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Contents

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Financial Literacy among College Teachers in Aizawl:
A Case Study of Pachhunga University College

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Abstract

Financial Literacy a intermingle of awareness, knowledge, skill, attitude and behavior essential to make informed and sound financial decisions and ultimately achieving individual financial welfare. The main objective of the study is to assess the level of financial literacy among college teachers in Aizawl city. Teachers have been selected as the respondents because society as a whole expects teachers to possess diverse and deep knowledge, which is particularly important as they train future workforce of the nation. The study is based on primary data. The study found that the respondents have knowledge relating to Low Risks Investment Avenues which are the basic financial instruments offered by the banks and insurance companies. It is found that the knowledge keeps on decreasing as the risks involved in it becomes higher.

Key words: Financial literacy, teacher

Introduction

Financial literacy has become important in recent years. Peoples are more concerned about what lies ahead in their future. Since, the introduction of many new financial instruments in recent years, financial market is becoming more complex. Due to this fact, the needs for informed choices about risks and rewards of different alternatives available in the market are essential. A number of programs for spreading the importance of financial education and uplifting financial literacy rate have been conducted through a number of funding agencies.

Organization for Economic Co-operation and Development (OECD) has defined Financial Literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual well-being".

According to RBI, Financial literacy can broadly be defined as "Providing familiarity with and understanding of financial market products, especially rewards and risks, in order making informed choices".

Nowadays, many financial instruments are available in the market not just for the regular investors but also for the occasional investors. In fact, the more the instruments in the market the more is the knowledge needed by the investors to minimize risks and increase rewards. In developed countries financial literacy implications act as a consumer protection act to the whole society, ensuring the capability to navigate the right combination. But, in developing countries the implications are rather different and accessible to a small portion of the society. This is why, financial literacy is very important to benefit the weaker section of the society.

In India, in order to minimize the risks and educate the society a number of initiatives are done by the government through different agencies. The major players being the Reserve bank of India, Security

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Exchange Board of India, and Insurance Regulatory and Development Authority PFRDA and commercial banks (Viz&Kumari, 2011)

Research has shown that levels of financial literacy worldwide are unacceptably low. Developing countries have much less financially literate population as compared to developed countries. People find it difficult to take decisions regarding personal finance issues confidently and often make mistakes. In India also the levels of financial literacy are very low (Bhusan, 2014). An enormous improvement can be depicted in the near future.

In the present study we will try to focus on the financial literacy level among college teachers in Mizoram. A case study of Pachhunga University College will be highlighted in order to have a clear view of financial literacy level.

Scope of the Study

RBI is putting more importance to financial inclusion as per their report published on 16th July, 2012. This in turn increases the need for financial literacy which will act as the consumer protection to those invests in avenues available in the market. Since, exploitative financial schemes and false interpretation of interest rates arises from the brokers and money lenders, there is a need for having financial literacy to make the consumer minimizing the risks involved in it and maximizing the rewards contain. Financial Literacy develops confidence and increases alternative avenues available for investing. In order to increase financial literacy knowledge about the present scenario of financial literacy level is required.

Objective of the Study

i. To study the level of awareness about the financial terms and investment avenues among college teachers in Aizawl.

Review of Literature

Braunstein& Welch (2002) concluded that financial literacy training yields certain benefits. Student testing and surveys of confidence in financial matters, how-ever, produce less-definitive results. In analyzing the efficacy of financial literacy pro-grams, the primary challenge is defining and quantifying "success." The broad objective of all programs is to present information that will improve consumers' ability to make informed decisions that are beneficial to their financial well-being. One measure of success is the achievement of a specific outcome resulting from the training, with programs that are tied to a defined goal providing the best opportunities for measuring success. Initiatives that have a significant goal-oriented educational component include programs for first-time homebuyers, savings initiatives, and workplace retirement-planning efforts.

Lusardi and Mitchell (2007) concluded that the consumers across several developed countries are poorly informed about financial products and practices. The low level of financial illiteracy may restrict peoples' ability to save and invest for retirement, and thus undermining their well-being in old age. Further, these deficiencies are concentrated among those with low income and low education, minorities, and women. Furthermore, educational programs may be most effective if they are targeted to that most vulnerable population subgroups, so as to address differences in saving needs and in preferences. As old-age dependency ratios rise across the developed world, and as government- run pay-as-you-go social security programs increasingly confront insolvency, these issues will become increasingly important. So the crucial challenge is to provide a wide range of financial literacy toolbox to such households so they can build better retirement plans and execute them.

Mandel (2008) in his study, focused on students in the Northeast, Midwest, South and West regions of U.S., found that the young adults finish high school with low mean levels of financial literacy, and the

study found a little evidence that high school courses in personal finance or money management are currently helpful in raising those levels. The study further found that the then full-semester high school classes in money management or personal finance education in high school were of no significant value, the stock market game was of some value, while only the fear of retiring poor has any motivational value.

Kumar &Anees (2013) in a study emphasized enhance the financial literacy among individuals in India. They were of the opinion that financial literacy can be easily improved through inclusion of relevant material on financial literacy in the general education program at school and college level. Any intervention strategy must take into account such sociological and behavioral aspects which influence sociological factors in financial decision making process. The influence of the determinants suggests that the strategy for improving financial well-being of individuals in India should be focusing the young investors.

Ravikumar (2013) found that the person, who may be either male or female and either married or unmarried, is not a graduate, aged more than 60 years belonging to scheduled tribe category and Christianity having 2 or less than dependents residing in urban area at the house build at government land with gross annual income of Rs 1,00,001 to Rs 3,00,000 has higher level of financial literacy perception. Conversely, the study shows that the person, who may be either male or female and either married or unmarried, aged up to 18 years belonging to forward category and Muslim religion having professional educational qualification and 3 to 5 members as dependents working in agriculture and its allied activities residing in semi urban area at lease house with annual gross income of up to Rs 20,000 has lower level of financial literacy perception

Bhusan (2013) proclaimed that 'people in India are still not much aware about their finance related issues. The results suggest that level of financial literacy varies significantly among respondents based on various demographic and socio-economic factors'. The study further concluded that the level of financial literacy is highly influenced by the demographic profile of the individuals, viz. gender, education, income, nature of employment and place of work whereas it does not get affected by age and geographic region. It finally concluded that the level of financial literacy is in general low in our country and thus the government is expected to take appropriate measures to increase awareness about finance related matters.

Bhushan (2014) made an attempt to examine the relationship between financial literacy of salaried individuals and their awareness regarding financial products. Further, the relationship between financial literacy and investment behaviour of salaried individuals was also investigated. The study found that respondents in high financial literacy group have higher awareness level for all financial products except for post office savings. Further, respondents with low financial literacy invest in traditional and safe financial products and do not invest much in those financial products which are comparatively more risky but can give higher returns. The study finally concluded that financial literacy level affects awareness regarding financial products as well as investment preferences towards financial products

Viz&Kumari (n.d.) highlighted their finding which indicate Reserve Bank of India , Securities Exchange Securities exchange board of India (SEBI) and Insurance Regulatory and Development Authority (IRDA) are working actively towards promoting financial literacy. Several measures can be taken to improve financial literacy levels. The best way is to start early. Integration of financial education in High School Curriculum , Social Marketing, Resource Persons, Adult Education, Self Help Groups and others, Microfinance Institutions, Integrated communication channels, Helpline are the suggested measures to improve the level of financial literacy.

Owusu (2015) is his research based on primary data found inadequate level of financial literacy among the teachers of the Sekyere East District. Further, his study found that knowledge of teachers about

insurance and investment is not good which in the long term will limit their financial decisions making and planning. Low financial literacy and its resultant consequences on the teachers could potentially hinder their productivity since their performance can be seriously affected as they will always have financial worries and challenges to think about.

Surendar&Sarma (2017) in a study found that the level of financial literacy among the teacher of higher education is satisfactory. They also concluded that the majority of technical and non-technical teachers of higher education are aware of various aspects of personal financial planning and are able to plan on their own irrespective of their subject of profession.

The review of the literature on financial literacy highlights that there is vast room for research in financial literacy, especially to those relating to developing countries. Teachers are supposed to be having a better exposure towards ever changing scenario of financial products and services. The society as a whole expect teachers to possess diverse and deep knowledge, which is particularly important as they train future workforce of the nation. If teachers are found to possess low level of financial literacy, as found in the study conducted by Owusu (2015), they cannot guide their pupil in this direction.

This present study is an attempt to find out the nature of financial literacy among college teachers in Aizawl.

Methodology

The present study is based on primary data. Pachhunga University College, Aizawl was selected to conduct the study as this is the oldest and biggest college in Mizoram state. There were 103 teachers in the college at the time of data collection; out of these a sample of 30 respondents (15 male teachers and 15 female teachers) was drawn randomly for the purpose. The population of the study was found quite homogenous, as their educational qualification is quite similar, all live in urban area, their socio-economic profile is also quite similar. Thus, purposive sampling method was adopted for selection of the respondents. A structured questionnaire was developed and administered among respondents.

Findings:

Table-1 highlighted that the gender mix of the respondents is 50/50 per cent. Out of the thirty respondents 50 per cent lies in the age group between 31-40 years which consist of 15 respondents. It also indicates that 80 per cent are married, and 50 per cent have more than five family members. 46.67 per cent are belonging to Master Degree with NET, which is almost the half way mark. Further, 36.67 per cent lies within 6000 Academic Grade Pay category and 16.67 do not know the category which they belong. Apart from that, only 73.34 per cent have PAN Card.

Table - 2 highlights that Fixed Deposits is known by every respondents, Saving Deposits and Mutual fund comes to second, while Demat Account is the least known as less than 17 per cent know about it. Table - 3 reveals the fact that Saving Bank account is the most popular avenues with 46.67 per cent awareness level which lies in ' Know Very Well Category' and subsequently followed by the same per cent 46.67 in ' Know Well Category '. Then, Bank Fixed Deposit attains 43.37 per cent awareness rate among the respondents. Among the Low Risk Avenues Provident Funds is the least understood variant.

A close look at the investment avenues with moderate risk shows that Company Deposits is the least understood among all as more than 60 per cent are not aware about it. A further analysis reveals that Children Benefit Plan is the most popular investment avenue as more than 50 per cent are aware about it while an additional 40 per cent know a bit about it (see Table-4).

From the analysis it is visible that High Risk Avenues are not so popular among the respondents. Future & Options is the least known among them with 26.67 per cent at Don't Know Well and 40.00 per cent at Don't Know at all level (see Table-5).

Table 1: Profile of the Respondents

Variables	Particulars	Number	Percentage
Gender	Male	15	50.00
	Female	15	50.00
Age	30 and below	5	16.67
	31-40	15	50.00
	41-50	4	13.33
	51-60	5	16.67
	61-70	1	3.33
Marital Status	Unmarried	5	16.67
	Married	24	80.00
	Widowed	1	3.33
	Divorced		0.00
Academic Grade Pay (AGP)	6000	11	36.67
	7000	7	23.33
	8000	2	6.67
	9000	5	16.67
	Don't Know	5	16.67
Highest Degree	Master Degree (NET)	14	46.67
	M Phil	4	13.33
	Ph.D	12	40.00
No of family members	Two	3	10.00
	Three	2	6.67
	Four	5	16.67
	Five	5	16.67
	More than five	15	50.00
PAN Card Holder	Yes	22	73.33
	No	8	26.67

Source: *Field study*

Surprisingly no one is found confident about Gold ETF/ other ETF while little over 25 per cent knew little about it. Other two investment avenues selected for the study, i.e. real estate and precious metal are also not very popular among the select teachers in the college (see Table-6).

An important finding which may be arrived at is the fact that the awareness level is declining as the risks involved in it are increasing.

Another surprising finding is the more than 26 per cent respondents do not avail debit card service at all while little over 73 % respondents avail debit card facility. A likely reason may be that some of the respondents might be confused with the terms ATM cards and Debit cards (see Table-7).

Table 2: Level of Awareness relating to Investment Terms

Investment Terms	Know		Don't Know	
	No.	%	No.	%
Mutual Fund	25	83.33	5	16.67
Endowment Plan	14	46.67	16	53.33
Unit Linked Insurance Policy (ULIP)	15	50.00	15	50.00
BSE Sensex	9	30.00	21	70.00
Equity Link Savings Scheme (ELSS)	7	23.33	23	76.67
Equity Shares	9	30.00	22	73.33
Debentures	9	30.00	21	70.00
Fixed Deposits	30	100.00	0	0.00
Savings deposits	29	96.67	1	3.33
National Savings Certificate	17	56.67	13	43.33
Permanent Account Number (PAN)	23	76.67	7	23.33
Real Estate	17	56.67	13	43.33
Life Insurance	29	96.67	1	3.33
Health insurance	26	86.67	3	10.00
Futures & Options	14	46.67	16	53.33
Stock Market	9	30.00	21	70.00
Demat Account	5	16.67	25	83.33
Systematic Investment Plan (SIP)	8	26.67	22	73.33
Systematic transfer Plan (STP)	6	20.00	24	80.00
Systematic Withdrawal Plan (SWP)	6	20.00	24	80.00
Recurring Deposit	21	70.00	9	30.00

Source: *Field Study*

Table 3: Low risk investment Avenues

Avenues of Investment	Know very Well		Know Well		Somewhat Know		Don't Know Well		Don't Know at all	
Savings account Deposits	14	46.67	14	46.67	1	3.33		0	1	3.33
Bank Fixed Deposits	13	43.33	15	50.00	1	3.33		0	1	3.33
Post Office Deposits	10	33.33	12	40.00	6	20.00	1	3.33	1	3.33
Provident Funds	6	20.00	1	3.33	15	50.00	4	13.33	4	13.33

Source: *Field Study*

Table 4: Moderate Risk Avenues

Avenues of Investment	Know very Well		Know Well		Somewhat Know		Don't Know Well		Don't Know at all	
Life Insurance Scheme	10	33.33	16	53.33	1	3.33	1	3.33	2	6.67
Retirement Plan	6	20.00	8	26.67	11	36.67	3	10.00	2	6.67
Children Benefit Plan	7	23.33	9	30.00	12	40.00	1	3.33	1	3.33
Health Insurance	7	23.33	5	16.67	13	43.33	2	6.67	3	10.00
Company Deposits	2	6.67	1	3.33	8	26.67	11	36.67	8	26.67
Mutual Funds	2	6.67	5	16.67	14	46.67	6	20.00	3	10.00
Debentures	1	3.33	2	6.67	9	30.00	8	26.67	10	33.33

Source: Field study

Table 5: High Risk Avenues

Avenues of Investment	Know very Well		Know Well		Somewhat Know		Don't Know Well		Don't Know at all	
Equity Shares	1	3.33	1	3.33	10	33.33	8	26.67	10	33.33
Foreign Exchange Deposits	0	0.00	2	6.67	13	43.33	6	20.00	9	30.00
Co-Operative Society Deposits	0	0.00	5	16.67	12	40.00	7	23.33	6	20.00
Non- Banking Financial Institutions(NBFCs)	1	3.33	1	3.33	11	36.67	8	26.67	9	30.00
Future & Options	0	0.00	2	6.67	8	26.67	8	26.67	12	40.00

Source: Field study

Table 6: Additional Investment Avenues

Avenues of Investment	Know very Well		Know Well		Somewhat Know		Don't Know Well		Don't Know at all	
Real Estate	3	10.00	2	6.67	9	30.00	9	30.00	7	23.33
Gold ETF/other ETF	0	0.00	2	6.67	6	20.00	9	30.00	13	43.33
Precious Metal	1	3.33	1	3.33	7	23.33	9	30.00	12	40.00

Source: Field study

Table 7: Debit card Holder

Do you have any debit card?	No. of Respondents	%
Yes	22	73.33
No	8	26.67

Source: Field study

Table-8 it is visible that only half of the respondents proclaimed they cultivated a habit of savings and investment to their children, while 9 people i.e., 30 per cent did not cultivate and 20% can't say whether they cultivate or not.

