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The Impact of Globalization on English Language

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The Necessity and Importance of Reflection in Teaching & Learning English as Second Language

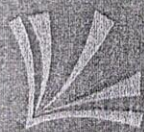
Md.Jaleel

Micro Insurance – A Boon for Economically Poor in India

Dr. K. Jayalakshmi

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THE NECESSITY AND IMPORTANCE OF REFLECTION IN TEACHING & LEARNING ENGLISH AS SECOND LANGUAGE

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ABSTRACT

In learner centered classrooms, John Dewey an American pragmatic pioneered Teaching methodology in the United States of America during the early decades of twentieth century. This methodology even today remains one of the effective teaching logics in teaching learning process.

Reflective Teaching is something that involves in self observation and self reflection. In this methodology, a teacher assesses him/her self for the betterment of teaching process. Donald Sachon suggests in his "Reflections of Actions" (1998) that Teaching is not momentary but a continuous process involving professionals and learners. The present paper here focuses on a particular kind of Reflective Teaching process, Reflective writing. Reflective writing is interconnected to Reflective thinking and Reflective Teaching.

Reflective writing is on what one is reflecting about to select just the most significant events or ideas. This paper broadly studies the salient features involved and their use of Reflective writing with the special reference to the students of under graduation who want to learn English as a second language.

Introduction

Believing in learner centred classrooms, John Dewey an American pragmatist introduced revolutionary ideas in teaching learning processes, which routed out the traditional notions of the classroom rubrics. The result was shift of classrooms from teacher centric to learner centric. This shift caused the emergence of new trends in teaching learning process. New trends emerged in fields like curriculum, methodology etc. As the ways of traditional learning process became irrelevant, new kinds of teaching learning processes came into existence. The emerging demands in classroom teaching created the need to invent new trends in classroom teaching.

In the process many new trends, techniques, strategies, methodologies are being developed to cater the emerging demands. During the early decades of twentieth century John

Dewey pioneered many of these inventions. *Reflection* is one of the inventions during the course of time.

Jenny Moon defines Reflection as "*Reflection is a form of mental processing that we use to fulfil a purpose or to achieve some anticipated outcome. It is applied to gain a better understanding of relatively complicated or unstructured ideas and is largely based on the reprocessing of knowledge, understanding and, possibly, emotions that we already possess.*"(2005)

In India seldom English is taught and learnt as second language. Usually learners learn English to fulfil their academic needs. Unfortunately till today in India English is treated as an elites' language rather than a house hold language. The status of English in India is an additional language besides mother tongue.

In the above circumstances the present paper focuses to trace out the necessity and importance of *Reflection* in teaching and in learning English as second language. The paper also tries to find out how reflective strategies such as *Reflective teaching* and *Reflective writing* contribute in learning English as second language. *Reflective teaching* is broadly concerned to teachers where as *Reflective Writing* is concerned to both the teachers and the learners as well.

To begin the discussion first we take one of the reflective strategies, *Reflective Teaching*, and to study how it is useful to teach English as second language.

Reflective Thinking

Reflective Teaching is one of the extended branches to reflective thinking. In reflective thinking one reflects one's point of view of experiences, situations, events that were encountered. Reflective thinking does not suggest the good or bad way of thinking but it examines the situation as it is. Thus reflective thinking provides an opportunity to analyze the situation. The analysis presents the total picture of the situation. Thus reflective thinking can be used as an instrument to examine the foundations like beliefs, values, attitudes etc.

Reflective thinking always adds new a finding to the existing knowledge. It is an inbuilt technology in every person. Reflective thinking teaches lessons, things to be remembered, and mistakes and so on, which guide a person to act accordingly to the situation.

Reflective Teaching

As said earlier, Reflective Teaching is one of the extended branches of reflective thinking. Donald Schon suggests in his "*Reflections of Actions*" (1998) that Reflective Teaching is not momentary but a continuous process involving professionals and the learners. Schon introduced and contributed to the concept of reflective practice as a critical process. Many scholars combine John Dewey and Donald Schon in the birth of Reflective Teaching as a teaching and learning process.

Reflective Teaching a teacher involves in self observation and self evaluation. In methodology the teacher sets a self analysis of all aspects related to teaching and learning. Reflective Teaching is based on the principle of "Learning to teach and Teaching to

Reflective Teaching

Generally a Reflective Teacher follows the following step. The first step in Reflective is *planning*. To realize the set objectives, a teacher initially plans systematically a classroom teaching. In planning the teacher considers factors such as classroom size, tent, methodology, use of technology etc.

The next step after planning is to *Act*. This is an execution phase. In this step the executes his plan into action. The hypothetical part is being brought into action. This may or may not realize in total.

After the step "Act", the next step is "*Collection of evidence*". This is the very step in Reflective Teaching.

The success of reflection depends on how a teacher devises effectively in collecting the evidence. The evidence is to be collected depending as per the requirement of reflection. The may be taken orally, written or technology based. It can be collected from the or peer group teachers. If it is collected from learners it may be done so from all the or selected group of learners as per the requirement. The collection process may be or be intimated to the class. The use of modern technology makes reflection more and reliable. With the help of modern electronic devices the teacher can record every and happening of a classroom.

The next important step is, '*analysis*'. In this step the teacher has to analyze the s that have been collected. The analysis is to be done in a coherent and logical way. /sis not to be done with a pre occupied mind.

The final step in Reflective Teaching is *Reflection*. Here the reflection takes place the analysis of evidence. The reflection may examine the perceptions of planning and ion. The reflection also considers experience, .ideas, observations etc. The reflections to identify the confusions, difficulties, obstacles etc .that are encountered during the of executing planning. The reflection enables the teacher to know the success rate. n throws light on the mistakes occurred and the areas to be improved. Thus resulting /ay of teaching and learning process.

Reflective Teaching is a very useful methodology where English is taught as a second .Generally in second language classrooms students prefer to observe to express. By reflective teaching methodology in these classrooms, teachers may notice the short and can focus on the solutions. Reflective teaching provides an opportunity to reflect ers particularly when they are teaching sound system of English. While teaching

phonetics teacher can collect evidences on the ways of articulation. By analyzing these ways teacher may advise the students for the betterment. By reflecting the total classroom teacher may improve the performance of classroom teaching. This methodology is also useful for teaching communication skills in English.

