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Waves of microfinance and its influence on economic growth of Pakistan

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ABSTRACT

Relationship between microfinance and economic growth has been a major concern for the policymakers of developing countries and focal point of economists to eradicate poverty, empower poor people and produce employment opportunities. This research applies OLS method to trace the impact of microfinance on economic growth in Pakistan.Variables of the study are active borrowers, active savers, active insured persons, borrowing, saving and insurance amount from microfinance institutions. Active borrowers and borrowing amount have highly significant positive relationship with economic growth of Pakistan. Active savers and saving amount have highly significant negative relationship with economic growth whereas insurance policyholders and insurance amount have no relationship. Government should not only increase outreach of microfinance but also devises a mechanism, which cannot only channelize the funds efficientlybut also avoid non-performing loans. Government should also provide some tax rebate or concession to microfinance and microcredit agencies so that maximum amount can be channelized towards economyin order to get long-run results.

Introduction

All over the world, poor masses are deprived from taking fruitful benefit of financial systems and this deprivation is quite severe in developing countries (Nair, 2010). This exclusion may be partial or full and it depends upon the development level of the county. In developed countries, funds are provided to poor or deserving people at larger extent but it is not the case in underdeveloped countries. This issue gets severe in so-called third world economies. In Lessor Developed Countries (LDCs), the poor take benefit from informal channel to get desired amount of credit. They take financial help from community based financial setups, which cannot provide the desired financial needs and facilities. Nowadays, many formal setups have been emerged in financial horizon with the help of government and private sector with a purpose of canalling the resources to poorto help them uplifting their living standards and increase economic pace (Megicks,2005). Pakistani microfinance institutions (MFIs) are[1]working on similar line.

Microfinance is a term that generally refers to such informal and formal arrangements, which offer financial services to the poor". Microfinance, according to Otero (1999, p.8), is "the provision of financial services to low-income poorand very poor self-employed people". Ledgerwood (1999) suggests that microfinance sector should include other financial services i.e. insurance and payment along with traditional services e.g. saving and credit availability. Schreiner & Colombet (2001) elaborate and define the terminology of microfinance as "the attempt to improve access to small deposits and small loans for poor households neglected by banks". "Microfinance is the setup to provide finance service to poor irrespective of urban or rural jurisdiction who cannot get financial services i.e. loans, saving and insurance from formal financial structures. In the literature, microfinance and microcredit are used as synonymous and interchangeably but it has a major difference, which should be kept in mind (Shirazi & Khan, 2009). Microfinance has broader aspect whereas microcredit has narrow aspect in definition and practical nature. Microcredit is a part of microfinance; it is amount of micro loans only while microfinance has breath in working. Microfinance institutes not only provide loans but also give other finance services i.e. insurance and saving (Okiocredit, 2005). Microcredit is a component of microfinance, which includes the provision of loan to the poor while microfinance also involves additional non-credit financial services such as savings, insurance, pensions and payment services.

Poverty reduction by the help of microfinance and microcredit activities in economic setup has gained much popularity in recent era (Rogaly, 1996). Microfinance is an appealing engine and mechanism to alleviate the poverty (Microfinance Report, 2005). Microfinance institutes empower persons and give them sense of independence especially poor communities in the world (Zohir & Matin, 2004).Microfinance institutions (MFIs) play a very important and unique role to boost economic growth and bring employment opportunities and increased income level of the poor. Grameen Bank, Badan Kredit Kecamatan and BancoSol gained reasonable recovery of credit in Bangladesh, Boliva and Indonesia respectively. This phenomenon has nullified the assumption that poor cannot recover the loan amounts. In spite of lending todeprived sector of economy having lower level of per capita income, it seems that a reliable mechanism for lending to the poor of under developed economies should be robust to serve the nation (Remenyi, 2006). A report of UNCDF (2004) focused three roles which are performed normally by microfinance activities for development of economy. These roles are meeting basic needs of deprived section of economy, increasing welfare and empowering women. Women participation in economic development also promotes the concept of gender equity(Otero,

[1] Complete list of MFIs are given in appendix for year 2013.