Table - 9 highlights that 80 per cent of the teachers prefer to save and invest in those avenues where they feel it is safe, 46.60 per cent choose High Return for the reason in selecting the instruments. Tax benefit is the least reason they considered before investing, the reason might be the fact that most of the respondents are exempted from tax.

Cursory view of the Table-10 reveals that the Newspapers/magazines/Books as the most useful tools for the respondents in getting the awareness about the avenues with 26.67 per cent. On the other hand

Table 8: Cultivating the habit of savings and investment in your children

	Actual Figure	Percentage
Yes	15	50
No	9	30
Can't Say	6	20

Source: Field study

Table 9: Reasons for selecting instruments

Please rank the factors given below as reason for selecting new instrument by ranking it from 1 to 7 (1 being the highest and 7 being the lowest)

	1	%	2	%	3	%	4	%	5	%	6	%	7	%
Safety	24	80.00	1	3.33	4	13.33	0	0.00	0	0.00	0	0.00	0	0.00
Liquidity	0	0.00	8	26.67	1	3.33	4	13.33	**6**	20.00	6	20.00	2	6.67
Tax Benefits	2	6.67		0.00	4	13.33	6	20.00	2	6.67	**1**	3.33	12	40.00
High return	1	3.33	14	46.67	6	20.00	4	13.33	3	10.00	1	3.33	0	0.00
Easy Availability		0.00	5	16.67	9	30.00	5	16.67	4	13.33	4	13.33	1	3.33
Diversification		0.00	0	0.00	3	10.00	4	13.33	6	20.00	7	23.33	6	20.00
Peer Pressure	2	6.67	1	3.33	2	6.67	4	13.33	6	20.00	8	26.67	6	20.00
No response	1	3.33	1	3.33	1	3.33	3	10.00	3	10.00	3	10.00	3	10.00

Source: Field study

Table 10: Sources of Information

	1	%	2	%	3	%	4	%	5	%	6	%	7	%
Newspapers/ Magazines/Books	8	26.67	6	20.00	5	16.67	5	16.67	4	13.33	2	6.67	1	3.33
Websites	2	6.67	6	20.00	5	16.67	2	6.67	4	13.33	6	20.00	4	13.33
Bank/Post Office/ Insurance Co.	4	13.33	2	6.67	3	10.00	8	26.67	3	10.00	4	13.33	2	6.67
TV Channels	1	3.33	1	3.33	1	3.33	5	16.67	9	30.00	4	13.33	7	23.33
Brokers and Agents	5	16.67	6	20.00	3	10.00	3	10.00	3	10.00	5	16.67	4	13.33
Friends and Relatives	6	20.00	6	20.00	6	20.00	2	6.67	3	10.00	4	13.33	1	3.33
Spouse/Family	2	10.00	1	3.33	5	16.67	3	10.00	2	6.67	3	10.00	9	30.00
No response	2	3.33	2	6.67	2	6.67	2	6.67	2	6.67	2	6.67	2	6.67

Source: Field study

Websites are considered as the least useful tool to be considered before investing. While there were two persons who do not responds to this question.

The reason for saving differs depending upon the personal preferences and priorities. Higher Education of children and Retirement savings are the two most prominent reason for saving consisting of 30.00 per cent each (see Table-11).

Table 11: Reasons for Savings

	1		2		3		4		5		6		7
Higher Education of Children	9	30.00	7	23.33	8	26.67		0.00	0	0.00	1	3.33	1
Buying house or land	2	6.67	6	20.00	3	10.00	6	20.00	0	0.00	6	20.00	
Tax savings	3	10.00	2	6.67	1	3.33	1	3.33	0	0.00	1	3.33	
High return from invested amount	1	3.33	3	10.00	2	6.67	4	13.33	2	6.67	5	16.67	6
Capital gains	1	3.33	2	6.67	2	6.67	2	6.67	6	20.00	1	3.33	4
Compulsion from family members		0.00		0.00	1	3.33	1	3.33	2	6.67	0	0.00	3
Marriage of children		0.00	0	0.00	1	3.33	2	6.67	0	0.00	5	16.67	7
Buying durable goods	1	3.33	4	13.33	2	6.67	3	10.00	7	23.33	4	13.33	2
To meet medical expenses	2	6.67		0.00	7	23.33	6	20.00	4	13.33	3	10.00	3
For retirement	9	30.00	4	13.33	1	3.33	2	6.67	6	20.00	1	3.33	1
Any other (please specify)		0.00		0.00		0.00		0.00		0.00	0	0.00	
No response	2	6.67	2	6.67	2	6.67	3	10.00	3	10.00	3	10.00	3

Source: Field study

Table 12: Target for the next three months

	Yes	%	No	%	May be	%	No response	%
Increase the amount you invest?	16	53.33	9	30.00	3	10.00	2	6.67
Review your investment performance?	15	50.00	9	30.00	4	13.33	2	6.67
Change your investment mix?	2	6.67	19	63.33	7	23.33	2	6.67
Consult with a financial advisor?	11	36.67	5	16.67	2	6.67	2	6.67
Learn about a new investment concept or product?	11	36.67	9	30.00	8	26.67	2	6.67

Source: Field study

It has inferred that 53.33 per cent of the respondents plans to increase they invest n the next three months to come, 30.00 per cent are not planning to increase in the near future. Again, 50.00% are planning to review their investment performance and 63.33 per cent are not planning to change their investment in three months to come.

Conclusions

From the above discussion, it can be concluded that the financial literacy level is somewhat low. The respondents has knowledge relating to Low Risks Investment Avenues which are the basic financial instruments offered by the banks. The knowledge keeps on decreasing as the risks involved in it becomes higher. Traditional Investment avenues are hardly availed by the teachers and among the Moderate investment avenues Life Insurance Scheme is the most popular. It is clearly visible that there are still 5 people who do not know their Academic Grade Pay. This shows that there is a lack of awareness among the teachers.

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A Study of Empolyees Job Satisfaction in Secunderabad Railway Divsion

Mohammad Azmat Ali*

Abstract

This study attempts to evaluate job satisfaction of employees in different category of employeesin Secunderbad RailwayDivision. It focus on the relative importance of job factors, there was different between employees overall job satisfaction in terms of Age, Gender and length of Service. There is influence factors salary, working hours, coworker support and overall job satisfaction.

Keywords: Secunderabad Railway Division, salary, working hours and coworker support

Introduction

Secunderabad Railway division is one of major railway division. The operations and maintainers are under the South Central Railway zone of Indian Railways. The magnificent Secunderabad Railway station was built by Nizam of Hyderabad in 1874. Later, it worked as the main station of the Nizam Railway. after 1951 its operation of Railways had increased, where thr transportation of goods has improved as well passengers.

The more it took famous the more it needed man power. The service played the most important role in Railway department. In order to give the quality services the railway management more potential employees. They succeeded afterwards Secunderabad station achieved the ISO-9001certification for quality management in ticket booking process and luggage transportation and train management of platform. In recent years the railway has proposal to upgraded it into a world class station, with emphasis on vertical expansion of complex with more attention of national railway categories.

This study attempts to evaluate job satisfaction of employees in different categories of Secunderabad Railway employees. It focus on the relative importance of job factors, and there was difference between employees overall job satisfaction in terms of Age and Gender. There is influence of factors like salary, working hours, coworker support responsibility, working conditions, income, and recognition of work.

Review of Literature

Higgins C. et, al.(1994): Interference was maximum when the children were early, and bottom in families with older children. Employed mothers still have higher total work and family loads than employed fathers. Gender differences in work-family engagement will endure until men take more responsibility at home-based.

Brown, S.P., Peterson, R.A., (1993) – Employee job satisfaction is the affective state of employees regarding multiple facts of their job.

Smith, P.C., Kendal, L.M., Hulin, C.L, (1969) – Job Satisfaction has defines as fillings or an affective responses to facts of the situation (work place).

Objectives

1. To study the effect of employee salary on job satisfaction
2. To study the effect employee coworker support on job satisfaction
3. To study the effect employee hours of works on job satisfaction

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Hypothesis
1) Ho: There is no significant relationship between salary and job satisfaction
2) Ho: There is no significant relationship between coworker support and job satisfaction
3) Ho: There is no significant relationship between hours of works and job satisfaction

Methodology
This paper descriptive in nature this study focuses on for analyzing job satisfaction of railway employees of Secundrabad Railway Division. The study has used both secondary and primary data. The Construction of questioner followed Warr – Cook – Wall (1979) job satisfaction scale.

Sample Design
For the purpose of this study sample of 30 employees was selected by applying Stratified Random Sample method. A questionnaire was administered 30 to employees and data was collected. The questionnaire uses Five point Likert scale model, ranging between Extremely Dissatisfied to Extremely Satisfied. Data was analyzed through SPSS package. 't' test was applied analyze the data and for drawing the inferences.

Source of Data
The study has used both secondary and primary data. Primary data was collected through questioner. Secondary data was collected from Articles, Journals, Magazines and websites. Primary data collected period is October 2017 to December 2017.

Job Satisfaction Factor
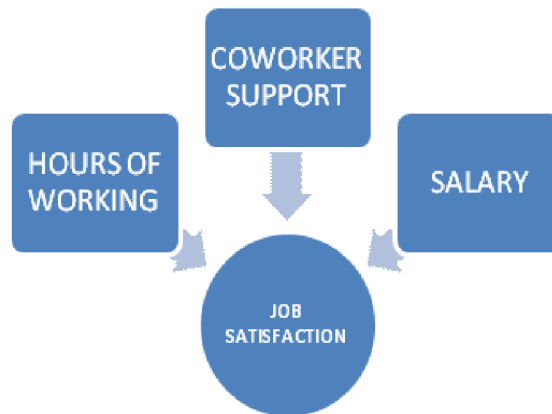
Chart: 1 job satisfaction factors

As the 't' test reveals result that there is no significant relationship among Male and Female with reference to salary, coworkers support and overall jab satisfaction. As 'P' values are above 0.05 for variables salary, co-workers support and overall jab satisfaction, the Null Hypothesis is accepted. In other words salary, co-worker support has no influence on job satisfaction for both Male and Female employees. But further results found that working hours ('P' values are below 0.05), so a significant

relationship between working hours and job satisfaction. This leads imply that employees are more satisfied with working hours, which results in to job satisfaction. On the conclude that employees are not satisfied with salary and co-worker support and overall job satisfaction.

Table: 1 Railway Employees Gender wise t test

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.(p value)	t	Sig. (2-tailed)
Salary	.191	.666	-.372	.713
			-.396	.698
Working hours	8.604	.007	1.961	.060
			1.431	.189
Coworkers support	.048	.828	-.996	.328
			-1.006	.333
Overall job satisfaction	.037	.850	.043	.966
			.043	.966

Source: Primary Data

Table: 2 Railway Employees Age group -'t' test

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.(p value)	T	Sig. (2-tailed)
Salary	3.136	.087	.882	.385
			.742	.472
Working hours	.109	.744	.000	1.000
			.000	1.000
Coworkers support	.855	.363	-.895	.378
			-.854	.406
Overall job satisfaction	.410	.527	1.465	.154
			1.327	.206

Source: Primary Data

To analyze the satisfaction among employees of below 50 years and above 50 years Age group. 'T' test is conducted; the results show that there is no significant relationship among two age groups and job satisfaction parameters. In other words salary, working hours, co-worker support and do not influence the job satisfaction of employees belonging to two age groups. Working hours below 50 years and

above 50 years age group is no different opinion Job satisfaction of two age groups do not differ significance on variables selected for study.

Conclusion

This study attempts to evaluate job satisfaction of employees in different categories Secunderbad Railway employees. It focus on the relative importance of job factors, there was difference among employees of overall job satisfaction in terms of Age, Gender and length of Service. There is influence of on factors salary, working hours and coworker support. 't' test results reveal that there is no significance relationship among Male and Female employees with difference salary, coworkers support. There is a significant relationship between working hours and job satisfaction. This leads imply that employees are more satisfied with working hours. T' test is conducted; the results show that there is no significant relationship among two age groups and job satisfaction parameters. In other works salary, working hours, co-worker support and do not influence the job satisfaction of employees belonging to two age groups.

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Empirics of Foreign Direct and Portfolio Investments in India

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Abstract

Foreign investment inflows play a significant role in providing necessary investment resources in a developing country like India. Apart from being a critical driver of economic growth, foreign direct investment is a major source of non-debt financial resource for the economic development of India. Foreign investors invest in India to take advantage of cheaper wages, special investment privileges like tax exemptions, etc. Along with the development of local financial markets in India, and her greater openness to foreign investors, the composition of capital inflows has shifted towards the rising share of foreign portfolio investment in total flows. An increase in the volume of portfolio investment flows to India is connected with the growing importance of institutional investors, as they added liquidity to global securities markets. In the literature, it has been argued that an information-based trade-off exists between foreign direct investment and foreign portfolio investment in an emerging market economy. In this connection, the present study is an attempt to examine the dynamics of the causal relationship between foreign direct investment and foreign portfolio investment in the context of the Indian economy over the sample period spanning from 1990-91 to 2017-18. The use of annual data in the trivariate framework of Toda and Yamamoto Granger non-causality test provides the empirical evidence of the existence of a feedback causal relationship between foreign direct investment and foreign portfolio investment in India. Such finding is significant from the policy makers' point of view especially in this era of financial globalization.