Reflective Writing

Reflective Writing is too like reflective teaching a useful strategy to teach English for second language classrooms. Among the various reflective strategies Reflective Writing is one of the prominent strategies. Reflective Writing is very much popular in the fields of Medicine and Law. Though Reflective Writing is widely used by the professionals, it is also useful to non-professional courses students. Reflective Writing as a strategy is useful to both the teachers and the learners. Reflective Writing contributes to explore the learning process. The systematic way of registration of data or content and its analysis provides students an opportunity to have clarity regarding to the learning process. It gives a better understanding of the learning process.

In India students who learn English are not much exposed to writing. When they have to produce something new in English they feel difficult to do so. Especially in examinations they try to reproduce the text that has memorized. When they are asked to reproduce something new they do not feel comfortable. To fill the gap teachers may assign Reflective Writing assignments to them. By verifying their responses teachers can advice where ever needed. It leads to the betterment of learning English as second language. Reflective Writing provides an opportunity to learners to improve their writing skills.

Reflective Writing involves four steps,

- 1) Responding an experience
- 2) Relating the experience to previous knowledge
- 3) Analyzing the causes
- 4) Reconstructing thinking.

Uses of Reflective Writing

- To make connections between previous and preset knowledge. . Reflective Writing helps to establish clarity in the connections between theory and practice.
- To examine learning process, Reflective Writing s very much useful.
- To integrate and relate knowledge Reflective Writing functions as an instrument.
- To reflect mistakes in learning process Reflective Writing is helpful.
- Reflective Writing keeps a learner always an active learner.

on Reflective Writing

It types of Reflective Writings are present to learn English as second language

Based on language content weekly entries may be made. Learners may enter their views through these entries.

Group Diary: A group is formed and the group enters their reflections individually. It may be communicated to all the group members. It gives a scope for peer sharing.

Journal Diary: In this, one can reflect source of evidence in one's essay. And also reflect one's learning.

Workbook: Generally for experiment based work reflections can be entered. This kind of Reflective Writing is useful in English language labs.

Peer Review: Students are involved to get feedback from their peers. It shows the peer group opinion.

Self Assessment: it is one's self critical comments on one's own work.

Conclusion

Students can be encouraged to adopt various Reflective Writing practices. These practices will enrich student learning abilities. Since Reflective Writing is mostly subjective, teachers should take additional care to incorporate Reflective Writing in writings like logical, analytical, hypothetical, critical and creative. For English language teaching Reflective Writing is much useful in teaching grammar, communicative skills, phonetics etc.

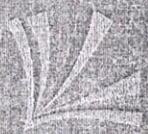
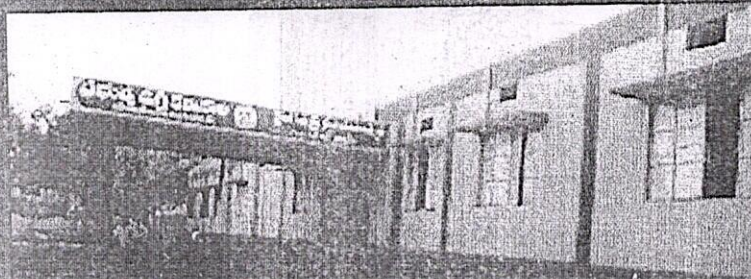
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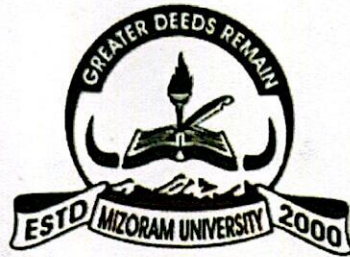
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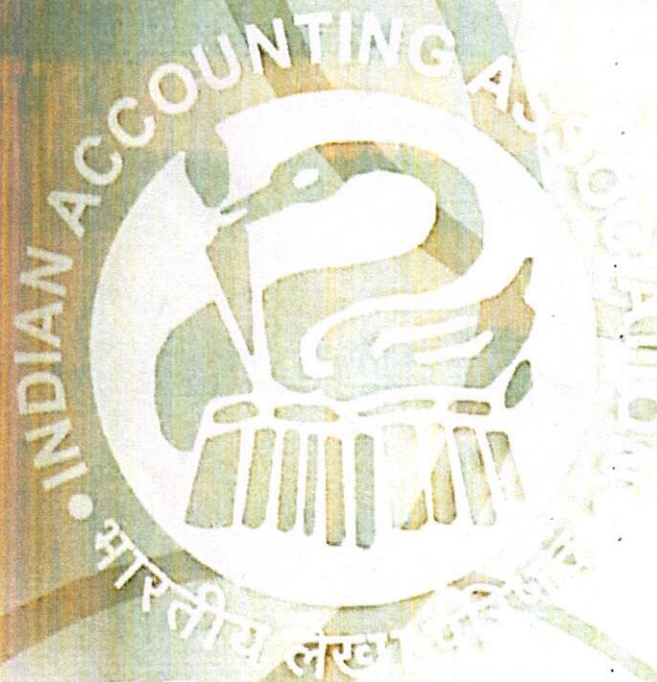
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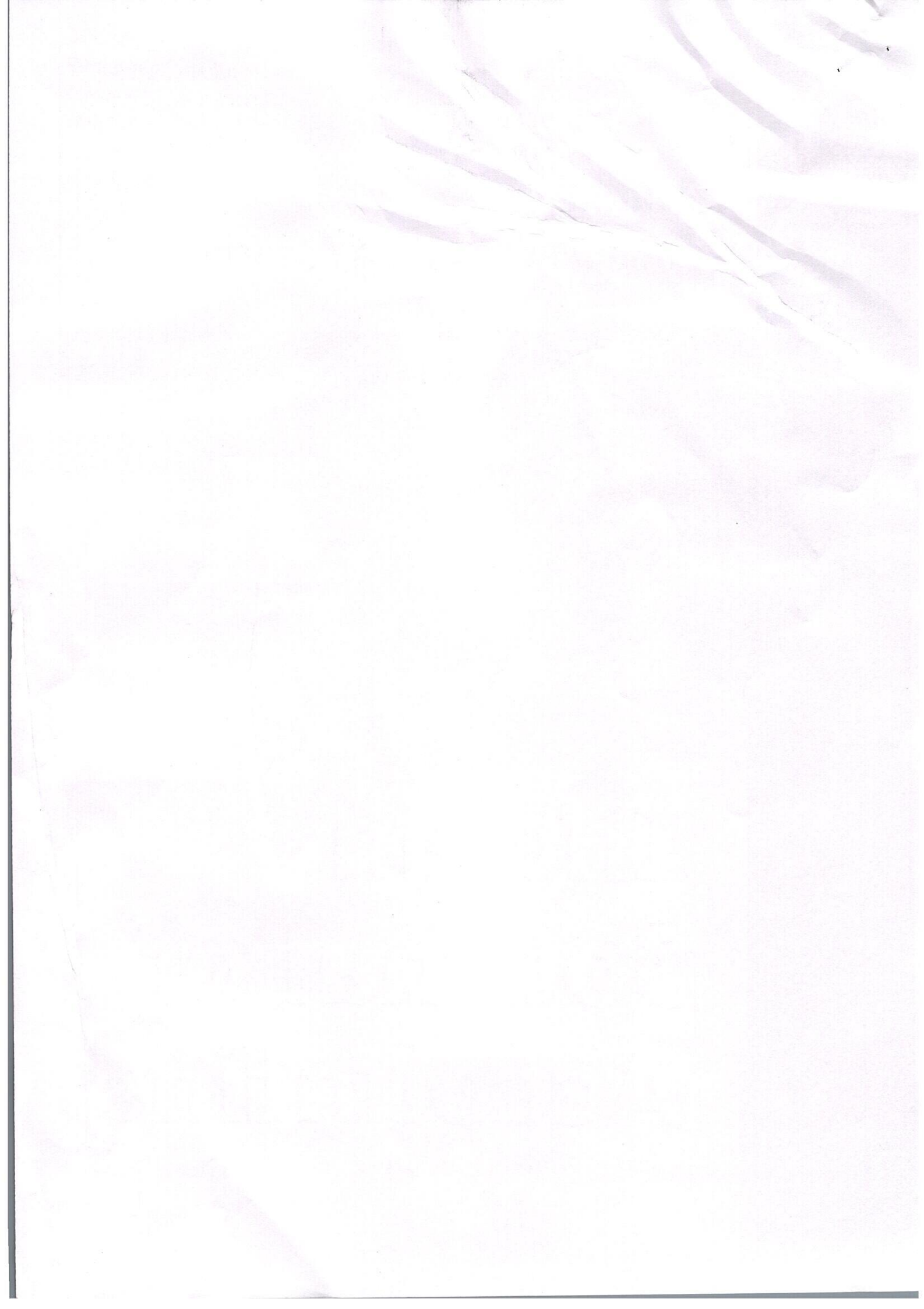