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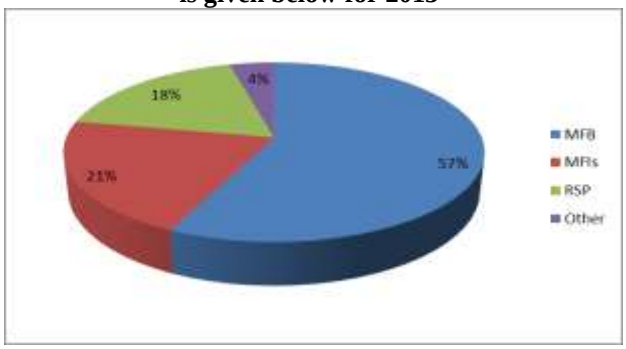
1999: p.10). Zohir and Matin (2004) researched that microfinance loans are also a reason to boost agricultural output which definitely would increase the Gross domestic product (GDP) of countries especially in agricultural economies. Increase in outreach of microfinance will boost trade and marketing links and microfinanceoutfit would also help in achieving Millennium Development Goals(Murduch&Hashemi (2003), Simanowitz& Brody (2004).

Figure: 1 Loan portfolio of microfinance sector in Pakistan is given below for 2013[2]



Gerder wise inequlaity exist in the pakistan but now focus of MFIS is shifting toward females. Total loan portfoio consit of male and females share 57% and 43% respectilvy in 2012. Active male borrowers are 58% while females are 42%. (Micro Watch. 28. P. 4)

Literature Review

Khandker (2005) empirically investigated the relationship of poverty and microfinance activities in Bangladesh economy. The researcher used data of consumption, poverty and microfinance to trace the impact of microfinance activities on consumption and poverty. The data of 1,798 individuals was collected from 87 villages. Grameen Bank, Bangladesh Rural Development Board and Rural Development were included in sample. The quasi experimental study conducted the survey on the individuals in first phase 1991/92 and the same individuals in second phase 1998/99. This study focused on results of treatment group and control group. Microfinance activity in rural area reduces poverty among borrower at lower rate whereas it rises per capital household consumption for control and experiment groups. Average return of female borrower was higher in 1998/99 as compare to 1991/92 and poverty reduction was lower.

Qudrat-I Elahi&Rahman (2006) explored significant difference between microcredit and microfinance by reviewing the existing literature from all over the world. The research not only differentiated between two terms in ordinary means but also with solid arguments about functional and conceptual differences. The review analyzed that that microcredit program mainly focuses on lending activities i.e. loans and distribution at operational level of organization whereas microfinance provides financial service about saving, lending and community development. Some conceptual differences were also witnessed; microcredit activities are run by NGOs that are voluntary and non-profit entities having outside resources for distribution whereas microfinance are profit oriented organizations, which generate enough profit from lending (Remenyi 2000). The author concluded that conceptual differences between micro credit and microfinance are important in their functionality and Government should devise policies by giving weightage to conceptual difference that would bring ultimately low level of poverty in economies.

Cssar et al. (2007) gave attention to repayment performance of borrowing group and social ties in context of microfinance. This research explores the unique way of social capital and their effect of performance. The study sample was consisted of 36 microfinance entities having 498 groups in two different locations Nyanja (South Africa) and Bred (Armenia). The key findings of this research revealed that repayment of any individual influenced by repayment of other members depend on the belief that availability of next loan cycle by lending microfinance entity. This experimental research provided clear evidence that trust is key factor in repayment by group or group performance and determined nature and magnitude of behavior of other group members in context of social capital. The author also found three major factors of social capital in performance of groups who takes the money from microfinance institutes and their repayment i.e. general trust of individual groups, familiarity among members and positive trust experience within group related to repayment of loans.

Cull et al. (2007) differentiated microfinance institutes into three categories i.e. individual based lending, village type banking and group lending mechanism and research on their pros and cons in context of lending decisions. To study the in-depth association and linkage of these institutes the author used 20 village type banks, 48 group lending and 56 individual lending decision. Their study enables the researcher to conclude that financial performance and depth of microfinance entity have a trade-off in perspective of institutional design. The author also addressed the issues of microfinance performance and type of program the entity adopted.