Keywords: Foreign Direct Investment, Foreign Portfolio Investment, Causality, India JEL classification: F21, F32, G32, G34

Introduction

It has been the long consensus that the economic growth and development of a country requires effective mobilization as well as efficient allocation of investible resources. However, when domestic resources become insufficient to generate ample growth opportunities, foreign investment plays a significant role. Sethi (2013) argues that foreign investment is an important investible resource for emerging market economies in the era of globalization. Foreign investment may enter an economy in the form of Foreign Direct Investment (FDI) and/or Foreign Portfolio Investment (FPI) (Ahmad et al. 2004). FDI is a type of overseas equity investment resource which is directly used in permitted business activities to procure the services of various factors of production including raw materials, etc. (Todaro, 2012). This type of investment is carried out to achieve permanent and sustainable benefits in an organization in another country, and the result is the acquisition of effective voting right in the company's management (Lipsey, 1999). On the other hand, FPI is a passive type of capital market investment made by individuals and institutions in a foreign land (Todaro, 2012) in which they play no direct role in the management of productive units, and have no fiscal responsibility (Humanickiet al. 2013). The former is considered to be relatively stable, less volatile (Baharumshah&Thanoon, 2006) and driven by the long-

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term macroeconomic fundamentals such as country size, financial market development, degree of open-ness, and the like (Razin&Sadka, 2007; Kirabaeva&Razin, 2011). In contrast, the latter is viewed as being more volatile, highly reversible, and driven by cyclical factors including interest rate differentials, business cycle conditions, market sentiments, and herd behaviour (Hattari&Rajan, 2011; Ahmad et al. 2015). Thus, among the two, FDI is considered as a crucial component especially for developing countries (Albuquerque, 2003). In the literature, it has been argued that FDI is more safe and desirable by host countries than FPI, which is treated as 'hot money' that is prone to destabilize the economy (Claessensetal. 1995).

Goldstein et al. (2010) specifically pointed out that multinational corporations choose FDI while private equity funds, mutual funds and hedge funds focus on FPI. FDI's contribution to domestic investment and output growth dominates over the contributions of FPI flows (Razin, 2002). Goldstein &Razin (2006) also conclude that investors prefer FDI over FPI if the transaction and entrance cost is low, if production costs abroad are low and if they have a sound liquidity position. This helps to explain, why FDI is more dominant in developing or emerging economies where transaction and production costs are much lower than in developed countries. FDI has a lion's share in aggregate investment in developing economies and Albuquerque (2003) provides two main reasons for it. Because FDI uses a lot of intangible assets, it cannot be easily expropriated by the host country government. The investor considers it thus, as relatively safe. The second reason concerns the host country which prefers and enforces FDI as it is a much more stable source of financing than other forms of capital flows.

Literature also suggests other reasons for the preference for FDI. It potentially involves the creation of new jobs, transfer of foreign technology and managerial expertise, and larger increases in per capita GDP (Strazicichet al. 2001). It is suggested to be more stable compared to other forms of foreign investment (Bekaert& Harvey, 1998). Borenszteinet al. (1998), Balasubramanyamet al. (1996) and Lichtenberg & Van Pottelsberghe De La Potterie (1996) also found the favourable effects of FDI. This characteristic of FDI is persistent both during normal and crisis periods (Sula & Willett, 2009). Humanickiet al. (2013) con-clude that in economically stable periods FDI tends to dominate over FPI, but during insecurity and economic distress, both in source and host countries, FPI starts to gain importance.

In recent years, FPI has been considered as the hottest of all major types of foreign capital flows (Gozgor&Erzurumlu, 2010) and plausibly possess the predictive ability to cause real economic growth (Ahmad et al. 2016). FPI can help in increasing efficiency in domestic capital markets, by deepening these markets and raising disclosure standards. Portfolio investments consist of liquid assets such as bond and equity investments. So the structure of FPIs enables investors to sell their assets more easily and quickly. Of course, this makes the FPI more volatile. The standard approach states that more volatile form of capital is the one that is more likely to leave the country (Ahmad et al. 2015). Hence, conventional wisdom suggests that FDI is least volatile and short-term funds are more volatile than long-term funds (Gabriele et al. 2000). The existing literature provides empirical evidence mostly in favour of this opinion indicating that FDI is unconditionally less volatile than other flows UNCTAD (1998), World Bank (1999) and Lipsey (1999, 2001) and portfolio flows are generally considered the most volatile form of foreign capital flows (Ferreira &Laux, 2009) and thus, the 'hottest' of all (Sula & Willett, 2009). It has also been argued that for a country on the rise, FPI can bring about rapid development, helping an emerging economy move quickly to take advantage of economic opportunities, creating many new jobs and significant wealth. Thus, the significance of FPI can't be overstressed in a developing country like India. It is with this backdrop and in line with the arguments of Evans (2002) and the findings of Humanickiet al. (2013) and Morales &Mroz (2014), we proceed to investigate that whether FDI and FPI inflows are complementary or substitute to each other in the context of an emerging market economy like India. Precisely, the goal is to examine whether initial FDI inflows set up an environment for the potential FPI follow up in the country, or the other way around. The rest of the paper is organised as follows: Section 2 presents a brief review of the relevant extant literature; Section 3 makes a note of the data and methodology of the study; Section 4 makes the analysis; and Section 5 concludes.

Literature Review

The extant literature provides both theoretical and empirical evidence for the causal structure between foreign direct and portfolio investments. Some researchers found that FDI and FPI are rather substitutes of each other. Using outward FDI and FPI flow data of the US, Ruffin &Rassekh (1986) found that every US dollar FDI results in one less dollar being invested in FPI. Razin&Sadka (2001) suggest that foreign direct investors can skim the good firms at the expense of their domestic or FPI counterparts, owing to their expertise in their respective industries. Erzurumlu&Gozgor (2014)empirically examined the short- and long-run relationships between FDI and volatility of foreign portfolio investments FPI in 12 Central and Eastern European countries, and provides the evidence that a decrease in FPI volatility is followed by an increase in FDI in the long-run, and this indicates economies that are advance in capital liberaliza-tion, benefit from increases in FDI. However, the relationship in the opposite direction in the long-run is valid in only half of the countries studied. In short-run, it is found that the former relationship is valid for Turkey, the Czech Republic, and Lithuania whereas the latter is valid only for Latvia.

Some studies conclude that FDI leads to FPI while others found the other way around, i.e., FPI leads to FDI. In case of the former, FDI enters an economy at first and contributes to the stability of the economic environment, enhancing the more suitable economic environment for the entry of FPI (Goldstein &Razin, 2006; Khan &Banerji, 2015). In the latter case, FPI enters an economy at first and if it maintains a certain level of consistency, it contributes to the stabilization of the host economy, and improvement in stabili-zation attracts FDI at later stage (Reinhart &Rogoff, 2009; Humanickiet al. 2017). Although FDI and FPI have long been considered as distinct and independent forms of international capital flows, in the globalized world there are reasons to treat them as interconnected phenomena (Humanickiet al. 2013). Dunning &Dilyard (1999) using the 19th century US and the recent experience of Asian and Latin America as examples argued that a greater stock of FDI and FPI indicates the favourable market environ-ment and, therefore, encourages further inflows of foreign investment. Pfeffer (2008) finds that interna-tional investors prefer to have a mix of FDI and FPI. This strategy combines the best aspects of both kinds of investment and leads to relatively high yield and a good liquidity position of the investors. The investors are able to deal with liquidity problems by selling FPI and thus, FPI is used to stabilize the FDI investment position. Furthermore, there exists an information-based trade-off between FDI and FPI (Goldstein &Razin, 2006). FDI enables the owner to obtain refined information about the firm. Foreign direct investor obtains both the ownership and the control of the domestic firm whereas foreign portfo-lio investor's gain is limited to the ownership. FDI investors are more informed about the prospects and fundamentals of their projects compared to FPI investors (Razin&Sadka, 2003). This effect generates an advantage, with an added value in the capital market, to foreign direct investors relative to foreign portfolio investors (Goldstein &Razin, 2006). However, the literature suggests that foreign portfolio investors are particularly more susceptible to these kinds of informational problems and herding behaviour (Sula & Willett, 2009). Informational problems can cause rational herding behaviour in financial markets (Calvo& Mendoza, 2000). Moreover, this superiority that the 'information value' of FDI relative to FPI poses the problem of asymmetric information between buyers and sellers of investment projects (Ahmad et al. 2004) which is crucial for the order of FDI and FPI entry to a country.

As Goldstein &Razin (2006) pointed out, if a foreign direct investor chooses to liquidate his investment project for a reason, potential buyers would undervalue the project assuming that foreign direct investor has an information advantage. The foreign direct investor would have low resale value because of asymmetric information between the owner and potential buyers. Thus, one implication of this would be that if the investor wants liquidity, then he would choose less control and vice-versa. Albuquerque (2003) also argued that FDI overcomes imperfect enforcement mechanism providing a risk-sharing form of investment. Thus, it is expected that sensitivity of FPI to information and asymmetric information advantage of FDI by its nature would cause capital liberalization in emerging markets like India to follow a pattern such that foreign direct investment flow leads to short-term foreign portfolio investment

(Gozgor&Erzurumlu, 2010). Although foreign portfolio investment has been blamed in the literature for making the domestic market volatile, it often releases signals contained in such volatility about the short-run market stability in the domestic economy that attracts the attention of foreign direct investors and thus, FDI inflow in the country increases thereby augmenting the resource mobilization in the recipient country.

The empirical literature also records some kind of short-run feedback relationship between FDI and FPI. Iyeret al. (2003) documented that FDI and FPI are not cointegrated in the long-run, but found to cause each other in the short-run in the context of Australia, and the strength of causality running from FDI to FPI is stronger than that running in the opposite direction.

Therefore, it is inferred that understanding the relationship (or lack of it) between FDI and FPI is important from the policy perspective. If FPI and FDI are substitutes, then any policy initiatives intended to boost one type of investment need to take into account of the crowding out effect on the other. On the other hand, if the two types of foreign capital are complements, it is equally important to understand the leveraging effect so it can be exploited optimally. It is in this line of argument, this paper examines the possible causal relationship between FDI and FPI inflows in the context of the Indian economy. The rationale behind such a study is laxity of empirical studies in the context of India, and the growing importance of foreign capital flows in the Indian economy.

Data and Methodology

The paper investigates the dynamics of the relationship between foreign direct and portfolio investments in the context of the Indian economy over the sample period 1990-91 to 2017-18 by taking into the effect of exchange rate on inflows of foreign capital. Thus, the variables of the study are: FDI inflows measured in USD (million), FPI inflows measured in USD (million), and the exchange rate between USD and INR. All the necessary data have been obtained from the Hand Book of Statistics on Indian Economy published by Reserve Bank of India. And, data are taken in their levels. The time series plot of inflows of foreign direct and portfolio investments is shown in Fig.1.

It is observed from Fig.1 that the FDI inflows are less volatile, more consistent and having an increasing trend over a long period of time with little variation in the short-period in India. In contrast, FPI inflows are showing more volatility behaviour and remain below the FDI levels. Notwithstanding, FPI inflows have led to FDI preference particularly during crisis periods (e.g., during the global financial crisis of 2008-09). Although this substitution hypothesis has been observed during 2008-09, 2011-12, 2013-14, and 2015-16 the last year can be seen as an exception when FPI became negative and FDI was going down like that of during 2008-09.

The financial analysts and researchers cite several reasons including exhaustion of investment limits in government securities by foreign portfolio investors, realignment of emerging markets allocations by some investors after sharp depreciation in EM currencies, sudden Chinese Yuan depreciation, the interest rate hike by the US Federal Reserve, rise in the strength of USD, triggered INR depreciation, imposition of 20 percent minimum alternate tax on capital gains by overseas investors, rise in global crude oil prices, increase in market consolidations, and delay in implementation of major economic reforms in India for FPI being negative in 2015-16. Thus, the inquisitive mind immediately asks, is this behaviour predict on an average the substitute hypothesis or the complementary hypothesis of international investment flows, or any other dynamics? This has been taken care of in this research study in a trivariate framework.

Unlike most empirical studies applying Granger Causality test, this study is carried out in a multivariate framework using Exchange Rate (ER) as a control variable. This mediating variable is related meaningfully to the inflow of foreign investments and therefore, mitigates the possibility of distorting the causality inferences due to the omission of relevant variables (Lutkepohl, 1982). To this end, the Granger causality test procedure as proposed by Toda & Yamamoto (1995) has been used. This method is

relatively more efficient in small sample data sizes and is particularly appropriate for time series for which the order of integration is not known, or may not be necessarily the same, or the order of integration is more than two. Another advantage of this procedure is that it does not require the pre-testing of the time series for cointegration properties so long as the order of integration of the process does not exceed the true lag length of the model. Toda & Yamamoto (1995) methodology of Granger causality test by directly performing the test on the coefficients of the levels VAR,minimises the risk associated with possibly wrongly identifying the orders of integration of the series and the presence of cointegration relationship (Galies, 1997; Mavrotas& Kelly, 2001).

Fig 1: FDI and FPI Inflows into India (US $ million)
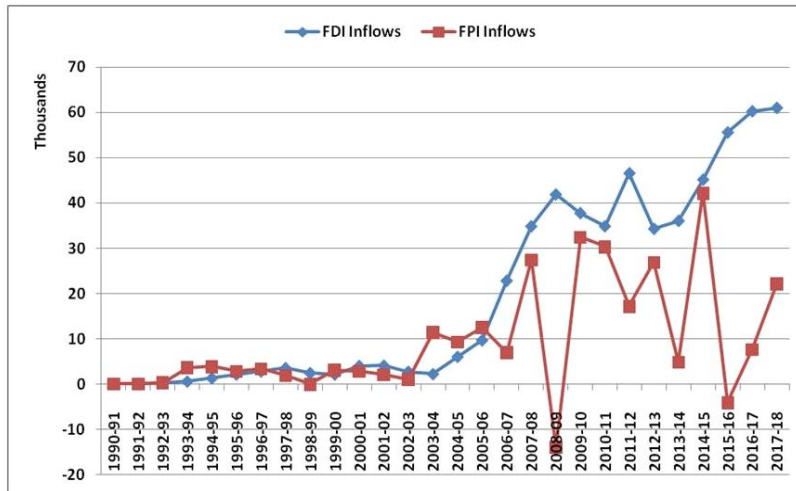
Source: Authors Own Plot of Data from RBI Publications

The basic idea in the Toda & Yamamoto (1995) procedure is artificially augmenting the correct VAR order, k with d extra lags, where is the maximum likely order of integration of the time series in the empirical system. Thus, at the outset, it is required to determine the maximum order of integration of time series, say, d_{max}. Then the optimal lag length of the VAR model is determined using Akaike Information Criteria (AIC), say, k. In the third step, the $(p=k+d_{max})^{th}$ order of VAR is estimated with Seemingly Unrelated Regression (SUR). At last, the null hypothesis of no-causality is tested using a standard Wald statistic, say, W. The implementation of the Toda & Yamamoto (1995) non-causality approach necessitates linking the three variables of the study in a trivariate system which can be stated as:

$$Y_t = A_0 + A_1 Y_{t-1} + \ldots\ldots + A_k Y_{t-k} + \varepsilon_t \tag{1}$$

where and $Y_t = \begin{bmatrix} Y_{1t} \\ Y_{2t} \\ Y_{3t} \end{bmatrix} = \begin{bmatrix} FDI_t \\ ER_t \\ FPI_t \end{bmatrix}$; and $\varepsilon_t \sim i.i.d\ N(0,\mu)$ A's are 3x3 matrices of coefficients. The

augmented level $VAR(p = k + d)$ is estimated to test the null hypothesis of no-causality and this VAR is specified as:

$$Y_t = \alpha + A_1 Y_{t-1} + \ldots\ldots + A_k Y_{t-k} + A_{k+1} Y_{t-k-1} + \ldots.. + A_p Y_{t-p} + \varepsilon_t \tag{2}$$

This augmented VAR system is estimated using SUR technique of regression. And, the null hypotheses of the study are H_{01} and H_{02} and these are tested by Wald test. Its process is elaborated below.