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LINKAGES AMONG STOCK MARKETS: BRICS COUNTRIES

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ABSTRACT

The purpose of the study is to look into the short-run and long-run relationships between Indian stock market (Nifty) and stock indices of BRICS countries. Monthly closing stock market indices of India (Nifty) and that of the Brazil (IBOVESPA), Russia (RTSIndex), China(SSE Composite) and South Africa (FTSE) for the period of April, 2009 to March, 2014 are taken as sample.

The study is tested with Cross correlation, Unit root test, Granger causality test and Johansen cointegration test to seek the relationship, stationarity, directional causality and either short or long run equilibrium between the Nifty and the selected indices of BRICS stock markets. The result obtained by the econometric tools shows that the correlation between the Nifty and the other selected indices is significant, the data are stationary at their level and its first difference (ADF and PP), both unidirectional and bidirectional causality occurs and the long term relationship is found between Nifty and selected indices.

Key Words: Stock Indices, BRICS, Cointegration, Causality

INTRODUCTION

The globalization of the world stock markets is the most noteworthy development that has occurred during the last decade. Various factors contributed to this including: the advancement of technology and remote access which have been utilized in security trading, the emergence of new international financial institutions offering financial services regardless of geographical jurisdictions, trends of liberalization and the removal of restrictions used to be imposed on foreign ownership, and the movement towards regional integration of that stock exchanges, clearing and settlements organizations, and other financial institutions. Along with various measures, opening up of the home market for the foreign investors is one of the important steps taken by the Indian Government that may lead the Indian stock market to be strongly integrated with the stock market of the rest of the world.

The globalization phenomenon may be blessing, since many experts believe that globalization may improve market efficiency, lower its risk due to the possibility of diversification, and use arbitrage in a relevant way. On the other hand, it may increase pricing volatility and trading instability, due to the high correlation between leading - major stock markets (BRICS) and other markets as well as to the fact that the irrational trading in one market may move to other markets as witnessed in the last two decades.

IMPORTANCE OF BRICS NATIONS

In the past few decades, some large economies such as Brazil, Russia, India and China, (BRICs) have acquired a vital role in the world economy as producers of goods and services, receivers of capital, and as potential consumer markets. The BRICs economies have been identified as some of the fastest growing countries and the engines of the global recovery process, which underscores the changed role of these economies. Even in the G-20 countries' forum, BRICs are playing a formidable role in shaping the macroeconomic policy after the recent financial crisis. At present, these four countries encompass over 40 per cent of the global population and a share in world GDP (in PPP terms) that increased from 16 per cent in 2000 to nearly 27 per cent in 2011, and is expected to rise significantly in the near future. If one compares the GDP in PPP terms for 2011, four economies figure among the G-20 top ten, with China, India, Russia and Brazil in 2nd, 4th, 6th and 8th place respectively. In terms of contribution to growth of PPP-adjusted global GDP of the world, these four economies accounted for 55 per cent during 2000–11, and their contribution is expected to rise in the coming years.

According to an estimate by Goldman Sachs, the four original BRICs countries are expected to represent 47 per cent of global GDP by 2050, which would dramatically change the list of the world's 10 largest economies. An important change that we may expect over the medium to long term is that the top 10 countries in terms of GDP may be different from the top 10 countries in terms of per capita GDP. The inherent strength of the BRICs emanates from strong domestic demand-based economies in the case of India and Brazil and the significant outward linkages of China and Russia.

LITERATURE REVIEW

Bailey & Stulz (1990) applied simple correlation technique to find interrelationship among US and Pacific basin stock market and found that the correlation differed in terms of daily, weekly and monthly time series data.

Arshanapalli & Doukas (1996) applied Johansen cointegration technique on daily data belonging to different Asian markets and found that there was no long term relationship among the Asian stock market.

Ghosh (1999) in contrary to Arshanapalli & Doukas (1996) found that some of the Asian market showed a long run equilibrium relationship with the world's major stock market.

Floros (2005) found a long term relationship among the stock prices of US, Japan and UK. He also observed that through Granger causality test some of the stock indices have shown bidirectional effect and some other showed unidirectional effect.