Nair (2010) studied effects of commercialization of microfinance on condition of poor and profitability trend of these commercial microfinance institutes. The researcher especially focused the social responsibility of commercial microfinance in context of lending to low income persons in India. The major apprehension of the era that commercial entities are more focused toward profitability than creation of social value and economic growth and their pivotal role was shifted toward maximizing financial return ((Conroy, 2010). Indian microfinance institutes which were transformed toward communalization and included in research sample were SKS, SpandanaSphoorty, ShareMicrofin and AsmithaMicrofin Alpha Microfinance Consultants Private Limited and Microfinance Institutions Network. During the study period, Indian microfinance institutes were indulged in capital market investment compare to poor microcredit or microfinance clients. This situation gave some hints may cause financial crises to these entities that over lending to investors.

Kevane and Wydick (2001) investigated the relationship of microfinance and economic growth. they used sample of 342 microfinance beneficiaries from the Guatemala. Finaly, he found male borrower has more impact on economic growth than female borrower male beneficiaries of microfinance institutions have more impact on economic growth but no significant difference in sales gender wise but women has advantage of employment generation.They found that microenterprise credit facility to poor women seems to indicate a trade-off between in poverty reduction and economic growth. they have concluded that women lessor contribution in economic growth is owing to child birth cases, domestic issues, nature of business and availability of time for business.

Methodology

Ordinary least Square has been applied on the quarterly data of the variables form 2006 to 2013. To check the effect on

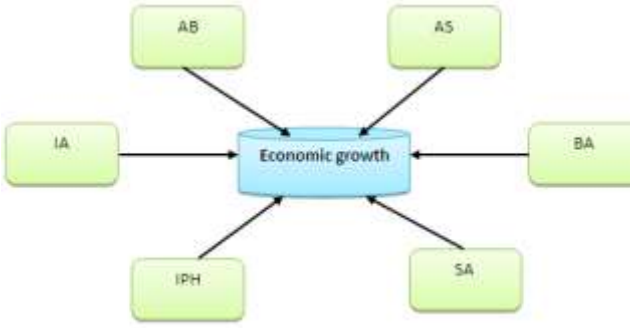
[2] The information is taken form micro watch, issue 28, available on www.microfinanceconnect.info/publication_search.php

economic growth this technique is simple and having rigorous type of assumption to present efficient results. Three models have been devised to take the broader picture of the relationship. Model 1 uses economic growth as dependent variable while independent variables are numbers of active savers and active borrowers.

Model 2 having three variables with economic growth as outcome variable while borrowing amount and saving amount are independent variables.

Model 3 having three variables, economic growth as outcome variable while numbers of insurance policy holders and insurance amount as repressors.

Theoretical framework



Limitation of the study

First limitation of the study reveals that data span is limited. We have used only data of few years; greater range of data may enable us to use different technique to give long run relationship. Limited availability of data enables researchers to give clear long run picture of microfinance situation and its effect on economy which may be helpful for policymakers and more appeal for generalization. Now Pakistan is giving importance which is reflected the microfinance quarterly report which are major contributor in this research work.

Other limitation of the study is limited range of variables. Future research may use extensive set of variables having more time span for better inferences.

Objective of study

There are two main objectives in this study

First: To trace nature of relationship of microfinance activities on economic growth in Pakistan and policy recommendation.

Second: to measure intensity of relationship between economic growth and microfinance activities in Pakistan.

Data Collection Sources

The secondary data analysis provides better degree of generalization of dependent and independent variables. Data of GDP has been collected from official website of State Bank of Pakistan whereas data of microfinance indicators or proxies have been collected form official government site deal microfinance and microcredit. Quarterly reports of the microfinance have been consulted for the purpose.

Operationalization of Variables

Explanatory variables have been operationalized in this paper by this way

$GDPy = \alpha + \beta 1AB + \beta 2BA + €$

$GDPy = \alpha + \beta 1As + \beta 2sA + €$

$GDPy = \alpha + \beta 1IPH + \beta IA + €$

where GDP = gross domestic product measured by chain linking method

AB= numbers of active borrower

BA= borrowing amount in million (PAK Rupees)

AS= numbers of active savers

SA= Saving amount in million (PAK Rupees)

IPH= numbers of insurance policy holders

IA= insurance amount in million (PAK Rupees)

α = alpha of regression

€ = error of regression

B= beta or rate of change

Hypothesis of the Study

Study is based on the following hypothesis:

Null hypothesis (H0): there is no relationship in saving amount and borrowing amount of microfinance's users with economic growth.