H_{01}: Y_{3t} does not cause Y_{1t}, i.e., $a_{13}^1 = a_{13}^2 = ... = a_{13}^p = 0$

H_{02}: Y_{1t} does not cause Y_{3t}, i.e., $a_{31}^1 = a_{31}^2 = ... = a_{31}^p = 0$

Let $e_1 = \begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$, $e_3 = \begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}$ and $D = I_k \otimes e_3$ with I_k being the $k \times k$ identity matrix. Let $vec(A)$ be

the column vector obtained by stacking the rows of the matrix . Then the Wald Test statistic is given by:

$$W = T\left((e_1^{'} \otimes D^{'})vec(\hat{A})\right)\left((e_1^{'} \otimes D^{'})\hat{\Sigma}(e_1^{'} \otimes D^{'})^{'}\right)^{-1}(e_1^{'} \otimes D^{'})vec(\hat{A}) \quad (3)$$

where $\hat{\Sigma}$ is a consistent estimator of the asymptotic variance matrix of $\sqrt{T}vec(\hat{A} - A)$. The Wald test statistic (W) has an asymptotic X^2 distribution with K degrees of freedom. The reason for ignoring the remaining d_{max} autoregressive parameters in testing for Granger causality is that it helps overcoming the problem of non-standard asymptotic properties associated with standard Wald test for integrated variables. It is established in the empirical literature that the Wald test experiences efficiency improvement when SUR model is used in the estimation (Rambaldi& Doran, 1996).

Analysis and Discussion of Results

In the first step of this non-causality analysis, the order of integration for each of the three variables used has been determined. The Augmented Dickey-Fuller (ADF) unit root test has been employed for this purpose. The results of ADF unit root test are reported in Table-1. It is evident that the null hypothesis of no unit roots for FDI and ER are rejected at their first differences since the ADF test statistic values are less than the critical values at 5 percent level of significance. Thus, these two variables are stationary and integrated of order one each, i.e., I(1). But the variable FPI is integrated of order zero, i.e., I(0) as the ADF test statistic at the level form is less than the critical value at 1 percent level of significance.

Table 1: Results of ADF Unit Root Test

Variables	ADF Statistic at level with trend and Intercept	p-value	ADF Statistic at 1st Difference with trend and Intercept	p-value	Decision
FDI	-1.596	0.765	-3.993	0.027**	I(1)
ER	-2.231	0.449	-4.019	0.022**	I(1)
FPI	-8.513	0.000*	NA	NA	I(0)

*Source: Authors' Own Estimation;   *, **Significant at 1% and 5% levels*

Table 2: Selection of Lag Length

Lag	FPE	AIC
0	2.44E+18	50.85127
1	1.92E+16	45.99930
2	1.71E+15*	45.83627*

indicates lag order selected by the criterion at 5% level
Source: Authors' Own Estimation

Thus, the results obtained from the ADF test suggest that the maximum order of integration of the series in this study is one, i.e., d_{max} =1. Therefore, the Toda-Yamamoto test involves the addition of one extra lag of each of the variables to control for potential cointegration. Then it is required to select the

appropriate lag length for the VAR in order to perform the causality test. In this study, the Akaike Information Criterion (AIC) and Final Prediction Error (FPE) techniques have been used to determine the optimal lag length. In a small sample study (n<60), AIC and FPE are superior to other information criteria (Lutkepohl, 1991; Liew, 2004). The results of such a test are presented in Table-2. The optimal lag length, thus, selected is $k=2$.

<div align="center">

Table 3: Results of Toda & Yamamoto Granger Non-Causality Test

Null Hypothesis	Chi-Square Statistic (d.f)	p-value	Decision
FDI does not Granger Cause FPI	32.045 (3)	0.0000	**Reject**
FPI does not Granger Cause FDI	14.227 (3)	0.0026	**Reject**

</div>

Source: Authors' Own Estimation

In the next step, the augmented VAR of order 3 ($p=k+d_{max}$) is estimated by SUR and the Wald test is carried out

using standard chi-square distribution. And, the results of this Toda & Yamamoto Ganger non-causality test are reported in Table-3. The results show that the null hypotheses that 'FDI does not Granger Cause FPI' and 'FPI does not Granger Cause FDI' are rejected at 5 percent level of significance. This means FDI and FPI cause each other, i.e., a feedback causal relationship exists between foreign direct investment and foreign portfolio investment inflows in India over the sample period at times of favourable exchange rates.

Conclusion

In this paper, we examined the dynamics of the causal relationship between foreign direct investment and foreign portfolio investment in India using annual data sets for the sample period from 1990-91 to 2017-18. The application of Toda and Yamamoto procedure of Granger non-causality test suggests the evidence of bi-directional causality between FDI and FPI at times of favourable exchange rates. This finding implies that the foreign direct investors and portfolio investors produce valuable information that is revealed by investment and, hence, FDI and FPI chase each other. This finding has important policy implications. When capital liberalization follows foreign direct investment, FDI provides signals about potential positive returns and optimism about the fundamental indicators of the domestic economy due to its permanent structure and information advantage and thus, paves the way for foreign portfolio investment that is especially sensitive to lack of informational efficiency. Since foreign portfolio invest-ment is very sensitive to information flows, it makes the domestic market volatile in the short-run. However, in the long-run such information asymmetry peters out and foreign portfolio investment may be the forerunner and cause of foreign direct investment in India. Thus, the planners and policy makers focus on the monitored capital liberalization such that ample resources flow into the country to supple-ment the streams of resource mobilization and capital formation thereby contributing to the sustainable inclusive growth of the economy. In addition, sound macroeconomic fundamentals and robust domestic financial systems are preconditions for attracting foreign investment and ensuring that it supports productive investment and a competitive economy. There is also a need for the deepening of domestic capital markets, within an appropriate regulatory and supervisory framework and with the development of a strong domestic institutional investor base.

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Impact of External Factors on Performance Appraisal System : A Comparative Study of Cement Companies in India

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Abstract

Performance appraisal can be defined as a methodical assessment of efficiency of various employees so that they can comprehend all personal skills for their progress and growth. It is also used in a very logical approach which includes determining the reimburse of employees and measure up to it with all predetermined plans. The analyzing the factors required following act of allotted work and what they expect for enhanced performance and for their direction. In this paper, an effort has been made to explain the impact of external factors on performance appraisal system activities. The language of this paper is easy to understand.

Keywords: Performance appraisal system, Activities, External factors

The performance appraisal is the procedure of evaluating human being's performance by way of comparing present performance with already set standards. These standards have been already explained to the employees, subsequently providing feedback to employees about their work effectiveness level for the purpose of improving their performance as required by the business organisation. (Ashwathhappa, 2007) There are various purposes of performance evaluation or uprising to know performance of each employee at workplace, consequently to choose whether training is required to specific employee or to give encouragement with additional increment. (Ahuja, 2002)In other words it can also be said that the performance appraisal is the tool for assessing whether employee is to be promoted, demoted in case of extremely pitiable performance and no scope for his improvement at workplace. (Aguinis, 2015)In present time, each corporate sector uses performance appraisal as a tool for identifying and evaluation of an employee and take decisions about him/her.

What is Performance Appraisal SYSTEM?

Performance appraisal system can be defined as a methodical assessment of efficiency of various employees so that they can comprehend all personal skills for their progress and growth. It is also used in a very logical approach which includes determining the reimburse of employees and measure up to it with all predetermined plans. The analyzing the factors required following act of allotted work and what they expect for enhanced performance and for their direction. (Herman, 2009)

The term performance appraisal system is also known as employee assessment, employee evaluation, performance rating, personnel appraisal, employee appraisal, and merit rating. Performance appraisal as, "performance appraisal is the systematic, periodic and an impartial rating of an employee's excellence in the matters pertaining to his present job and his potential for a better job." (Kandula, 2006)

Literature Review

For present study, following literature has been reviewed:

Prasad, et al.(2016) observed on the topic titled Evaluation of the Employee Core Competencies Influencing the Performance Appraisal System with Reference to Agriculture Research Institutes, Hyderabad: A Multiple Regression Analysis that the PAS is affected by the other parameters.

Singh and Vadivelu (2016) studied the topic titled Performance Appraisal in India – A Review. According to him, only the differentiation between traditional methods and modern methods.

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Singh, Pooja and Priyanka (2016) observed on the topic titled Training and Performance Appraisal Practices of State Bank of India with Special Reference to Varanasi that Performance appraisal practices are undertaken to let an employee know how they are performing as well as compare the present performance with that of the supervisor's expectations and identify those areas that require training.

Ajitha and Panchanatham (2015) focuses on the topic titled Impact of Performance Appraisal on Attitude of Employees in New Private Sector Banks in Karur, Taminadu. The study focused on the basic techniques of performance appraisal.

Begum, Sameera, et al.(2015) studied on the A Study on Performance Appraisal Private Sector Vs. Public Sector. It is found that the PAS is affected by the other factors at workplace.

Chetana, Pattnaik and Mohpatra (2015) found on the topic titled Determinants of Performance Appraisal: An Empirical Study. It is found that the PAS is affected by the other factors at workplace.

Kaur, Gurpreet (2015) studied on the topic Performance Analysis: A Study of Public Sector &Private Sector Banks in India. He observed that the banks are based on traditional method of performance appraisal.

Murthy, Rama (2015) studied on the topic A study on Employees' Performance Appraisal System with reference to APGVB. He observed that performance appraisal is the identification of key problems faced by employees due to organizational procedure.

Saxena, Neha & Rai, Himanshu (2015) studied on the topic titled Impact of Performance Appraisal on Organizational Commitment and Job Satisfaction. He found that the PAS affects the organisational commitment and job satisfaction.

Research Gap

The literatures have been studied in detail to find out the key factors of performance appraisal system in India. On the basis of the reviewed literature, it has been concluded that few studies were made on the Performance Appraisal System in the Cement sector in India, where the role of performance appraisal exists at immense level.

Objectives of the Study

Following are the main objectives of the study:

1. To study the PAS in the selected cement companies
2. To identify the factors affecting PAS in the selected cement companies.
3. To Study the external factors affecting PAS in the selected cement companies
4. To identify the impact of external factors on PAS in the selected cement companies.

Hypothesis of the Study

H_{01} :There is no significant difference in the PAS practices of cement companies under study.

H_{02} :There is no significant difference between the impact of External factors and adoption of CSR practices of cement companies under study.

Universe of Study

The arrangement of sampling for the study has been formulated on the basis of the background of the study. Followings are the main standards for sampling in data collection in this study:

Target Universe   :Employees of the Cement Companies in Rajasthan(10,000 employees}
Sampling Method   :Random Sampling Method
Sample Size   :300 employees
Area of Survey   :Jaipur, ShriGanganagar, Hanumangarh, and Bikaner districts of
                                          Rajasthan

Sample Design
The study was conducted on the employees of selected cement companies in Rajasthan from the four cities. For this purpose, employees were selected from 18 years to 60 years on the basis of random sampling method and their convenience.

Collection of Data
Collection of data is an essential part of each research. If the data is not appropriate and suitable, the results of the research are vault to be misleading. The collection of data is based on the area for which it is to be collected. The researcher has to decide which methods is to be used and in what order to study the problem; whether it is questionnaire, an interview schedule, a case study or observation method or a combination of any of these. The person collecting the data is similarly imperative. He must be fair, intelligent and polite to respondents so that they can satisfyingly part away with the information.

Application of Statistical Tools
The statistical tools provide authenticity and reliability of collected information or data. In this research, SPSS software has been used to test the data for reliability and authenticity of data analysis. With the help of SPSS, all the hypotheses have been tested and their inferences have been validated through Chi-square test and other SPSS tools.

Reliability Test
To test the reliability of the data collected through questionnaire from the respondents, Cronbach's Alpha is calculated. The value of reliability statistics is shown in table 1.

Table 1: Reliability Test

Reliability Statistics	
Cronbach's Alphaa	**N of Items**
0.85	37

Interpretation
It is clear from the above table that Cronbach's Alpha is 0.85, which shows a high level of internal consistency for the selected scale with this specific sample in this research. Thus, it can be concluded that the data collected from the selected respondents of the cement companies has been reliable.

Hypothesis Testing
Following is the main hypothesis of the study:
H_0:There is no significant difference between the impact of External Factors and adoption of PA practices of cement companies under study.

Interpretation
It is clear from the above table that the null hypothesis is rejected as the assumed significance value (P value) is less than 0.05(@ 5% level of significance) i.e., 0.0000 which indicate that there is a significant difference between the adoption of PAS activities in the cement companies.
H_0:There is no significant difference between the impact of External factors and adoption of CSR practices of cement companies under study.