Amanulla & Kamaiah (1995) examined the long run equilibrium between the RBI stock price indices of Bombay, Calcutta, Madras, Delhi and Ahmedabad. They found that there existed long run equilibrium. Nath & Verma (2003) tested the cointegration between India and other selected countries with daily price indices and found that no cointegration

existed among India, Taiwan and Singapore for the period January 1994 to November 2002. Jayanthi & Pandiyan (2008) tested the cointegration between the stock price indices of India, Malaysia, Taiwan, China, South Korea, US, UK, Germany, Singapore, Hong Kong and Japan. The study period was from April 2000 to March 2007 and they found that no correlation and cointegration among the selected stock price indices.

Chakravarty & Ghosh (2011) made an attempt to find the relationship among the indices of Sensex 30, S&P 100 and FTSE 100 through Granger causality test and found that unidirectional causality occurred for S&P100 and FTSE 100 from Sensex.

Sen (2011) made an attempt to investigate the relationship between Sensex and some selected Stock Price Indices of the Asia Pacific region and found that the correlation among the selected Stock Price Indices were highly correlated and significant. Granger causality test revealed the unidirectional effect from the Asian tigers to Sensex and Johansen cointegration test clearly showed that there existed a long run relationship between Sensex and stock indices of the major Asian Pacific countries.

It is worth mentioning that the present study is carried out as an extension of the study of Sen (2011) with the time interval from January 2000 to June 2013 to find out the relationship among the selected market indices in amid strident recessionary trends.

OBJECTIVES OF THE STUDY

1. To test the stationarity of the BRICS Stock Market Indices
2. To examine directional effect among the BRICS Stock indices
3. To understand the effect of Long term relationship among the BRICS market.

METHODOLOGY

This study is conducted in an empirical format by using secondary data gathered from monthly stock market indices of India (Sensex) and that of the Brazil (IBOVESPA), Russia (RTSIndex), China (SSE Composite) and South Africa (FTSE).

DATA

Monthly time series data of the above-mentioned indices have been used for the purpose of empirical investigation covering the study period from April, 2009 to March 2014. The data for these indices were collected from the website www.Finance-yahoo.com. The following standard statistical and economic tools have been applied for empirical investigation.

- Cross Correlation,
- Unit root test,
- Granger causality test, and
- Johansen cointegration test.

Cross-Correlation

Cross-Correlation is a useful statistical tool to measure the co movement of variables and the lead-lag relationship between them.

Using the following formula, pair-wise cross-correlations between Sensex and other prices indices have been computed

$$r = \frac{\sum_i (x_i - \bar{x})(y_{i-d} - \bar{y})}{\sqrt{\sum_i (x_i - \bar{x})^2} \sqrt{\sum_i (y_{i-d} - \bar{y})^2}} \quad (A1)$$

Where r is greater than, equal or less than zero.

From the cross-correlations, it would be clear whether Nifty is correlated to other selected stock price indices in different times (monthly) lags.

Unit Root Test

Before using the time series data for further investigation, all the time series data must be tested for stationarity. Mean, Variance and covariance of such stationary time series data do not change with the time shift. If the data is non-stationary, then regression results using such data would be spurious, as the usual t test would not be applicable to test the significance of coefficients.

To test the stationarity, the unit root test has been applied on the time series index data. In this regard, the Phillips-Perron unit root test has been preferred against ADF test, as the latter is considered the low power test. In Phillips-Perron test, non-parametric statistical methods are used to take care of the serial correlation in the error term (μ_t) of the following equation.

$$\nabla Y_t = \nabla Y_{t-1} + u_t$$

The test is based on the null hypothesis $H_0: Y_t$ is not I(0). If the computed PP statistics are less than the critical value, the Y_t is non-stationary.

Granger Causality Test

Granger causality test has carried out to observe the direction of the short-run relationship between the sensex and other indices. To test for Granger causality between two stock price indices Y_t and X_t , the following two equations have been estimated.

$$Y_t = \sum_{i=1}^m \alpha_i Y_{t-i} + \sum_{i=1}^m \beta_i X_{t-i} + it_i$$

$$X_t = \sum_{i=1}^m \gamma_i Y_{t-i} + \sum_{i=1}^m \delta_i X_{t-i} + e_t$$

Where Y_t and X_t are the first difference of time series variable.

Therefore, F-test has been conducted for joint insignificance of the coefficients. The null hypothesis of such test Y_t does not Granger cause X_t and vice versa. A rejection of the null hypothesis indicates the existence of Granger causality; for each of the stock indices, two Granger causality tests have been performed to investigate whether Y Granger causes X or X Granger causes Y or both or there is no causal relationship between the variables.

Johansen cointegration test

The condition for testing Johansen cointegration test for anytime series data is that the data should be non stationary at their level i.e. the natural logarithm of time series data should be non stationary and the first difference in the data should be stationary. If the return indices of different markets are correlated, the value may raise or fall. On the other hand, if the time series data are cointegrated, then the series in the long run will come to equilibrium point.

EMPIRICAL RESULTS AND ANALYSIS

Descriptive statistics results

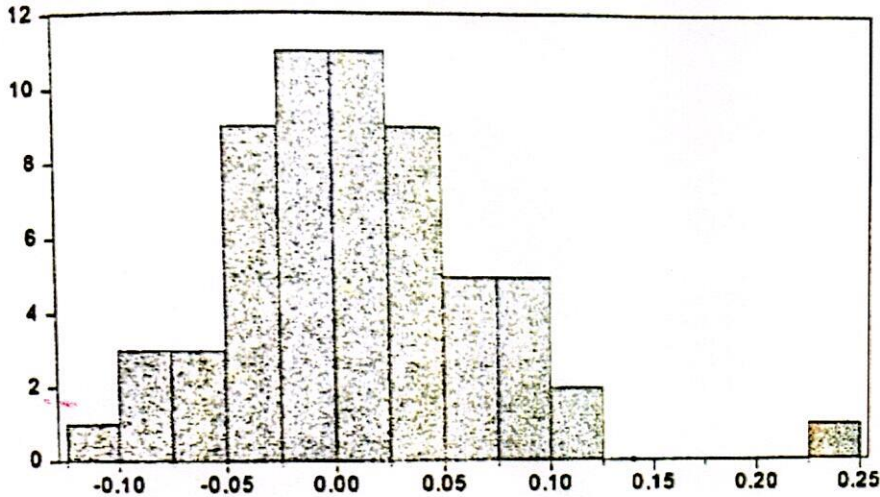
figure 1 to 5 revealed that the variables considered in the scope of the analysis are examined, the average values of variables were found to be Nifty (0.011316), BOVESPA (0.001169), SSE (-0.0028), RTSINDEX (0.0065) and FTSE (0.0142), standard deviation values are found to be Nifty (0.06075), BOVESPA (0.054), SSE (0.068), RTSINDEX (0.0882) and FTSE (0.038), When average values of the variables are considered in terms of the case that data do not have normal distribution and that variables are not distributed normally in full, but are distributed very close to normal distribution as the median values of variables are very close to average values.