(H0) =0= SA , BA,GDP

Null hypothesis (H0): there is no relationship in number of active saver and active borrowers with economic growth

(H0) =0= AS ,AB, GDP

Null hypothesis (H0): there is no relationship in insurance policyholders with economic growth

(H0) =0= IPH, IA, GDP

Data Processing Tool

Eviwes is considered a better tool for secondary data analysis especially in context of time series data. It is user friendly and having easiness in incorporation data. Eviews is major statistical tool used to infer the findings and results.

Empirical results

Model 1

T -test measures the significance of single variable in the model. Lesser than 5% p value of t-test give us confidence to claim that variable under study is significant. Active borrowers (AB) and Active savers (AS) have lessor than one percent P-value suggests the researchers to claim it highly significant variables. Active savers have significant negative relationship with economic growth of Pakistan. Lower standard error digits present a better fitted picture and more reliability in finding. However, active borrowers have significant positive relationship with economic growth. Increase in one borrower may increase the .0001 million in [3]GDP whereas increase in one saver may decrease .0003 rupees in GDP of the Pakistan.

Overall model significance is normally measured by the help of F-Test so this test has been applied to check the joint effect of active borrowers and active savers on economic growth (GDP). Probability value of F-test less than 5% provides conclusion that our repressors in the have significant effect on dependent variable and their beta are different to Zero. So we can claim that overall model is significant. Explanatory power is important issue in time series analysis and it represent how much regression line is fitted.27 percent variation in GDP is caused by the active savers or active borrowers and it only explain 21 % when adjusted it with degree of freedom. Independent variables in model capture variation in economic growth approximately 27% while 63% is explained other factors

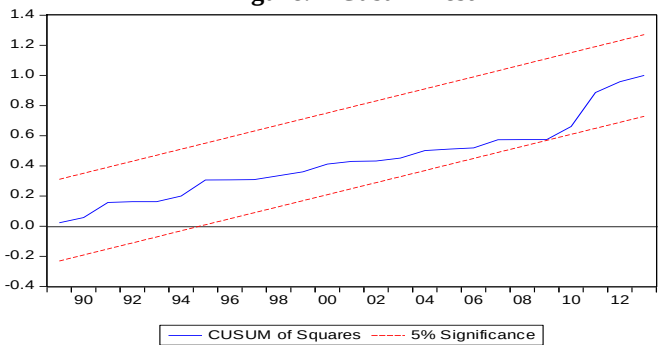
GDPCLM = -0.000129951254197*AS + 0.0003479099724*AB + 3430.91450437

Residual diagnostic tests

All important assumptions of Ordinary Least Square (OLS) have been tested. Results of OLS may be efficient whenever the all residual diagnosticmeet the standard. To get efficient and Best Unbiased Linear Estimation (BLUE) nature of coefficient estimation, different residual test have been applied in this regard i.e. normality test, hetroscadasticty test, serial correlation test. P value of J.B test, Breusch-Godfrey LM Test and Breusch-Pagan-Godfrey declare that these three assumptions are clear and find no problem in this regard.

[3] GDP is measured on quarterly basis by chain linking method

Figure: 2 Cusum Test



Our data of analysis have normally distributed, have equal variance and no specific correlation pattern exit in the residuals especially non-existence of first order autocorrelation.

CUSUM Test of square measure the linearity in parameters and the value and graphical picture give us clue that parameters are linear in nature. The parameter value lies within 5% level of significance and declares that linearity assumption has also met in MODEL 2

Two tailed T-test measures the significance of single variable in the model. Borrowing amount (BA) and saving amount (SA) have lesser than one percent P-value suggests the researchers to claim it highly significant variables.

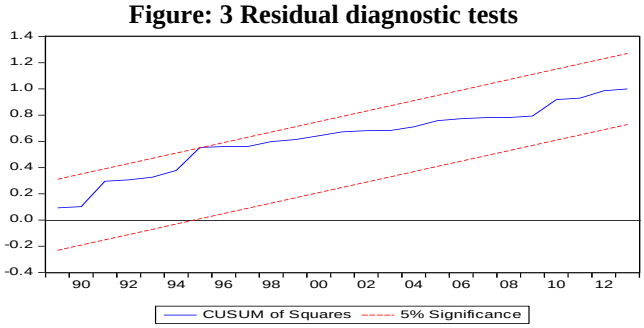
Saving amount has significant negative relationship with economic growth of Pakistan. Lower standard error digits present a better fitted picture and more reliability in finding. However, borrowing amount has significant positive relationship with economic growth. Increase in one million by borrower of microfinance may increase the .04 million in GDP whereas increase in one million may decrease .05 million rupees in GDP of the Pakistan.