Table:2

Chi-square (Goodness of Fit) Testing and Interpretations

	Chi-Square	d.f.	Asymp. Sig.	Decision
Gender	80.656b	1	0.000	Rejected
Age	88.848a	3	0.000	Rejected
Designation	20.656a	3	0.000	Rejected
Qualification	112.464a	3	0.000	Rejected
Income	276.656a	3	0.000	Rejected
Experience	112.784a	3	0.000	Rejected
Good activity	52.320c	4	0.000	Rejected
Benefit to staff	65.480c	4	0.000	Rejected
Increase lifestyle	41.280c	4	0.000	Rejected
Safety to staff	82.720c	4	0.000	Rejected
Increase performance	43.400c	4	0.000	Rejected
Essential step	48.000c	4	0.000	Rejected
Medical facility	76.560c	4	0.000	Rejected
Benefit to family	60.440c	4	0.000	Rejected
Common factors	57.320c	4	0.000	Rejected
Set standards	34.360c	4	0.000	Rejected
Applied to all	53.680c	4	0.000	Rejected
Fair CSR policy	54.920c	4	0.000	Rejected
Non monetary benefits	53.680c	4	0.000	Rejected
Designed for improvement	56.040c	4	0.000	Rejected
Cause of stress	52.440c	4	0.000	Rejected
Positive impact	40.200c	4	0.000	Rejected
Constructive criticisms	36.640c	4	0.000	Rejected
Barriers of promotions	38.800c	4	0.000	Rejected
Creating diversity	35.480c	4	0.000	Rejected
Identifying best employees	38.800c	4	0.000	Rejected
Change behaviour	41.400c	4	0.000	Rejected
Development conflict	31.280c	4	0.000	Rejected
Motivation and job satisfaction	41.400c	4	0.000	Rejected
Employees performance	32.320c	4	0.000	Rejected
Healthy competition	36.120c	4	0.000	Rejected
Employees development	43.880c	4	0.000	Rejected
Training programme	44.400c	4	0.000	Rejected
External reviewers	45.240c	4	0.000	Rejected
Government plans and policy	44.400c	4	0.000	Rejected
Monthly basis	45.240c	4	0.000	Rejected

Table: 3

Chi- square for Independence Testing and Cross Tabulation of the Impact of External factors and Adoption of PAS Practices

Variables	Value	d. f.	Asymp. Sig. (2-sided)	Decisions
Good Activity	14.63	12	0.262	**Accepted**
Benefits to Staff	22.26	12	0.035	Rejected
Increased Lifestyle	17.71	12	0.125	**Accepted**
Safety to staff	17.73	12	0.256	**Accepted**
Increase Performance	14.84	12	0.250	**Accepted**
Essential step	12.17	12	0.432	**Accepted**
Medical facility	11.34	12	0.499	**Accepted**
Benefit to family	11.61	12	0.477	**Accepted**
Common factors	10.80	12	0.546	**Accepted**
Set standards	11.15	12	0.516	**Accepted**
Applied to all	7.87	12	0.795	**Accepted**
Fair CSR policy	15.55	12	0.212	**Accepted**
Non-monetary benefits	7.87	12	0.795	**Accepted**
Designed for improvement	16.13	12	0.185	**Accepted**
Cause of stress	8.39	12	0.756	**Accepted**
Positive impact	7.09	12	0.851	**Accepted**
Constructive criticisms	15.79	12	0.201	**Accepted**
Barriers of promotion	7.57	12	0.817	**Accepted**
Creating diversity	15.74	12	0.203	**Accepted**
Identifying best employee	7.57	12	0.817	**Accepted**
Change Behaviour	24.47	12	0.018	Rejected
Conflict Development	15.01	12	0.241	**Accepted**
Motivation and job satisfaction	24.47	12	0.018	Rejected
Employees Performance	14.97	12	0.234	**Accepted**
Healthy competition	20.77	12	0.054	Rejected
Employees development	10.46	12	0.575	**Accepted**
Training programme	10.10	12	0.607	**Accepted**
External Reviewers	11.36	12	0.498	**Accepted**
Government Plans and Policy	10.10	12	0.607	**Accepted**
Monthly basis	11.36	12	0.498	**Accepted**

Interpretation

It is clear from the above table that the null hypothesis is accepted as the assumed significance value (P value) of all the variables is more than 0.05(@ 5% level of significance), which indicate that there is no significant association between the adoption of PAS activities and impact of external factors during the period of study.

While on the other hand, the calculated value of variables such as Benefits to Staff (0.035); Healthy competition (0.054); Motivation and job satisfaction (0.018) and change behaviour (0.018) is less than 0.05(@ 5% level of significance) which indicate that there is a significant association between the adoption of PAS activities and impact of external factors during the period of study.

Table: 4

Comparative Analysis of Selected Variables of the Study

Variables	ACL			JKCL			SCL			UCL			WCL			Decisions
	Value	d. f.	Asymp. Sig. (2-sided)	Value	d. f.	Asymp. Sig.(2-sided)	Value	d. f.	Asymp Sig.(2-sided)	Value	d. f.	Asymp Sig.(2-sided)	Value	d. f.	Asymp. Sig.(2-sided)	
Good Activity	17.219[a]	12	.142	11.265[b]	12	.506	10.509[c]	12	.571	8.043[d]	8	.429	8.234[e]	12	.767	Accepted
Benefits to Staff	16.058[a]	12	.189	10.053[b]	12	.611	**26.092[c]**	**12**	**.010**	6.532[d]	8	.588	10.759[e]	12	.550	Accepted only Rejected in SCL
Increased Lifestyle	17.219[a]	12	.142	13.591[b]	12	.328	10.509[c]	12	.571	8.043[d]	12	.429	9.479[e]	12	.662	Accepted
Safety to staff	15.398[a]	12	.220	10.053[b]	12	.611	**26.092[c]**	**12**	**.010**	6.379[d]	8	.605	5.190[e]	12	.951	Accepted only Rejected in SCL
Increase Performance	14.270[a]	12	.284	10.197[b]	12	.599	9.034[c]	12	.700	**14.024[d]**	**8**	**.081**	8.234[e]	12	.767	Accepted only Rejected in UCL
Essential step	14.239[a]	12	.286	5.467[b]	12	.941	**26.855[c]**	**12**	**.008**	2.399[d]	8	.966	11.413[e]	12	.494	Accepted only Rejected in SCL
Medical facility	**23.127[a]**	**12**	**.027**	6.975[b]	12	.859	19.705[c]	12	.073	6.817[d]	8	.557	7.006[e]	9	.636	Accepted only Rejected in ACL
Benefit to family	13.505[a]	12	.333	4.929[b]	12	.960	**26.855[c]**	**12**	**.008**	2.637[d]	8	.955	12.979[e]	12	.371	Accepted only Rejected in SCL
Common factors	13.507[a]	12	.333	10.184[b]	12	.600	18.817[c]	12	.093	6.817[d]	8	.557	4.677[e]	9	.862	Accepted
Set standards	13.625[a]	12	.325	5.467[b]	12	.941	**26.872[c]**	**12**	**.008**	2.399[d]	8	.966	12.979[e]	12	.371	Accepted only Rejected in SCL
Applied to all	18.604[a]	12	.099	9.396[b]	12	.669	11.573[c]	12	.481	14.975[d]	8	.060	13.055[e]	12	.365	Accepted
Fair CSR policy	9.578[a]	12	.653	11.299[b]	12	.503	12.339[c]	12	.419	9.683[d]	8	.288	15.705[e]	9	.073	Accepted
Non-monetary benefits	18.604[a]	12	.099	9.396[b]	12	.669	11.573[c]	12	.481	14.975[d]	8	.060	13.055[e]	12	.365	Accepted
Designed for improvement	9.578[a]	12	.653	12.836[b]	12	.381	12.339[c]	12	.419	9.683[d]	8	.288	15.705[e]	9	.073	Accepted
Cause of stress	18.604[a]	12	.099	9.229[b]	12	.683	11.573[c]	12	.481	14.975[d]	8	.060	13.055[e]	12	.365	Accepted
Positive impact	7.374[a]	12	.832	8.684[b]	12	.730	19.661[c]	12	.074	6.573[d]	8	.583	7.621[e]	12	.814	Accepted
Constructive criticisms	13.593[a]	12	.327	15.702[b]	12	.205	**22.931[c]**	**12**	**.028**	9.785[d]	8	.280	3.289[e]	9	.952	Accepted only Rejected in SCL
Barriers of promotion	8.778[a]	12	.722	8.684[b]	12	.730	19.661[c]	12	.074	6.573[d]	8	.583	7.621[e]	12	.814	Accepted
Creating diversity	15.959[a]	12	.193	15.702[b]	12	.205	**22.931[c]**	**12**	**.028**	9.785[d]	8	.280	3.289[e]	9	.952	Accepted only Rejected in SCL
Identifying best employee	8.778[a]	12	.722	8.684[b]	12	.730	19.661[c]	12	.074	6.573[d]	8	.583	7.621[e]	12	.814	Accepted
Change Behaviour	17.525[a]	12	.131	15.867[b]	12	.197	9.819[c]	12	.632	14.756[d]	8	.064	11.348[e]	12	.499	Accepted
Conflict Development	8.651[a]	12	.732	9.581[b]	12	.653	7.541[c]	12	.820	10.327[d]	8	.243	**19.938[e]**	**9**	**.018**	Accepted only Rejected in WCL
Motivation and job satisfaction	17.525[a]	12	.131	15.867[b]	12	.197	9.819[c]	12	.632	14.756[d]	8	.064	11.348[e]	12	.499	Accepted
Employees Performance	8.994[a]	12	.703	9.581[b]	12	.653	7.541[c]	12	.820	10.327[d]	8	.243	**19.938[e]**	**9**	**.018**	Accepted only Rejected in WCL
Healthy competition	18.898[a]	12	.091	15.867[b]	12	.197	9.819[c]	12	.632	4.429[d]	8	.816	11.348[e]	12	.499	Accepted
Employees development	6.608[a]	12	.882	13.426[b]	12	.339	12.210[c]	12	.429	9.959[d]	8	.268	6.346[e]	12	.898	Accepted
Training programme	10.226[a]	12	.596	6.758[b]	12	.873	5.356[c]	12	.945	6.172[d]	8	.628	5.227[e]	9	.814	Accepted
External Reviewers	6.608[a]	12	.882	13.426[b]	12	.339	7.122[c]	12	.849	6.267[d]	8	.617	6.346[e]	12	.898	Accepted
Government Plans and Policy	10.226[a]	12	.596	6.758[b]	12	.873	5.356[c]	12	.945	6.172[d]	8	.628	5.227[e]	9	.814	Accepted
Monthly basis	6.608[a]	12	.882	13.426[b]	12	.339	7.122[c]	12	.849	6.267[d]	8	.617	6.346[e]	12	.898	Accepted

Interpretation

It is clear from the table that the selected cement companies are engaged in PAS activities during the period of study. A comparative study has been conducted and result shows that the Ambuja Cement Limited (ACL) is majorly using medical facilities as a PA activity in their area. ACL is using its apportioned funds in health of the rural public and focusing only medical facilities. The J K Lakshmi Cement Limited (JKLCL) is not found satisfactory in PA activities during the period of study. The company is commonly using its proportion in there are some part in rural education, medical, infrastructure and rural development. The company is not much engaged in the CSR activities during the period of study.

The Shree Cement Limited (SCL) is focusing PA activities and received several awards for CSR activities. Meanwhile, the company is marked I rank in PA activities during the period of study. The company is majorly engaged in benefits to staff, medical facilities to staff and their family members, safety and security of the staff and their family as PA priorities. The company is performing their PA activities on the basis of set standards and following the norms and policies designed by the management and the Government for the development of rural development and human development. The companies also invite constructive criticisms for the improvement of their PA activities and try to remove these by the HR department. The company is also providing PA activities to all categories of public. Hence, the SCL is marked I rank in the present study.

The UCL is also engaged in PA activities on the basis of performance measurement. For this purpose the company is performing the PA activities on the basis of the past performance. The company is evaluating their previous expenses on PA and deciding their future expenses. The proper policies and plans were not found in this company as compared to Shree Cement Limited during the period of study.

In Wonder Cement Limited, the PA activities were found on the basis of employee performance and conflicts. It may be due to newer company which is using a portion of its profits into PA activities.

On the whole, the Shree Cement Limited is marked good company in PA activities during the period of the study.

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Market efficiency and inefficiency: an overview on the Adaptive Market Hypothesis

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Abstract

Academic research and financial trader during the past 50 years are unable to come to consent whether the capital market are efficient or not.The inconclusive and mixed result of the market efficiency and inefficiency gave the birth of new theories that reconcile the two schools of thought in a natural and satisfying conclusive manner. The theory called Adaptive market hypothesis (AMH) was propounded by Andrew Lo in 2004. The present paper explored the various literatures related to the efficient market hypothesis and had identified the various findings of the studies conducted. The paper aimed to identify the existing gap related to the study of the market efficiency by exploring the related literatures. The paper scrutinized the controversial EMH and explored the related literatures and has come out with the existing gap in understanding the market efficiency.

Keywords: Efficient market hypothesis, adaptive market hypothesis, stock market

Introduction

Stock market efficiency is one of the most debated issues among the investors and also among the academics. In 1970, Eugene Fama propounded that efficient markets fully reflect the available information. Since then, the EMH has been one of the most extensively researched areas in finance theory. Due to the implication of the Efficiency Market Hypothesis in the financial market there is still constant examination in this field. Over five decades many researches have been done to test the validity of EMH in various stock markets and different result are found.

The Efficient Market hypothesis (EMH) assumes that the security markets are efficient. The theory of EMH is an utmost important and influential theory in the area of finance where many theories like, CAPM, APT or other are developed directly and indirectly from it. Eugene F. Fama (1970, 1990) set forth the idea of EMH on the framework of Samuelson's Random walk model (RWM). It says the current prices of the stock fully "reflect" all available information about the intrinsic value of the asset. The efficient market is a market condition where price of the securities adjust rapidly with the infusion of new information and, therefore, the current stock prices reflect with incorporation of new information (Bhat 2008). Therefore, investors without prior research have the same level of returns as those technical analyses using past data or recommendation by the analysis (Smiles, 2013). This gave an intention to dig further research on inconclusiveness in this topic. Academic research and financial trader during the past 50 years are unable to came to consent whether the capital market are efficient or not.

A new dimension was added to the controversy in EMH because of the expanding behavioural finance. Academics seek to support the concept of efficient market regulation and aims to increase market efficiency and trader aims to exploit inefficacy to generate abnormal profit (Almail&Almudhaf, 2017). Various studies (Lo, 2004; Worthington and Higgs, 2005; Borges, 2010; Gupta & Yang, 2011; Kapoor 2017 &Parulekar, 2017), found a mixed result i.e. market efficiency and inefficiency are co-existed in a rationally steady manner over a period of time. The study of market efficiency in the Indian equity market also found mixed results. Some of the studies (Poshakwale, 1996; Jain & Jain, 2013; Nalinda&Suraj,

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2013; Mishra, Mishra & Smyth, 2015) observed that the price of the Indian stock price is efficient in weak form while others (Srinivasan, 2010; Khan, Ikram&Mehtab, 2011;Malafeyev, Awasthi, Kamberkar, &Kupinskaya, 2019) rejected this hypothesis.

Stock market is thus neither efficient nor inefficient; it follows certain bound rationally (Simon, 1955). This means that the EMH was not false but rather incomplete; it cannot be disapproved as well. In the light of this prevailing scenario an investor act irrationally which includes behaviour or psychological factors. In contrast to EMH, financial market are adaptive and switch between period of efficient and inefficient (Lo, 2004). This same market behaviour was observed in various studies (such as Al-khazali&Mirzaei, 2017; Worthington & Higgs, 2005; Borges, 2010; Gupta & Yang, 2011; Kapoor, 2017; Parulekar, 2017).

The issue on financial predictability had been never an ending process. The inconclusive and mixed result gave the birth of new theories that reconcile the two schools of thought in a natural and satisfying conclusive manner. The theory called Adaptive market hypothesis (AMH) was propounded by Andrew Lo in 2004. According to Lo (2004) "Price reflects as much information as dictated by the combination of environmental condition and the number and nature of species in the economy". The species here means an individual which seem to have the common behaviour. Hedges funds, mutual funds, pension funds etc. behave in a same manner even though their investment style differs. The AMH is creating more holistic view of the market which combines the efficient market and behavioural finance, more focus on a vast scope and complete wide perspective and was a successor of efficient market hypothesis (EMH).