Regarding whether series are distributed normally or not; skewness, kurtosis and Jarque-Bera statistics were considered. If kurtosis value of relevant variables is bigger than three, it indicates that series is sharp, if it is smaller than three, it indicates that series is oblate. In consideration of skewness values, if skewness value is equal to zero, it indicates that series has normal distribution, if the skewness value is bigger than zero; it means that series is skew in the positive direction, if skewness value is smaller than zero; it indicates that series is skew in negative direction.

Following values were found: skewness value of Nifty variable 0.8622, kurtosis value (5.32), Jarque-Bera value (20.95), skewness value of BOVESPA (0.142), kurtosis value (2.831), Jarque-Bera value (0.27), skewness value of SSE (-0.5356), kurtosis value (4.5619), Jarque-Bera value (8.968), skewness value of RTSINDEX (-0.2595), kurtosis value (4.5022), Jarque-Bera value (6.3152) and skewness value of FTSE (0.2547), kurtosis value (2.488), Jarque-Bera value (1.303).

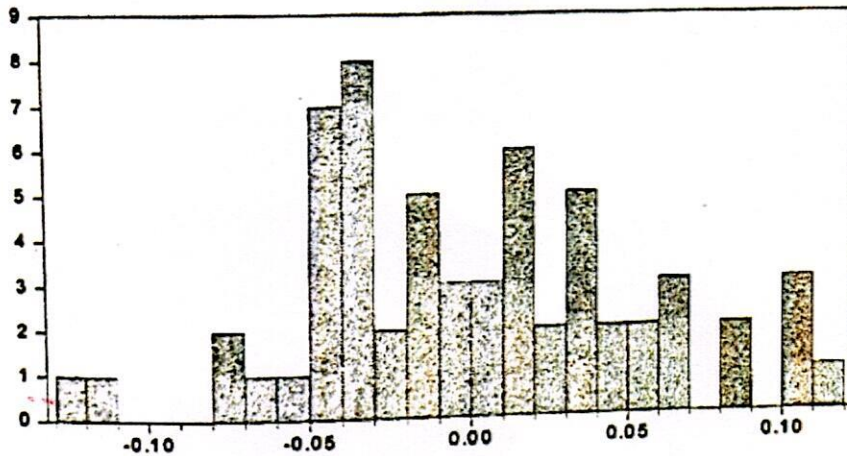
It has been found that Nifty variable is skew (inclined) and sharp in the positive direction, BOVESPA variable is skew (inclined) and oblate in positive direction and SSE variable is skew (inclined) and sharp in negative direction, RTSINDEX variable is skew (inclined) and sharp in negative direction and FTSE variable is skew (inclined) and oblate in positive direction.

Figure: 1



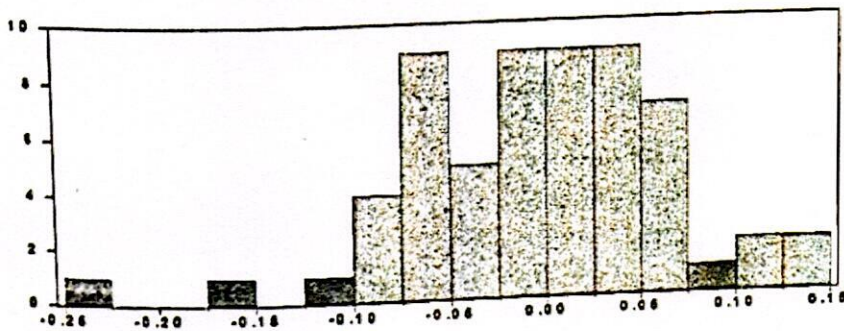
| | |
|----------------------|-----------|
| Series: NIFTY | |
| Sample 1 61 | |
| Observations 60 | |
| Mean | 0.011316 |
| Median | 0.005571 |
| Maximum | 0.247376 |
| Minimum | -0.108108 |
| Std. Dev. | 0.060756 |
| Skewness | 0.862211 |
| Kurtosis | 5.325072 |
| Jarque-Bera | 20.94897 |
| Probability | 0.000028 |

Figure: 2



| | |
|------------------------|-----------|
| Series: BOVESPA | |
| Sample 1 61 | |
| Observations 60 | |
| Mean | 0.001169 |
| Median | -0.002305 |
| Maximum | 0.117722 |
| Minimum | -0.126210 |
| Std. Dev. | 0.053658 |
| Skewness | 0.142132 |
| Kurtosis | 2.831104 |
| Jarque-Bera | 0.273330 |
| Probability | 0.872262 |

Figure: 3



| | |
|--------------------|-----------|
| Series: SSE | |
| Sample 1 61 | |
| Observations 60 | |
| Mean | -0.002763 |
| Median | -0.001903 |
| Maximum | 0.142343 |
| Minimum | -0.248081 |
| Std. Dev. | 0.068460 |
| Skewness | -0.635630 |
| Kurtosis | 4.561922 |
| Jarque-Bera | 6.968002 |
| Probability | 0.011288 |

Unkages Among Stock Markets: BRICS Countries

Table 4: Cross- Correlation between S&P CNX Nifty to other Selected Indices

| Lag | IBOVERSPA | RTSINDEX | SSE | FTSE |
|-----|-----------|----------|---------|---------|
| -5 | -0.0244 | 0.0314 | -0.1287 | 0.0900* |
| -4 | -0.05 | -0.121 | 0.1351 | -0.0771 |
| -3 | -0.1017 | -0.1596 | -0.0743 | -0.005 |
| -2 | 0.0436 | 0.1787* | -0.1654 | 0.1412* |
| -1 | 0.0854* | 0.1002* | 0.1663* | -0.2074 |
| 0 | -0.1014 | -0.364 | -0.0734 | 0.0521* |
| 1 | 0.6662* | 0.6234* | 0.2570* | -0.0004 |
| 2 | -0.0814 | 0.0691* | 0.1537* | -0.0849 |
| 3 | -0.1392 | -0.19 | -0.0024 | 0.0915* |
| 4 | 0.1027* | -0.1879 | -0.0905 | 0.1121* |
| 5 | 0.1237* | 0.0543* | 0.2350* | -0.0263 |

Note: *significant at 1% level

Source: Computed Data

The pair-wise cross correlation co-efficient between Nifty and other indices are presented in table 4. It that there is a positive correlation between the Nifty and other selected indices at 1% level of significance.

