The impact of microfinance provision on financial sustainability of enterprises is measured through logistic regression model and the odd ratios are reported in Table 7. The results show that microfinance loan, retained earnings and other loan have negative impact on financial sustainability of enterprises. The reason is that only 47 percent of the respondents invested loan in the business. Out of them 61 percent of enterprises operated before joining MFIs and only 39 percent people started their business after joining MFIs.

Table 7: The Determinants of Financial Sustainability of Enterprises—Logistic Regression Model

Regressors	Odd Ratios	Std. Error
Microfinance capital (yes =1)	0.957**	0.025
Personal saving (yes =1)	0.997**	0.009
Retained earnings (yes =1)	0.972**	0.015
Other loan amount (yes =1)	0.918	0.014
Type of MFIs (JWSP = 1)	0.186*	0.109
Location ( urban =1 )	0.638	0.253
Age of enterprise (in years )	0.945	0.055
Firm size (no. of employed workers)	0.627	0.287
Marketing (yes =1)	1.051	1.816
Business plan (yes =1)	0.801	0.353
Out-side home/inside home	0.213	0.291
Industrial area/inside home	2.370**	1.475
Local market/inside home	0.460	0.340
Mobile/inside home	0.687	0.789
Road-side/inside home	1.000	0.000
Another fixed place/inside home	28.207**	48.261
N	28	33

Note: \* denoted significant at 5%, \*\* denoted significant at 10%

Source: Estimated from SEFSM 2017 micro dataset

During the survey, recipients of both of MFIs communicated that they used microfinance loan amount in homes. They explained that they did not use loans in business but they used profit to repay loan amount. Due to this reason, the growth of micro enterprises affected and their profits decreased over the time. It also showed that enterprises of JWSP are less financially stable as compared to enterprises of Akhuwat. Enterprises of JWSP beard more financial liability because JWSP charged 23 percent interest on micro loans and Akhuwat does not charge any interest on loans.

The insignificant odd ratios of marketing and business plan reflects the real scenario of micro enterprises in Pakistan that majority of entrepreneurs are uneducated and they have no idea of how to expand their business. The entrepreneurs who got microfinance loans but did not use in business are facing more financial issues. The results showed that age of the enterprises bring no significantly improvement in business over the time because they did not channel the experience and investment properly for business expansion. As a result their business did not improve over the time.

# **Conclusion and Policy Implications**

Microfinance is one of the financial instruments to improve the life of low income groups as well as to promote SMEs. Microfinance sector has a tremendous growth in Pakistan, currently it has reached to 5.5 million active borrowers with a gross loan port folio of Rs. 293 billion. 31 millions are the active savers 7.3 million are the micro insurances. Various forms of microfinance are currently working, the two major modes in Pakistan are; Islamic microfinance (without interest) and conventional microfinance (with interest). The current study has examined the structure of both the conventional and Islamic microfinance

programmes as well as has observed the welfare impacts of both the microfinance on entrepreneurial development and financial sustainability of micro enterprises over time.

We have collected the data through primary survey from 625 recipients from 4 districts of Gujranwala division through random selection. 300 respondents were from Islamic microfinance institution (Akhuwat Foundation) and 324 recipients were from conventional microfinance institution (JWS). These respondents were reported as the active borrowers who have taken loan at least 2 times. The findings indicate that not all the respondents have used the loan properly, in case of JSW, 43 percent invested loan and for Akhuwat Foundation, 52 percent have invested the loan. Near to one-third of the cases, though they acquired loan for business purposes but currently they lack of business. The multivariate analysis shows that microfinance loan has no significant impact on net profits and financial sustainability.

The present analysis has revealed inefficient utilization of microcredit. The result suggests for utilizing the loan properly along with promotion of skills and the measures that can help in making the business stable. The findings suggest some policy implications. First, the loan amount is minimal, and may not be sufficient for SMEs development. The repayment mechanism is also tight as most of the loan must be paid within a year. Without proper skills, valid business plan, such loans will ultimately put burden on client. The microfinance institutes must focus on entrepreneurial skills, opportunity identification, product differentiation in the market along with technology up-gradation in order to promote the development of enterprises. Second, microfinance institutions should provide their beneficiary enterprises a forum where they can interact and get information about input and output markets. This interaction will enhance their market exposure which can be helpful in the business' development. Third, market linkages should be the integral part of microfinance, as without developing linkages in rural areas of both the input and output products, enterprises will remain unsustainable.

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Annex A: An Operational Analysis of Akhuwat Foundation and Jinnah Welfare Society Microfinance Programme

•	Akhuwat Foundation	Jinnah Welfare Society
Organisation setup	An Islamic microfinance foundation and managed by	It is a microfinance company based on conventional methods. It is a
	the socio cultural, traditions, and religious habits of	centrally managed, dedicated microfinance institution and highly
	the community. It functions on the principles of Islam	disciplined organizational structure.
Objective	To alleviate poverty by empowering socially and	Financial strengthening and social uplift of marginalized segments of
	economically marginalized families through interest	society, through an integrated approach thereby providing financial
	free microfinance and by harnessing entrepreneurial	services, capacity building and developing market linkages for them
	potential, capacity building and social guidance	to sustain their businesses and to improve their living standards
Programme Type	Microfinance Institution	Microfinance Company
Target Clients	Under privilege and the poor community	Poor rural women in the community
Financial Services	Group loan, liberation loan, education loan, health	Micro credit, agriculture development loan
	loan, emergency loan, home loan, marriage loan	
Non-Financial Services	Akhuwat University, Internship Programme, Cloth	Ambulance serves, Food distribution, Health camps
	Bank, Volunteer Services	Livestock vaccination
Eligibility Criteria	Must be member of a group, Earning less than 10 K	Must be member of a group, Must have undergo group meeting
Funding Types	Equity shares by members, savings from community	External funds from donor agencies, savings and internally generated
	savings from clients, grants from capacity building,	funds
	local NGO and from International donors' agencies	
Average Loan Size	25 K	35 K
Interest Rate	5 percent membership fee and 1 percent insurance	23 percent
Loan Terms	Negotiable, depends on members' business. Some	Compulsory monthly reimbursement, Maximum periods 1year. 3
	situations it runs up to 15 months. Local and cultural	percent of any amount granted is set aside as insurance
	securities	
Loan Repayments Schedule	Monthly	Monthly
Loan Guarantee	Peer pressure and social collaterals. Credits often	Peer pressure and social collaterals. Credits often given to groups.
	given to groups.	