Methods and Scope of the study

In the light of this, the present paper intends to determine the instability of market efficiency overtime.The paper is an exploratory study in which various literatures related to the efficient market hypothesis are explored and identified the various findings of the studies conducted. The paper aims to identifythe existing gap related to the study of the market efficiency by exploring the related literatures. This paper will provide cognizance of investors a better idea with a clearer view that market prices do not fully reflect all available information. But, also, need to observe the market momentum, environmental condition and market participants are taken into consideration for a market to be efficient (Lo,2004).The paper is expected to carry a better idea in the study that the degree of efficiency change over time and the return predictability is possible in the market. The study will help in answering whether the market follows different pattern of efficiency or dynamic market efficiency.The paper scrutinizes the controversial EMH and explored the related literatures to come out with the existing gap in understanding the market efficiency. The paper is organised into different section. Introduction forms the Section I. Section II discusses about the Efficient Market Hypothesis/ Theory and its different forms of efficiencies; Literature review related to Empirical studies conducted in Indian region, Asian region, and different regions of the world forms Section IIIFinally in Section IV the paper concludes by identifying the existing gap related to the study of the market efficiency.

The Efficient Market Hypothesis/ Theory

The theory was developed by a scholar Eugene Francis Fama in 1965 on his PhD thesis entitled "The behaviours of stock market prices" at the University Of Chicago Booth School Of Business. The articles "The behaviours of stock market prices" published in Journal of Business were the introduction of his first notation in "Efficient Market" (Fama, 1965a). He again published his second article entitled "Random walk in Stock Market Price" in the same journal (Fama, 1965b). Fama (1965b) focused on EMH and found empirical evidence in the Random walk in the stock market. He called the theory as a "fair game model". Fama (1970) divided the level of testing efficient market hypothesis (EMH) into three sub-hypothesis depending upon the information set involved. He published an article titled "A review

theory and empirical work" and stated that "a market is said to be efficient with respect to an information set if the price fully reflects the information set".

The EMH is a theory which states that the given financial market prices mirror all the available information at a given time, the "type" and "source" of information is already reflected in stock prices (Thomset, 2018). Reilly & Brown (2006) stated that "the prices of the securities changerapidlyto the infusion of new information". Kuepper (2019) observed that it is "investment theory, where share price reflect all the available information and constant alpha generation is possible, neitherfundamental nor technical analysis can produce consistent alpha". This means thatthe movement of the stock price follows a rational behaviour of random movement and historical price is not-related with the upcoming movement of the price and vice versa (Harper & Jin, 2012).

Form of the Efficient Market Hypothesis

EMH is divided into three forms, namely – Weak form efficiency, Semi-strong form efficiency and Strong form efficiency.

Weak form:

The weak form of market efficiency state that future securities of price are random and not influenced by the past information from the trading data. The information includes historical sequence of price, rate of returns, trading volume data etc. The weak form efficiency implies that investors who depend on the historical rates of return with prior research had no advantage with the future expected returns.

Semi-Strong Form:

The semi-strong form of market efficiency states that the stock price reflects all publicly known available information. Semi-strong form implies that neither fundamental analysis nor technical analysis technique will provide a reliable or excess return. Investors who based their decision on new information from publicly available information, they have noabove-average risk-adjusted profits from their transaction.

Strong form:

Strong form encompasses both the weak and the semi-strong form,where the securities price of all the available information was reflected from public information as well as private source.If investors are gathering information from public, private and even unpublished information, he had no advantage to gain excess return if the markets are efficient.

Review of Literatures

Studies conducted in Indian region:

In India various studies related to the efficient market hypothesis using both parametric and non-parametric test like Run test, K-S test, serial correlation etc were conducted. The various researchers have empirically tested the EMH using daily, weekly or monthly data. The EMH was rejected by Srinvasan (2010), Khan, Ikram&Mehtab, (2011), Harper and Jin (2012), and Malafeyev, Awasthi, Kamberkar, &Kupinskaya, (2019). The findings of the above studies have shown that the Indian marketfollow non-random walk and an investor can earn abnormal returns. However, Poshakwale (1996), Nalinda&Suraj (2013) and Mishra, Mishra & Smyth (2015) accepted the random walk. The finding of Gupta and Yang (2011) result gave the idea that the market efficiency existed in an inconsistent manner. In their study, Gupta and Yang (2011) accepted the weak form hypothesis for the period from 1997-2007 while for the 2007-2011 the weak form hypothesis was rejected. Parulekar (2017) also studied the random walk and found that the market would be efficient in the medium and long run however it is inefficient in the short run. Singh (2015a, 2015b) found Indian stock index price is inefficient for different sub-periods.

Hiremath&Kumari(2014)studied the AMH using the linear test including autocorrelation, runs test and multiple variance ratio test and observed the linear dependence of Indian equity market. The finding suggested switching of behaviour of the market between efficiency and inefficiency. On the other hand,

non-linear test including Mcleod-Li, ARCH-LM, Hinichbicorrelation and BDS non- linearity test suggested that the predictability of returns was uncertain during financial crisis and market bubbles. Overall, they observed that the Indian market is not fully adaptive as it followed a single period of efficiency however; the Indian market is moving toward efficiency. Similar results were found in the study conducted by Hiremath& Narayan (2016) using the Generalized Hurst Exponential in which the Indian stock market was moving towards efficiency. Further, Kumar (2017) found the predictability of exchange rate in India is time varying episode of inefficiency around major macroeconomic events. The study conducted based on automatic variance ratio test and Belaire-French & Contreras rank based test on the market condition support the adaptive market hypothesis hence the trading on profitable opportunity in Indian exchange are episodic in nature.

Studies conducted in Asian Region
Singh (2015a) found out the ASEAN stock markets viz. India, Indonesia, Malaysia, Singapore are inefficient in weak form. Singh (2015b) also found similar result in the Hong Kong and Japan Stock Markets. Moustafa (2004) examined the movement of stock price in United Arab Emirates (UAE) market and found the weak-form of efficient in the market.Asiri (2008) measured the behaviour of stock market in the Bahrain stock exchange and results were observed in support of efficiency in the weak form. However, the test done by Omar, Hussain, Bhatti&Altaf (2012) on a random walk theory in Karachi Stock Exchange could not find the market efficiency.

Worthington & Higgs (2005) observed contrasting scenario between developing market and developed market in the market efficiency. They do not found market efficiency in developing market such as India, Indonesia, Sri Lanka, etc. while developed market such as Hong Kong, New Zealand and Japan follows the random moment of stock price and are market efficient in a weak form. Their findings were consistent and similar to the finding of Kim&Shamsuddin (2008). Kim &Shamsuddin (2008) found that behaviour of the stock return predictability of market was fluctuating over time. Kim, Shamsuddin& Lim (2011) found the efficient market is adaptive in nature in which return predictability changed over time which is driven by the market condition. They show that during the political and economic crisis, the predictability of return is high while during bubbles period there are uncertainty.

Nisar&Harif (2012) conducted a test on the weak form of efficient market in South East Asia; India, Pakistan, Bangladesh and Sri Lanka Stock Exchanges were taken for the study. They found market is inefficient in the weak form. Budd (2012) examined the EMH and Random Walk Hypothesis (RHW) in seventeen sector of the Saudi Arabia Tadawul Stock Exchange and found inefficient. Almujamed, Fifield& Power (2018) rejected the EMH as observed in the empirical test in the Kuwait Stock Exchange.

The degree of market efficiency using time varying approach was measured by Noda (2016). His finding supported the AMH as the degree of market efficiency varies over time in Japanese Stock Market. Similar results were found by Ito, Noda &Wada (2014, 2016). An evaluation perspective on market evaluation was done by Ghazani and Araghi (2014), the findings as of linear test (Automatic variance ratio and automatic Portmanteau) and Non-linear (generalize spectral and McLeod- Li) test supported the AMH. Similar test was conducted by Shi, Jiang & Zhou (2015) using the wild bootstrap automatic variance ratio test and the generalized spectral test to find out random walk behaviour and predictability of stock returns in China. The study by Shi, Jiang & Zhou (2015) also supported the AMH.

Studies conducted in different regions:
Many researcher have studied the hypothesis in various regions of the world such as Magnus (2008) in Ghana; Ameanu and Cioca (2014) in Romania; Seth and Sharma (2015) in Asia; Erdem&Ulucak (2016) in G7 countries ; Khrapo (2013)in Ukraine; Borges (2010) in European countries; Boya (2019) in France; Ndubuisi&Okere (2018) in Nigeria; Huang (2019)in United States, etc.

Magnus (2008) rejected the weak-form efficiency in a study of the Ghana Stock exchange. Ameanu&Cioca (2014) tested the EMH in Bucharest Stock Exchange and found invalid and opined that abnormal return

can be earned by investors. Examining the information efficiency and integrations simultaneously for select Asian and US stock market, Seth and Sharma (2015) rejected the EMH. Erdem&Ulucak (2016) examined the validity of EMH on the interconnection relationship among G7 (Canada, France, Germany, Italy, Japan, United Kingdom, and United States) countries using Bootstrap causality test and found EMH to be valid among each G7 countries' stock exchange markets. They also observed existence of the benefit of portfolio diversification among these markets.

The study conducted by Khrapo (2013) in the Ukraine stock market found mixed result depending on the type of test used. The weak form was accepted using Independent and Identically Distributed (I.I.D) test. The test using Bartel test, Runs test, Mann-Kendall testand Inversions test fail to reject the EMH while Lo-Mackinlay variance test rejected the EMH. Borges (2010) also provided a mixed result on the level of efficiency of the six stock markets efficiency in his findings. In Germany and Spain the findings supported the EMH; in UK and France the EMH was rejected; in Portugal and Greece EMH was rejected however the two countries have been approaching martingale behaviour after 2013.

Boya (2019) examining the market efficiency in French stock market used rolling variance ratio test approach for a period from 1988 to 2018 and found the result consistent with AMH. He found the cyclical pattern through time which is similar with the finding of Lo (2004). Urquhart and Hudson (2013) found evidence on adaptive market by testing five year subsample of the market in most established country (US, UK and Japanese) using Auto- correlations test, Runs test and VAR test. They suggested AMH gave a better picture on the account of behaviour of stock returns as compared to EMH. Urquhart &McGroarty (2016) tested four major stock markets (S&P 500, FTSE100, NIKKEI1225 AND EURO STOXX 50) using Bootstrapped version and AR-GARCH, the result shows that the predictability of return appeared significant and change significantly to non-predictability in the behaviours of the stock market which means market evolve change over time and predictability was uncertain. Ndubuisi and Okere(2018) in their study in Nigeria witnessed the evidence of linear test supporting the AMH, whereas the nonlinear test supporting the time varying inefficiency. Huang (2019) rejected the EMH in his study on S&P 500for the past 30 years and he opined that the market returns is varied which depends on investors valuation of their losses and further shows that the market appear to be AMH consistent.

Research Gap and Conclusions

Variousresearches and studies on market efficiencyhad been already done in a weak form using different model from traditional models to advance statistics, but the result provide mixed result (Al-khazali&Mirzaei, 2017). Worthington & Higgs (2005), Borges (2010), Gupta & Yang (2011), Kapoor (2017) and Parulekar (2017), have found evidence of mixed efficient market. In Indian stock market, contradictory results were found in various studies that the price of the Indian stock is efficient in weak form while others reject weak form efficiency. Srinivasan (2010), Khan, Ikram&Mehtab, (2011), Delcey and Malafeyev, Awasthi, Kamberkar, &Kupinskaya, (2019) found the Indian market was not weak form efficient. On the other hand studies by Poshakwale (1996), Jain & Jain (2013), Nalinda&Suraj (2013) and Mishra, Mishra & Smyth (2015) suggested the existence of weak from of efficiency in the Indian stock market. These contrasting results give an idea that stock behaviour on the market follows efficient and inefficient in a consistent pattern. The literatures also indicated that market efficiency is characterised by the changing sequence overtime. This means that the market is adaptive in nature.

Lo (2004) developed asupplementary market theory which is a successor to EMH from a behavioural perception. According to which, "market efficiency is not all-or-none condition but characterised bydifferent time-varying that result in episode of efficiency change over time depends upon market condition". Lo (2005) has examined the S&P of US stock market index from 1987 to 2003. He then found the stock market exist a cyclical pattern through which the behaviour of the stock price varies over episode of efficiency and inefficiency.

The issue on financial predictability had been never an ending process. The inconclusive and mixed

result gave the birth to new theories that reconcile the two school of thought in a natural and satisfying conclusive manner. The theory called Adaptive market hypothesis (AMH) was propounded by Andrew Lo in 2004. According to Lo (2004) "Price reflects as much information as dictated by the combination of environmental condition and the number and nature of species in the economy". The species here means an individual which seem to have the common behaviour. Hedges funds, mutual funds, pension funds etc. behave in a same manner even though their investment style differs. One shortcoming of critics of AMH is the inability to come out with a fullblown model for prices and returns that can be tested. However, the AMH is creating more holistic view of the market which combines the efficient market and behavioural finance, more focus on a vast scope and complete wide perspective and is a successor of efficient market hypothesis (EMH).

This paper thus attempted to provide an idea in understanding comprehensive view that market price do not fully reflect all available information and also need to observe the market momentum, environmental condition and market participants as advocated by Lo (2004). Future research towards understanding the market efficiency should be directed to provide whether AMH is appropriate to explain the behaviour of the stock return.

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A Study on the Role of MUDRA Bank in Promoting Entrepreneurs in North East India

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A.S. Yarso**

Abstract

The significant of rural industry has spotlighted in transition from agrarian society into economic base society. Rural industry has the potentiality to upgrade living standard of the people living in and hence, it is known as the engine of growth in modern literature. The major portion of NER of India is covered with rural areas, 80 per cent of its population is engaged in agrarian activities and therefore, has witness stiff-necked of economic growth in the pass years. However, the region had blessed strategic location and abundant resources with specialties of production from each state. Indeed, the people of the region can take advantage to a greater extends by utilizing the available resources by promoting MSME and promoting business partners with the mainland as well as the emerging markets of Asian countries. And can become a trade and commercial hub by offering local and international investment opportunities. On the other hand, signaling the escalating development of entrepreneurs in rural areasthe Government of India has launched MUDRA Bank to rekindle the spirit of adventure among the country's youth in their dreams of ventures.Thus, the present study aims at sensitizing the beneficiary by highlighting various provisions of MUDRA Bank andalso to evaluate state-wise response on the schemes of the bank and their performances base on number of accounts register, sanctioned amount and disbursement amount from the time of its inceptions. It is found that numbers of entrepreneurs as well as disbursement amount of loans were increasing tremendously in all the state of NER of India. Therefore, it can be concluded that the schemes of the bank has helped in budding numbers of rural start-up in NERand has also liberate the bondage of acquiring capitals for the entrepreneurs.