The pair wise Granger causality test is shown (Table-5) that no causality exists between

- | | |
|--------------------------|---------------------------|
| (i) RTSINDEX and BOVESPA | (ii) NIFTY and BOVESPA |
| (iii) BOVESPA and NIFTY | (iv) SSE and BOVESPA |
| (v) BOVESPA and SSE | (vi) FTSE and BOVESPA |
| (vii) BOVESPA and FTSE | (viii) NIFTY and RTSINDEX |
| (ix) RTSINDEX and NIFTY | (x) SSE and RTSINDEX |
| (xi) RTSINDEX and SSE | (xii) FTSE and RTSINDEX |
| (xiii) RTSINDEX and FTSE | (xiv) SSE and NIFTY |
| (xv) FTSE and NIFTY | (xvi) NIFTY and FTSE and |
| (xvii) SSE and FTSE. | |

The only Bidirectional causality exists between

- (i) BOVESPA and RTSINDEX
- (ii) NIFTY and SSE and
- (ii) FTSE and SSE.

It is important to note that the pronouncement of causality between the selected variables does not mean that movement in one variable actually causes movements in another variable. To a certain extent, causality basically entails in order of movements in the time series.

Table 5 : Granger Causality Test-Results

| Null Hypothesis | F-Stat. | P-Value | Decision |
|---|---------|----------|----------------|
| RTSINDEX does not Granger Cause BOVESPA | 2.08192 | 0.1348 | No Causality |
| BOVESPA does not Granger Cause RTSINDEX | 3.47199 | 0.0383 | Bi-directional |
| NIFTY does not Granger Cause BOVESPA | 19.4874 | 5.00E-07 | No Causality |
| BOVESPA does not Granger Cause NIFTY | 2.71817 | 0.0754 | No Causality |
| SSE does not Granger Cause BOVESPA | 1.54488 | 0.2228 | No Causality |
| BOVESPA does not Granger Cause SSE | 2.36276 | 0.104 | No Causality |
| FTSE does not Granger Cause BOVESPA | 26.1302 | 1.00E-08 | No Causality |
| BOVESPA does not Granger Cause FTSE | 0.05678 | 0.9449 | No Causality |
| NIFTY does not Granger Cause RTSINDEX | 14.5548 | 1.00E-05 | No Causality |
| RTSINDEX does not Granger Cause NIFTY | 1.84631 | 0.168 | No Causality |
| SSE does not Granger Cause RTSINDEX | 0.06349 | 0.9386 | No Causality |
| RTSINDEX does not Granger Cause SSE | 3.09227 | 0.0537 | No Causality |
| FTSE does not Granger Cause RTSINDEX | 17.6885 | 1.00E-06 | No Causality |
| RTSINDEX does not Granger Cause FTSE | 0.81435 | 0.4485 | No Causality |
| SSE does not Granger Cause NIFTY | 2.40146 | 0.1006 | No Causality |
| NIFTY does not Granger Cause SSE | 4.06017 | 0.023 | Bi-directional |
| FTSE does not Granger Cause NIFTY | 2.05702 | 0.1379 | No Causality |
| NIFTY does not Granger Cause FTSE | 1.64957 | 0.2018 | No Causality |
| FTSE does not Granger Cause SSE | 8.39016 | 0.0007 | Bi-directional |
| SSE does not Granger Cause FTSE | 0.41982 | 0.6594 | No Causality |

The result obtained in the table 6 through Johansen cointegration test revealed that trace statistics is significant at 5% level in cases and it leads to conclude that there is long run equilibrium between the Nifty and other selected indices of the stock market. Therefore, this suggests that there will belong run relationship among the BRICS economics.

Table 6: Johansen Cointegration Test Results (Lags Interval: 1 to 4)

| Unrestricted Cointegration Rank Test (Trace) | | | | |
|--|------------|-----------|----------------|---------|
| Hypothesized | | Trace | 0.05 | |
| No. of CE(s) | Eigenvalue | Statistic | Critical Value | Prob.** |
| None * | 0.508015 | 119.8398 | 69.81889 | 0.0000 |
| At most 1 * | 0.383041 | 80.11860 | 47.85613 | 0.0000 |
| At most 2 * | 0.341966 | 53.07321 | 29.79707 | 0.0000 |
| At most 3 * | 0.260582 | 29.63730 | 15.49471 | 0.0002 |
| At most 4 * | 0.203355 | 12.73137 | 3.841466 | 0.0004 |

Note: Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-value

CONCLUSION

The study revealed certain facts that there is positive correlation between Nifty and other selected indices (BRCS) during the study period April, 2009 to March 2014. Further it is worth noted that both unidirectional and bidirectional causality effect took place among the selected indices. The result obtained through cointegration test proved that long run equilibrium exists between the Nifty and other selected market indices. Due to this cointegration prices indifferent markets cannot move away far from each other and therefore the investor community cannot get abnormal gain due to the price differences among the markets.

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Size and Age of Npas and Their Implications for Financial Exclusion

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Among the institutional sources of credit, the cooperatives have been relatively more stable sources of financing the agriculture. But the recovery of loans has become the strenuous problem. The problem of mounting NPAs not only jeopardizes the interests of the defaulters but also of the regular members, auditors, and the very cooperative banking itself. There is no gainsaying the fact that a safe, sound and solid kind of credit structure depends to a considerable extent on the speedy recovery of funds advanced to the borrowers. The cooperative credit is no exception to this rule. The real test of its future strength lies in the record of the realization of loans. But there has been sluggishness in the recovery of loans in the cooperative credit agencies as well as in the societies financed by the commercial banks. This has made the RBI to give a call for a proper climate to tackle the problem of mounting NPAs which are smothering the progress of the cooperative movement. It has also exhorted the various cooperative organizations to make concerted efforts to reduce NPAs. The magnitude of NPAs have a direct impact on banks' profitability as legally they are not allowed to book income on such accounts and at the same time banks are forced to make provision on such assets as per the RBI guidelines. The rapid hike in NPAs of banks is a matter of great alarm and anxiety to the government since it causes obstacles in the free flow of credit jeopardizing the health of the banking system and the economy ending up in doldrums.