Overall model significance is normally measured by the help of F-Test so this test has been applied to check the joint effect of active borrowers and active savers on economic growth (GDP). Probability value of F-test less than 5% gives us conclusion that our repressors have significantimpact on economic growth and their betas are different to Zero. The research may claim overall all model has statistically significance in context of empirical relationship.

The goodness of fit is reasonable and independent variables explain variation approximately 53 % in economic growth while 47% is explained other factors missing form model.

GDPCLM = 0.0403952846583*BA - 0.0556957464744*SA + 3311.69576606

Figure: 3 Residual diagnostic tests



P value of J.B test, Breusch-Godfrey LM Test and Breusch-Pagan-Godfrey declare that these three assumptions are clear and find no problem in this regard. Our data of analysis have normally distributed, have equal variance and no specific correlation pattern exit in the residuals especially non-existence of first order autocorrelation.

CUSUM Test of square measure the linearity in parameters and the value and graphical picture give us clue that parameters are linear in nature.

Model 3

F -test in model three provide of justification of statistically insignificant model. it means insurance policy holder and insurances amount involve in microfinance sector has no relationship with economic growth of Pakistan while economic growth measured by proxy of GDP.

Residual diagnostic tests:

To get efficient and Best Unbiased Linear Estimation (BLUE) nature of coefficient estimation, different residual test have been applied in this concern i.e. normality test, hetroscadasticty test, serial correlation test.

P value of J.B test, Breusch-Godfrey LM Test and Breusch-Pagan-Godfrey declare that these three assumptions are clear and find no problem in this regard. Our data of analysis have normally distributed, have equal variance in observation and no specific correlation pattern exit in the residuals especially non-existence of first order autocorrelation

Highest values of numbers of active borrower, active savers, borrowing amount and saving amount occur in second quarter of 2013 and lowest value happen second quarter of 2007. Descriptive analysis of these variable give us clue that in Pakistan the amount of borrowing and saving in microfinance sector and their outreach increases with passage of time. It means Government of Pakistan collaboratively with private sector give special attention to this sector in context of finance availability and also introduce may policy Highest value of GDP was in first quarter of 2011 and lowest was in fourth quarter of 2012. Lowest volatility has been seen in GDP and highest in borrowing. Kurtosis and skewness of every variable give the result of approximately normally distributed data of variables.

Conclusion and Policy Recommendation

This empirical paper traces relationship between microfinance included microcredit and economic growth of Pakistan. The research uses three models to trace the effects of microfinance separately. Data of the variables has been used on quarterly basis from 2006 to 2013in the study. First model consists of active borrowers and active savers in perspective of microfinance as explanatory variables while outcome variable is GDP (economic growth). Second model consists of borrowing amount and saving amount in context of microfinance as repressors while outcome variable is economic growth. Third model consist of insurance policyholders and amount of policies as repressors variables while outcome variable is economic growth. OLS has been used as a basic empirical technique in this paper. All the compulsory post-testing of data has been performed to present efficient results of relationship and parameters. To present BLUE nature of parameters different tests have been applied on the data i.e. normality test, serial correlation test, hetroscadasticity test and CUSUM test of Linearity. Researcher may claim that there exist normality and homoscadasticiy in residuals along with no serial correlation. CUSUM test of linearity gives us proof that the parameters of model under study have linear relationship. All tests present reliable picture of estimates. Active borrowers and borrowing amount have highly significant positive relationship with economic growth of Pakistan. Active savers and saving amount have highly significant negative relationship with economic growth whereas insurance policyholders and amount of insurance have no relationship.

Policymakers should keep in mind the nature of relationship while devising microfinance policy at any level i.e. federal or provincial in Pakistan.