Key words: MUDRA, rural industry, abundant resources, liberal finance, easy incubation and budding

Introduction

Comprehensive growth is said to be the most challenging prospects to escalate the gross domestic product (GDP) and strengthened economy growth in a developing countries. In India, development of rural areas has been the concerned of economic growth and therefore, we witness numbers of initiations by the Government of India. The main barrier of rural areas development was unemployment and lack of income generations, and employment creations has been identified as sophisticated tools to eradicate poverty in rural areas. Subsequently, developing and promoting of micro units enterprises will pave the way in generating income and creating more jobs opportunities. As a matter of fact, 80 per cent of geographical land of north eastern region (NER) of India is covered with rural areas features with very limited infrastructure. However, it is connected with the mainland of India by only 2 or 3 per cent and more than 90 per cent is covered with international boundary. Thus, NER has vast potential for economic growth and can also contribute greater rate of GDP for the country for its unique geopolitical location and its richness in resources. The region had blessed strategic location and abundant resources characterized with specialty of product from each state. Indeed, the people of the region can take advantage to

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a greater extends by utilizing the available resources by promoting MSME and have business partners with the mainland as well as the emerging markets of Asian countries. On the other hand, step has been taken to elevate the rural areas and therefore,Government of India has initiated and launched MUDRA Bank as a means to solve the issues and problems of generating incomes and employment opportunities in rural areas. The word MUDRA stands for 'Micro Units Development and Refinance Agency' it is a public sector Bank set up under PradhanMantri MUDRA Yojana scheme. It is launched by Prime Minister, NarendraModi, on 8th April 2015 with a focus on extending services and financial aid in promoting microenterprises in rural areas. MUDRA Bank provides loans at cheaper cost to both financial institutions and non-financial institutions, and through their support MSMEs received financial aid in the forms of loan credit at lower interest rate. The beneficiaries of the scheme will be extended to micro small entrepreneurs who are neglected by the financial and non-financial institutions. Therefore, MUDRA bank ensured to support financial aid as well as services to micro units for comprehensive economic growth and social development. The bank promised to have an initial corpus of US$ 3.0 billion and a credit guarantee funds of US$ 450 million. It will initially function as a non-banking financial institutions and a subsidiary of the Small Industries Development Bank of India (SIDBI). Later, it will be made into a separate institution serving as a regulator for Micro-Financial Institutions (MFIs) by providing guidelines and giving ratings according to their performance. Thus, the present study has made an attempt to examine various provisions provided by MUDRA bank in educating the beneficiaries under these schemes and also to evaluate state-wise response on the scheme of MUDRA bank and their performances base on number of accounts register, sanctioned amount and disbursement amount from the time of its inceptions.

Review of Literature
Mahajan, A. (2016) conducted a study on performance and impact of MUDRA Yojna under PMMY and has stated that small enterprises create more employment opportunities than large industries in India, substantiated by data as 12 crore people were employed by small enterprises while as only 1.25 crore people were employed by large industries in India during the study period. The study also found that MUDRA scheme has liberated the financial bondage for the entrepreneurs from the financial institutions and has creates more people to become self-employed and also had reported that the scheme is trying its best to improve the status of women and other backward sections of the society especially those who are not well educated and who are semiskilled; the study had concluded by pointing out that if MUDRA scheme works well in future then there will be increased market of the indigenous products even in the international market.

Objectives of the study
In this paper, researchers have made an attempt to examine the role of the MUDRA bank under PMMY on the perspective of role played in promoting rural industry in NER of India and furnish details information on the contents of the schemes to the beneficiaries. More specifically it will focus on the followingobjectives:
1.To study the role of MUDRA bank in promoting entrepreneurs in NER of India.
2.To evaluate and compare state-wise performance of MUDRA schemes in NER of India since from the time of its inceptions.

Methodology
As the paper is designed to examine the provisions, roles and impact of MUDRA bank in promoting entrepreneurs in NER of India, it is descriptive types of research. Thus, the required information and data needed in the present study are collected from secondary sources, namely, newspapers, magazines and from official website of MUDRA bank. Further, descriptive statistical tools are employed for analy-

sis purpose.

Schemes Offered by MUDRA Bank: The offerings of MUDRA bank are targeted across the spectrum of beneficiaries as segmented below:
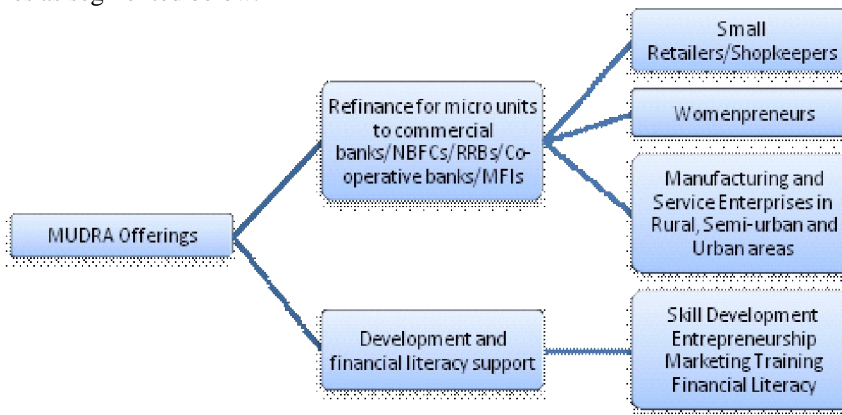
Provisions of MUDRA: At present, Micro Finance Institutions (MFI) act as an assistance of MUDRA bank in subordinating the beneficiaries and supports them by providing loans within the range of 50,000 – 10 lakh. The loans were categories into three different types, namely; Shishu, Kishore and Tarun. It will rendered services to the new entrepreneurs in regardless of the type of business they engaged. However, its main purpose of categorizing the loans was to identifythe different stages of development in micro units and help even to distinguish the funding needs to the entrepreneurs. Thus, the details of the scheme are displayed below:
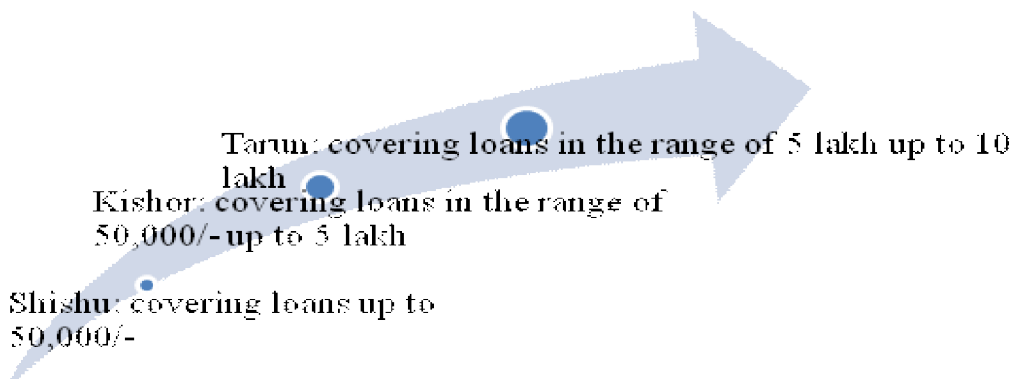

Tarun: covering loans in the range of 5 lakh up to 10 lakh

Kishor: covering loans in the range of 50,000/- up to 5 lakh

Shishu: covering loans up to 50,000/-

Table No. 1:

Total No. of New Entrepreneurs Registered, Total Loans Sanctioned Amounts and Total Loans Disbursement Amounts in NER of India under MUDRA Schemes (2015 to 2018)

Particulars	2015-16	2016-17	2017-18
Shishu	503417	1532449	2021439
Kishore	51351	55964	196496
Tarun	8242	10926	13810
Total Entrepreneurs	**563010**	**1599339**	**2231745**
Sanctioned Amt. (Crore)	2793.81	6648.61	9094.08
Disbursed Amt. (Crore)	1743.80	6490.67	8920.95

Source: Compiled and Calculated from annual reports

Sector or Activity Specific Schemes

Land Transport Sector / Activity	Transport vehicles for goods and passengers includes auto rickshaw, small goods transport vehicle, 3 wheelers, e-rickshaw, passenger cars, taxis, etc.
Community, Social & Personal Service Activities	Includes Saloons, beauty parlors, gymnasium, boutiques, tailoring shops, dry cleaning, cycle and motorcycle repair shop, DTP and Photocopying Facilities, Medicine Shops, Courier Agents, etc.
Food Products Sector	Under this sector activities such Papad making, achaar making, jam or jelly making, agricultural produce preservation at rural level, sweet shops, small service food stalls and day to day catering or canteen services, cold chain vehicles, cold storages, ice making units, ice cream making units, biscuit, bread and bun making, etc.
Textile Products Sector / Activity	It includes Handloom, power-loom, khadi activity, chikan work, zari and zardozi work, traditional embroidery and hand work, traditional dyeing and printing, apparel design, knitting, cotton ginning, computerized embroidery, stitching and other textile non garment products such as bags, vehicle accessories, furnishing accessories, etc.

Micro Credit Scheme

Financial support to Micro Financial Institutions (MFIs) for lending to individuals, groups of individuals, SHGs for creation of qualifying assets as per RBI guidelines towards setting up or running micro enterprises as per MSMED Act and non-farm income generating activities.

Missing Middle Credit Scheme

Financial support to financial intermediaries for lending to individual for setting up or running micro enterprises as per MSMED Act and non-farm income generating activities with beneficiary loan size of 50,000 to 10 lakh per enterprise or borrower.

Refinance Scheme for RRBs / Co-operative Banks

Enhancing liquidity of RRBs or Scheduled Co-operative Banks by refinancing loan extended to micro enterprises as per MSMED Act with beneficiary loan size up to 10 lakh per enterprise or borrower for manufacturing and service sector enterprises.

MahilaUddyami Scheme

Timely and adequate financial support to the MFIs, for lending to women or women SHGs for creation of qualifying assets as per RBI guidelines towards setting up or running micro enterprises as per MSMED Act and non-farm income generating activities.

Business loans for Traders and Shopkeepers

Timely and adequate financial support on lending to individuals for running their shops or trading & business activities or service enterprises and non-farm income generating activities with beneficiary loan size of up to 10 lakh per enterprise or borrower.

Equipment Finance Scheme for Micro Units

Timely and adequate financial support on lending to individuals for setting up micro enterprises by purchasing necessary machinery or equipments with per beneficiary loan size of up to 10 lakh.

Chart No. 1:
Growth Rate of New Entrepreneurs in NER of India
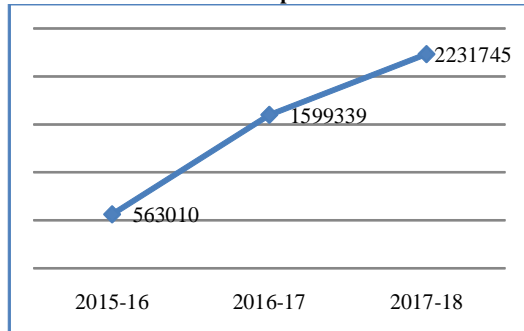
Chart No. 2:
Growth Rate of Loans Sanctioned and Loans Disbursed in NER of India
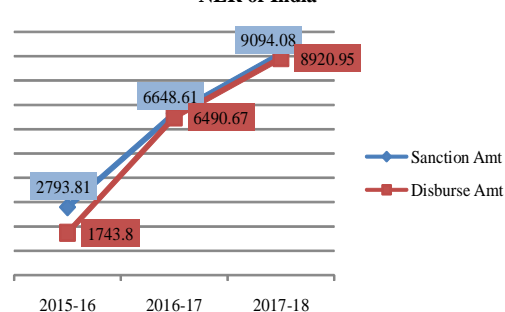
Above chart No. 1 and No. 2 displayed growth rate of entrepreneurs, loans sanctioned and loans disbursed under MUDRA schemes in NER of India. It is shown that from the first year itself 5,63,010 entrepreneurs had registered under MUDRA schemes and their after speedy increase has witness in the following two years. This revealed that the scheme is effectives for the people of North East India in promoting new entrepreneurs. Further, it is also seen from the growth rate of loans sanctioned and loans disbursed amounts that in the first year (2015-16) Rs. 2,793.81 crore was sanctioned out of which only Rs. 1,743.8 crore (62.42 per cent) was able to give out as a loans to the new entrepreneurs. But in the following years the sanctioned amount and disbursed amount shows almost an equal trend at increasing rate. This indicates that people the region became more cognizant about the scheme in 2017 and 2018 and thereby availing the financial services provided making it(MUDRA scheme) a successful one. Thus, it can be concluded that if the MUDRA scheme continues to be effective in this manner in North East India, the region can be a land of entrepreneurs within short spans of years due to its abundant resources and strategic locations; it will also pave ways in promoting indigenous products in international markets.

Table No. 2:
State-wise No. of New Entrepreneurs Registered under Shishu Scheme in NER of India (2015 to 2018)

Years	Ar. Pradesh	Assam	Mani	Megh.	Mizo	Nagala	Sik.	Tripu
2015-16	3194	390320	20943	15451	5473	3247	5491	59298
2016-17	4645	1214502	19099	20357	3408	8723	18466	243249
2017-18	9137	1558335	27973	23858	6474	11069	18466	366127
Total	**16976**	**3163157**	**68015**	**59666**	**15355**	**23039**	**42423**	**668674**

Source: Compiled and Calculated from Annual Reports

Chart No. 3:
State-wise No. of New Entrepreneurs Registered under Shishu Scheme in NER of India
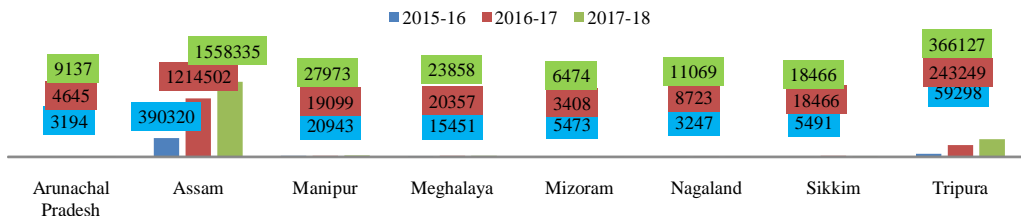
The above table and chart depictsthe state-wise new entrepreneurs registered under Shishu scheme in NER of India. It is shown that the state of Assam registered highest; on the first year itself 3, 90,320 new entrepreneurs open an accounts under this scheme and then within two years its membership reaches to 15 lakh. In 2015-16, Tripura was recorded to be second highest and Arunachal Pradesh shows poorest with only 3,194 members registered; whereas, in the year 2017-18, Mizoram shows only 6,474 members registered under the scheme and in the overall comparison, Mizoram shows lowest amongst all the state of the region.