The chief objective of the paper is to discuss the size and age of NPAs in the study area. The financial exclusion is measured in terms of increasing level of dependence on informal sources of credit, high interest burden, worsening financial

situation, mounting poverty and mounting indebtedness. Towards this end, samples of 500 who are financially excluded from the formal financial institutions were selected for the purpose of the study from the three regions of Andhra Pradesh. Bhaimsa and Rebbana Mandals of Adilabad district of Telangana, Adoni, Bandi Atmakur mandals of Kurnool district of Rayalaseema and Sullurupeta and Vinjamur Mandals of Nellore Districts of Andhra Pradesh, mostly by resorting to the method of stratified random sampling. The stratification is done on the basis of size of the land holding and social status.

RESULTS AND ANALYSIS

Table-1

Size of the loan borrowed

| Rs in thousands | Frequency | Percent | Cumulative Percent |
|-----------------|-----------|---------|--------------------|
| Up to 25 | 260 | 52.0 | 52.0 |
| 25-50 | 110 | 22.0 | 74.0 |
| 50-75 | 80 | 16.0 | 90.0 |
| Above 75 | 50 | 10.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-1 refers to the distribution of the sample farmers by the size of the loan borrowed from various banks. It is observed that 52 percent of the sample farmers have borrowed an average of up to 25000 rupees followed by 25000-50000 rupees of loan by 22 percent of the sample farmers, 50000-75000 rupees of loan by 16 percent of sample farmers and above 75000 rupees of loan by 10 percent of the sample farmers.

Table-2
Extent of repayment

| Extent of repayment (%) | Frequency | Percent | Cumulative Percent |
|-------------------------|-----------|---------|--------------------|
| 40 | 275 | 55.0 | 55.0 |
| 40-50 | 145 | 29.0 | 84.0 |
| 50-60 | 80 | 16.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-2 refers to the distribution of the sample farmers by the extent of loan repayment. It is observed that 55 percent of the sample farmers have made the repayment of the loan to the extent of 40 followed by 29 percent made repayment to the extent of 40-50 percent of their loan and 16 percent have made repayment to the extent of 50-60 percent of the loan.

Table-3
Extent of NPAs

| Extent of NPAs (%) | Frequency | Percent | Cumulative Percent |
|--------------------|-----------|---------|--------------------|
| Up to 20 | 290 | 58.0 | 58.0 |
| 20-40 | 140 | 28.0 | 86.0 |
| Above 40 | 70 | 14.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-3 refers to the distribution of the sample farmers by the extent of NPAs. It is observed that the extent of NPAs is up to 20 percent in case of 58 percent of sample farmers, and the same is 20-40 percent of their borrowings in case of 28 percent of the sample farmers and above 40 percent in case of 14 percent of the sample farmers.

Table-4
Period of NPAs

| Period of NPAs (Years) | Frequency | Percent | Cumulative Percent |
|------------------------|-----------|---------|--------------------|
| one | 295 | 59.0 | 59.0 |
| Two | 150 | 30.0 | 89.0 |
| More than two | 55 | 11.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-4 refers to the distribution of the sample farmers by the period of NPAs. It is observed that the period of NPAs one year in case of 59 percent of sample farmers, and the same is two years in case of 30 percent of the sample farmers and more than two years in case of 11 percent of the sample farmers.

Table-5
Type of Bank

| Type of Bank | Frequency | Percent | Cumulative Percent |
|------------------|-----------|---------|--------------------|
| Cooperative bank | 265 | 53.0 | 53.0 |
| Commercial bank | 170 | 34.0 | 87.0 |
| Others | 65 | 13.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-5 refers to the distribution of the sample farmers by the type of bank from which they have borrowed. It is observed that 53 percent of the sample farmers have borrowed from cooperative banks, 34 percent have borrowed from commercial banks and 13 percent from other banks.

Table-6

**Financial exclusion attributable to NPAs-
increasing level of dependence on informal
sources of credit**

| Response | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|-----------------------|
| Yes | 350 | 70.0 | 70.0 |
| No | 150 | 30.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-6 refers to the distribution of the sample farmers by their response about financial exclusion attributable to NPAs with a focus on increasing level of dependence on informal sources of credit. It is observed that 70 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of increasing level of dependence on informal sources of credit and 30 percent of the sample street children did not subscribe to this view.

Table-7

**Financial exclusion attributable to NPAs-
high interest burden**

| Response | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|-----------------------|
| Yes | 300 | 60.0 | 60.0 |
| No | 200 | 40.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-7 refers to the distribution of the sample farmers by their response about financial exclusion attributable to NPAs with a focus on high interest burden. It is observed that 60 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of high interest burden and 40 percent of the sample farmers did not subscribe to this view.

Table-8

**Financial exclusion attributable to NPAs-
worsening financial situation**

| Response | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|-----------------------|
| Yes | 400 | 80.0 | 80.0 |
| No | 100 | 20.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-8 refers to the distribution of the sample farmers by their response about financial exclusion attributable to NPAs with a focus on worsening financial situation. It is observed that 80 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of worsening financial situation and 20 percent of the sample farmers did not subscribe to this view.

Table-9

**Financial exclusion attributable to NPAs-
mounting indebtedness**

| Response | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|-----------------------|
| Yes | 250 | 50.0 | 50.0 |
| No | 250 | 50.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-9 refers to the distribution of the sample farmers by their response about financial exclusion attributable to NPAs with a focus on mounting indebtedness. It is observed that 50 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of mounting indebtedness and 50 percent of the sample farmers did not subscribe to this view.

Table-10
Financial exclusion attributable to NPAs-mounting poverty

| Response | Frequency | Percent | Cumulative Percent |
|----------|-----------|---------|--------------------|
| Yes | 450 | 90.0 | 90.0 |
| No | 50 | 10.0 | 100.0 |
| Total | 500 | 100.0 | |

Source: Primary data

Table-10 refers to the distribution of the sample farmers by their response about financial exclusion attributable to NPAs with a focus on mounting poverty. It is observed that 90 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of mounting poverty and 10 percent of the sample farmers did not subscribe to this view.