Table: 1 Main Results Of Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AS	-0.000130	4.32E-05	-3.009676	0.0059
AB	0.000348	0.000122	2.847534	0.0087
C	3430.915	128.5910	26.68083	0.0000

Table: 2 Residuals Diagnostic

Tests	Test name	Value	Pro.	Decision basis	Problem existence
Hetroscadasticity	Breusch-Pagan-Godfrey	1.81	0.4	P Value	No
Residual normality	J.B test	1.17	0.55	P Value	No
Autocorrelation	LM Test	4.41	0.01	DW value	No
linearity test	CUSUM of square	-	0	P Value	No

Table: 3 main results of model 2

Variable	Coefficient	Std. Error	T-statistic	Prob.
BA	0.040395	0.007739	5.219660	0.0000
SA	-0.055696	0.009867	-5.644737	0.0000
C	3311.696	92.29960	35.87985	0.0000

Table 4. Residuals diagnostic

Tests	Test name	Value	Pro.	Decision basis	Problem existence
Hetroscadasticity	Breusch-Pagan-Godfrey	2.17	0.33	P Value	No
Residual normality	J.B test	1.38	0.50	P Value	No
Autocorrelation	LM Test	2.55	0.21	DW value	No
linearity test	CUSUM of square	-	0	P Value	No

Table 5. Main Results Of Model 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPH	-2.49E-05	0.000111	-0.224281	0.8246
IA	0.001058	0.007846	0.134863	0.8939
C	3758.202	72.49053	51.84404	0.0000

Table 6. Residuals Diagnostic

Tests	Test name	Value	Pro.	Decision Basis	Problem existence
Hetroscadasticity	Breusch-Pagan-Godfrey	1.64	0.43	P Value	No
Residual normality	J.B test	1.3	0.51	P Value	No
Autocorrelation	Breusch-Godfrey LM Test	4.35	0.11	P Value	No
linearity test	CUSUM of square	-	0	P Value	No

Table 7. Descriptive Analysis

	AB	AS	BA	SA	MIPH	IA	GDPCLM
Mean	1957638	2973048	25847.6	11341.6	2446600	31742.44	3730.864
Median	1975820	2834916	25082	9566	2654307	33650	3762.6
Maximum	2635312	5207397	46626	30010	3913516	54823	3894.4
Minimum	1273666	1414478	13056	3232	387902	5819	3442.4
Std. Dev.	338842.6	1191867	8925.183	7436.383	917499	12984.05	117.7723
Kurtosis	2.672607	1.757079	2.813693	3.134154	3.056582	2.806632	2.578696

Table 8. Multicollinerity testModel 1

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
AS	1.86E-09	37.50759	5.938527
AB	1.49E-08	117.2432	5.938527

Table 9. OLS Estimation Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AS	-0.000130	4.32E-05	-3.009676	0.0059
AB	0.000348	0.000122	2.847534	0.0087
C	3430.915	128.5910	26.68083	0.0000
R-squared	0.267315	Mean dependent var		3713.286
Adjusted R-squared	0.208700	S.D. dependent var		127.9128
S.E. of regression	113.7849	Akaike info criterion		12.40745
Sum squared resid	323675.1	Schwarz criterion		12.55019
Log likelihood	-170.7044	Hannan-Quinn criter.		12.45109
F-statistic	4.560535	Durbin-Watson stat		1.398303
Prob(F-statistic)	0.020486			

Table 8. Serial Correlation LM Test: Model1

F-statistic	2.153937	Prob. F(2,23)	0.1389
Obs*R-squared	4.417058	Prob. Chi-Square(2)	0.1099

Table 9. Heteroskedasticity Test: Breusch-Pagan-Godfrey Model1

F-statistic	0.866763	Prob. F(2,25)	0.4326
Obs*R-squared	1.815650	Prob. Chi-Square(2)	0.4034
Scaled explained SS	0.755897	Prob. Chi-Square(2)	0.6853

Table 10. OLS Estimation Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BA	0.040395	0.007739	5.219660	0.0000
SA	-0.055696	0.009867	-5.644737	0.0000
C	3311.696	92.29960	35.87985	0.0000
R-squared	0.572207	Mean dependent var		3713.286
Adjusted R-squared	0.537984	S.D. dependent var		127.9128
S.E. of regression	86.94460	Akaike info criterion		11.86938
Sum squared resid	188984.1	Schwarz criterion		12.01211
Log likelihood	-163.1713	Hannan-Quinn criter.		11.91301
F-statistic	16.71977	Durbin-Watson stat		1.907413
Prob(F-statistic)	0.000025			