Table-11
Size of the farmer and size of the loan borrowed

| Size of the farmer | Size of the loan borrowed (Rs in thousands) | | | | Total |
|--------------------|---|--------|--------|----------|--------|
| | Up to 25 | 25-50 | 50-75 | Above 75 | |
| Marginal | 30 | 5 | 25 | 5 | 65 |
| | 46.2% | 7.7% | 38.5% | 7.7% | 100.0% |
| | 11.5% | 4.5% | 31.3% | 10.0% | 13.0% |
| Small | 155 | 75 | 30 | 40 | 300 |
| | 51.7% | 25.0% | 10.0% | 13.3% | 100.0% |
| | 59.6% | 68.2% | 37.5% | 80.0% | 60.0% |
| Medium | 50 | 25 | 20 | 5 | 100 |
| | 50.0% | 25.0% | 20.0% | 5.0% | 100.0% |
| | 19.2% | 22.7% | 25.0% | 10.0% | 20.0% |
| Big | 25 | 5 | 5 | | 35 |
| | 71.4% | 14.3% | 14.3% | | 100.0% |
| | 9.6% | 4.5% | 6.3% | | 7.0% |
| Total | 260 | 110 | 80 | 50 | 500 |
| | 52.0% | 22.0% | 16.0% | 10.0% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Chi-Square=49.673, df=9, =0.000, r=-0.101
Source: Primary data

Table-11 refers to the distribution of the sample farmers by their farm size and by their loan size. The correlation between the size of the farmer and loan size is found to be negative($r=-0.101$). The rejection of the null hypothesis with level of significance=0.05 and degree of freedom=9 implies that the relationship between the size of the sample farmers and their loan size is found to be statistically dependent.

Table-12
Size of the farmer and extent of repayment

| Size of the farmer | Extent of repayment (%) | | | Total |
|--------------------|-------------------------|--------|--------|--------|
| | 40% | 40-50 | 50-60 | |
| Marginal | 50 | 15 | | 65 |
| | 76.9% | 23.1% | | 100.0% |
| | 18.2% | 10.3% | | 13.0% |
| Small | 140 | 95 | 65 | 300 |
| | 46.7% | 31.7% | 21.7% | 100.0% |
| | 50.9% | 65.5% | 81.3% | 60.0% |
| Medium | 60 | 25 | 15 | 100 |
| | 60.0% | 25.0% | 15.0% | 100.0% |
| | 21.8% | 17.2% | 18.8% | 20.0% |
| Big | 25 | 10 | | 35 |
| | 71.4% | 28.6% | | 100.0% |
| | 9.1% | 6.9% | | 7.0% |
| Total | 275 | 145 | 80 | 500 |
| | 55.0% | 29.0% | 16.0% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% |

Chi-Square=35.799, df=6, =0.000, r=0.004

Source: Primary data

Table-12 refers to the distribution of the sample farmers by their farm size and by the extent of repayment of their loan. The correlation between the size of the farmer and the extent of repayment of their loan is found to be positive($r=0.004$). The rejection of the null hypothesis with level of significance=0.05 and degree of freedom=6 implies

that the relationship between the size of the sample farmers and the extent of repayment of their loan is found to be statistically dependent.

Table-13

Size of the farmer and extent of NPAs

| Size of the farmer | Extent of NPAs (%) | | | Total |
|--------------------|--------------------|--------|----------|--------|
| | Up to 20 | 20-40 | Above 40 | |
| Marginal | 40 | 10 | 15 | 65 |
| | 61.5% | 15.4% | 23.1% | 100.0% |
| | 13.8% | 7.1% | 21.4% | 13.0% |
| Small | 170 | 80 | 50 | 300 |
| | 56.7% | 26.7% | 16.7% | 100.0% |
| | 58.6% | 57.1% | 71.4% | 60.0% |
| Medium | 55 | 45 | | 100 |
| | 55.0% | 45.0% | | 100.0% |
| | 19.0% | 32.1% | | 20.0% |
| Big | 25 | 5 | 5 | 35 |
| | 71.4% | 14.3% | 14.3% | 100.0% |
| | 8.6% | 3.6% | 7.1% | 7.0% |
| Total | 290 | 140 | 70 | 500 |
| | 58.0% | 28.0% | 14.0% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% |

Chi-Square=37.384, df=6, =0.000, r=-0.056

Source: Primary data

Table-13 refers to the distribution of the sample farmers by their farm size and by the extent of repayment of their loan. The correlation between the size of the farmer and the extent of repayment of their loan is found to be positive($r=0.004$). The rejection of the null hypothesis with level of significance=0.05 and degree of freedom=6 implies that the relationship between the size of the sample farmers and the extent of repayment of their loan is found to be statistically dependent.

Table-14

Size of the farmer and period of NPAs

| Size of the farmer | Period of NPAs | | | Total |
|--------------------|----------------|--------|---------------|--------|
| | one | Two | More than two | |
| Marginal | 50 | 10 | 5 | 65 |
| | 76.9% | 15.4% | 7.7% | 100.0% |
| | 16.9% | 6.7% | 9.1% | 13.0% |
| Small | 145 | 120 | 35 | 300 |
| | 48.3% | 40.0% | 11.7% | 100.0% |
| | 49.2% | 80.0% | 63.6% | 60.0% |
| Medium | 80 | 10 | 10 | 100 |
| | 80.0% | 10.0% | 10.0% | 100.0% |
| | 27.1% | 6.7% | 18.2% | 20.0% |
| Big | 20 | 10 | 5 | 35 |
| | 57.1% | 28.6% | 14.3% | 100.0% |
| | 6.8% | 6.7% | 9.1% | 7.0% |
| Total | 295 | 150 | 55 | 500 |
| | 59.0% | 30.0% | 11.0% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% |

Chi-Square=46.007, df=6, =0.000, r=-0.046

Source: Primary data

Table-14 refers to the distribution of the sample farmers by their farm size and by the period of NPAs. The correlation between the size of the farmer and the period of NPAs is found to be negative($r=-0.046$). The rejection of the null hypothesis with level of significance=0.05 and degree of freedom=6 implies that the relationship between the size of the sample farmers and the period of NPAs is found to be statistically dependent.

It is concluded that 52 percent of the sample farmers have borrowed an average of up to 25000 rupees, 55 percent of the sample farmers have made the repayment of the loan to the extent of 40 percent of the loan, the extent of NPAs is up to 20 percent in case of 58 percent of sample farmers, the period of NPAs one year in case of 59 percent of sample farmers. 70 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of increasing level of

dependence on informal sources of credit. 60 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of high interest burden. 80 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of worsening financial situation. 50 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of mounting indebtedness. 90 percent of the sample farmers have opined that due to their NPAs, they are subjected to financial exclusion in terms of mounting poverty.

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