Table 11. Breusch-Godfrey Serial Correlation LM Test: Model2

F-statistic	1.156617	Prob. F(2,23)	0.3322
Obs*R-squared	2.558762	Prob. Chi-Square(2)	0.2782

Table 12. Heteroskedasticity Test: Breusch-Pagan-Godfrey Model2

F-statistic	1.051973	Prob. F(2,25)	0.3642
Obs*R-squared	2.173502	Prob. Chi-Square(2)	0.3373
Scaled explained SS	0.928999	Prob. Chi-Square(2)	0.6284

Table 13. Multicollinerity testModel2

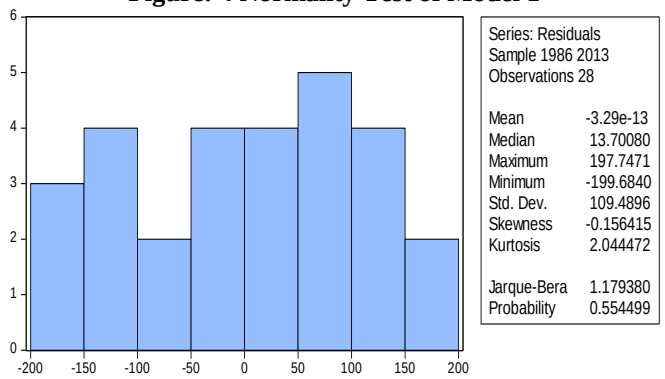
	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
BA	5.99E-05	150.3161	9.90269
SA	9.74E-05	58.71583	9.90269

Table: 14 List of microfinance institutions operate for microfinance and microcredit operation (2013)

Rural support program	Microfinance Bank licensed
Ghazi BarothaTaraqiatiIdara (GBTI)	ApnaMicroFinance Bank Ltd. (AMFB)
Rural support program	Microfinance Bank licensed
running microfinance	and prudentially regulated by
operation as part of multidimensional	the State Bank of Pakistan to
ruraldevelopment programme	exclusively service
	microfinance market
National Rural Support Program (NRSP)	Kashf Microfinance Bank (KMFB)
Punjab Rural Support Program (PRSP)	Khushhali Bank (KB)
Sarhad Rural Support Program (SRSP)	National Rural Support Programme Bank Ltd. (NRSP-B)
Sindh Rural Support Organization (SRSO)	Pak-Oman Microfinance Bank Ltd. (POMFB)
Thardeep Rural Development Program (TRDP)	Tameer Microfinance Bank Ltd. (TMFB)
	The First Microfinance Bank Ltd. (FMFB)
	Waseela Microfinance Bank Ltd. (WMFB)
Other . multi-dimensional entities	Micrfinance institutions
Association for Gender Awareness and Human Empowerment (AGAHE)	Akhuwat (AKHU)
Organizations running	Microfinance institution
microfinance operations as	providing specialized
part of multi-dimension	microfinance services.
service offering.	ASA Pakistan (ASA)
BRAC Pakistan (BRAC)	Asasah (ASASAH)
National Rural Development Program(NRDP)	Community Support Concern (CSC)
Organization for Participatory Development (OPD)	Development Action for Mobilization and Emancipation (DAMEN)
Rural Community Development Society (RCDS)	Farmers Friend Organization
Sungi Development Foundation (SDF)	Jinnah Welfare Society (JWS)
Support With Working Solutions (SWWS)	Kashf Foundation (KASHF)
ORIX Leasing Pakistan Ltd. (OLP)	MOJAZ Foundation
	Orangi Charitable Trust (OCT)
	SAFCO Support Foundation (SSF)
	Wasil Foundation (WASIL)

Government should increase the lending to deprived sector of economy and also collaborate with some private sectors to uplift microfinance and microcreditactivities in economy. Government should not only increase outreach of microfinance but also devise a mechanism, which can channelize the fund efficiently and design policies to reduce the quantum of non-performing loans. Government should also provide some tax rebates or concessions to microfinance institutions so that maximum amount can be channelized in the economy for the well-being of poor.

Figure: 4 Normality Test of Model 1



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