Table No. 3:
State-wise Sanction and Disburse Amount under Shishu Scheme in NER of India
(Rs. in crore)

Years	Particulars	Arunachal. P	Ass.	Mani.	Megh.	Miz.	Naga.	Sik.	Trip.
2015-16	Scnt. Amt	8.27	770.80	35.95	40.94	20.61	10.57	12.70	137.98
	Dis. Amt	8.18	759.22	35.41	40.24	19.44	10.32	12.10	136.83
2016-17	Scnt. Amt	13.21	3600	58.61	60.32	16.09	25.31	51.77	720.77
	Dis. Amt	13.16	3593.18	58.22	60.04	15.46	25.08	51.66	719.12
2017-18	Scnt. Amt	23.28	4320.53	81.55	70.66	26.03	39.57	52.77	1048.51
	Dis. Amt	23.14	4311.15	80.88	70.48	25.64	38.57	51.66	1046.92

Source: Compiled and Calculated from Annual Report

Chart No. 4:
State-wise Sanctioned Amount to Financial Institutions under Shishu Scheme in NER of India
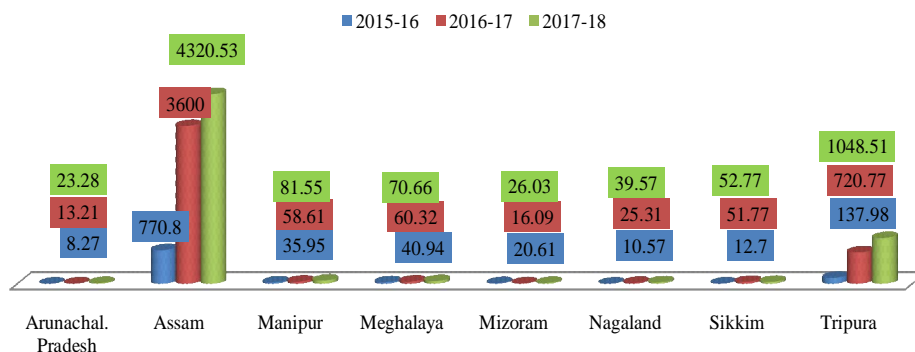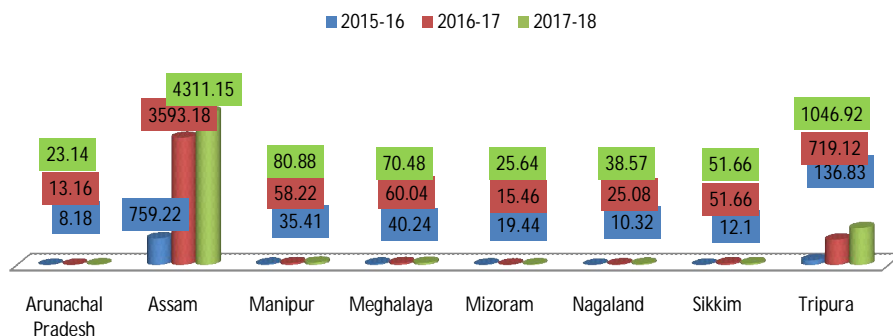

Chart No. 5:
**State-wise Disburse Amount to Entrepreneurs under Shishu Scheme in NER of India**

The above chart 4 and 5 displayed loans sanctioned and loans disbursed under Shishu scheme. In the year 2015-16 the state of Assam recorded highest in both sanctioned amounts and disbursed loans. However, in following years Tripura shows tremendous improvement and stood higher than Assam. In 2017-18, people of Tripura availed Rs. 1,048.51 crore as sanctioned funds and benefited with Rs. 1,046.92 crore disbursed as loans to the new entrepreneurs. This indicates that in Tripura, this scheme is very active in operation; almost the entire sanctioned amounts were disbursed as loans to the new entrepreneurs. Thus, it can be concluded that Tripura is the best performer among all the state of NER of India under Shishu scheme. However, the state of Arunachal Pradesh revealed weakest in performance in both sanctioned as well as disbursed amounts during the study period.

Table No. 4:
State-wise No. of New Entrepreneurs Registered under Kishore Scheme in NER of India (2015 to 2018)

Years	Aru. P.	Assam	Mani	Megh.	Mizo	Naga.	Sik.	Trip.
2015-16	977	32121	2679	3051	1993	1418	1145	7967
2016-17	1003	34363	2233	2793	3278	1726	1143	9425
2017-18	1236	145421	4507	4143	5536	2461	1143	32049
Total	**3216**	**211905**	**9419**	**9987**	**10807**	**5605**	**3431**	**49441**

Source: Compiled and Calculated from Annual Report

Chart No. 6:
**State-wise No. of New Entrepreneurs Registered under Kishore Scheme in NER of India**
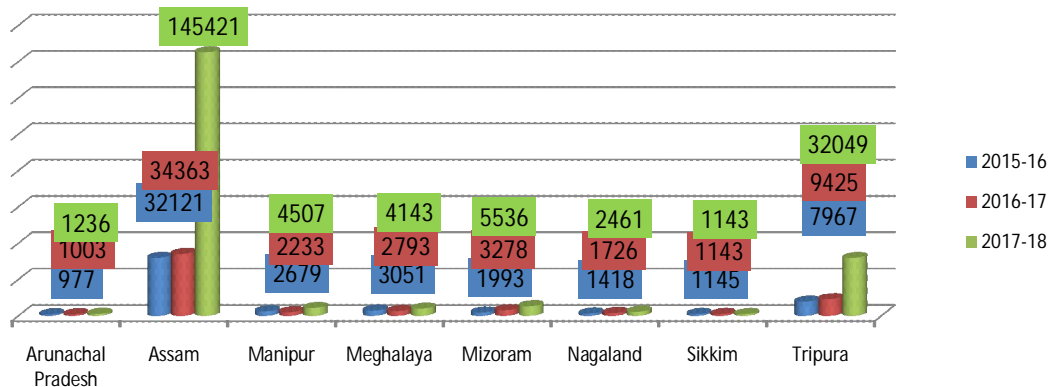
Above table no. 4 and chart no. 6 exhibits number of new entrepreneurs registered under Kishore scheme in NER of India. During the study period, Assam shows highest particularly there was a tremendous rise in 2016-17 to 2017-18; Tripura shows second highest and had revealed that there was sudden increase between the year 2016-17 and 2017-18 and the rest of the states have also shown increases in the number of registered entrepreneurs. This indicates that people of the region had become more aware of MUDRA scheme resulted in upgrading their business with higher capital investment. In this scheme the state of Arunachal Pradesh shows lowest entrepreneurs registered in 2015-16 and 2016-17 but in the year 2017-18 Sikkim shows lowest.

Table No. 5:
State-wise Sanction and Disburse Amount under Kishore Scheme in NER of India
(Rs. in Crore)

Years	Particulars	Arunachal. P	Ass.	Mani.	Megh.	Miz.	Naga.	Sik.	Trip.
2015-16	Scnt. Amt	29.16	679.93	66.74	75.84	41.90	39.51	27.07	167.60
	Dist. Amt	27.44	614.57	58.66	74.20	35.24	36.75	24.82	141.05
2016-17	Scnt. Amt	30.01	785.98	55.31	71.29	62.22	44.24	25.99	188.43
	Dist. Amt	28.12	725.46	47.18	68.52	53.16	39.26	24.91	166.65
2017-18	Scnt. Amt	36.51	1646.95	82.49	83.00	100.31	48.94	25.99	348.26
	Dist. Amt	32.91	1583.47	71.47	80.55	97.23	44.25	24.91	330.41

Source: Compiled and Calculated from Annual Report

Chart No. 7:
State-wise Sanctioned Amount to financial institutions under Kishore Scheme in NER of India
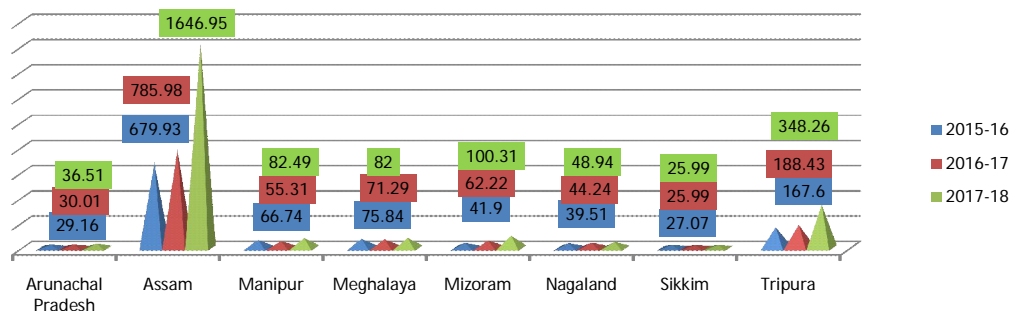
The above chart no. 7 and 8 exhibits sanctioned funds and disbursement amounts as loans under Kishore scheme in NER of India. In both sanctioned amounts and disbursed amounts, Assam had stood first and Tripura was recorded to be second highest; followed by Mizoram,Meghalaya, Manipur, Nagaland, Arunachal Pradesh and Sikkim shows lowest under the scheme in both sanctioned as well as disbursed amounts during the study period. This indicates that enterprises with higher capital investment are rapidly increasing in the states of the region. It also revealedthat sanctioned amounts and disbursement amounts are steadily increasing in all the states of the region.

Table No. 6:
No. of New Entrepreneurs Registered under Tarun Scheme in NER of India (2015 to 2018)

Years	Aru. P.	Assam	Mani	Megh.	Mizo	Naga.	Sik.	Trip.
2015-16	454	4831	399	649	306	469	253	881
2016-17	461	6889	533	765	287	602	256	1133
2017-18	631	9248	706	845	390	611	256	1123
Total	**1546**	**20968**	**1638**	**2259**	**983**	**1682**	**765**	**3137**

Source: Compiled and Calculated from Annual report

Chart No. 9:
State-wise No. of New Entrepreneurs Registered under Tarun Scheme in NER of India (2015 to 2018)
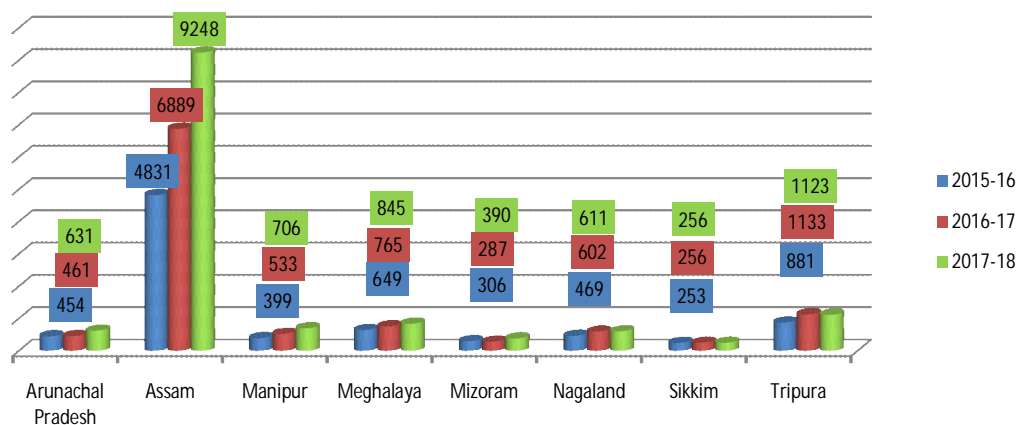
The chart no. 9 displayed new entrepreneurs registered under Tarun scheme in the NER of India. It is shown that Assam has the highest number of entrepreneurs registered during the study period; from the first year itself 4,831 new entrepreneurs registered and then 6,889 in 2016-17and 9,248 in 2017-18. This indicates that enterprises with larger capital investments are mostly concentrated in the state of Assam. Again, the state of Tripura was recorded to be second highest under the scheme amongst all the states of NER India. However, from the comparison of state-wise registrations, Sikkim had shown the lowest number of registration. It can be concluded that entrepreneurs who are engaged with higher capital investment are mostly found in Assam and Tripura.

Chart no. 10 and chart no. 11 represents the amounts sanctioned and amounts disbursed, state-wise, under Tarun scheme in NER of India. It can be seen from the chart that in both cases of sanctioned and disbursed amounts, Assam has the highest amount of sanctioned and disbursed amongst the states of the region and Tripura stood second highest in both sanctioned amounts and disbursed amounts under the scheme;whereas, Sikkim had stood the lowest in both sanctioned amounts and disbursed amounts. In Assam, from the year of its inceptions(2015-16) itself the sanctioned amount was Rs. 366.89 crore out of which Rs. 354.67 has given out tonew entrepreneurs as a loan. Likewise, in 2016-17 sanctioned

amounts was Rs. 521.56 crore and disbursed amounts was Rs. 505.91 crore and in 2017-18 sanctioned amounts was Rs.702.26 crore and disbursed amounts was Rs. 675.26 crore. This indicates that Assam has highest beneficiaries under the scheme (larger amounts of loans).

Chart No. 10:
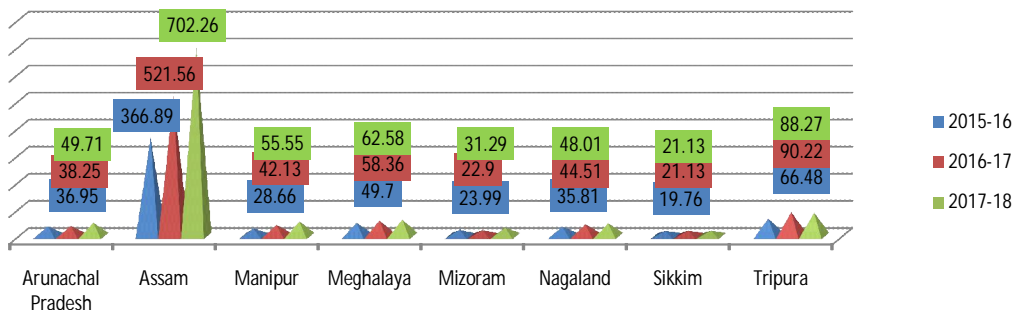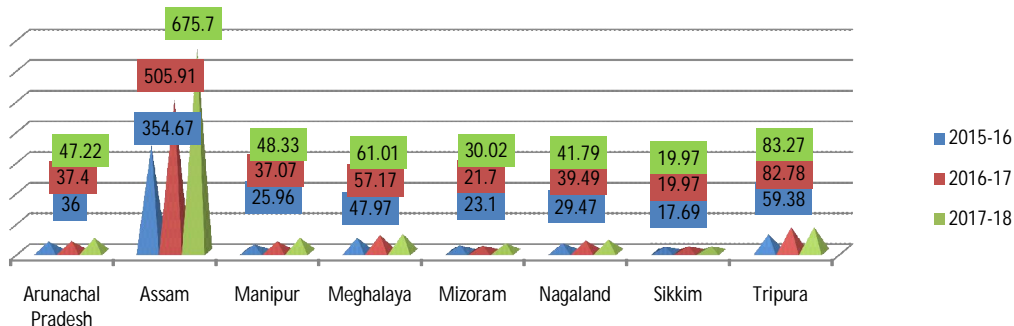**State-wise Sanction Amount to financial institutions under Tarun Scheme in NER of India**

Chart No. 11:
State-wise Disburse Amount to Entrepreneurs under Tarun Scheme in NER of India

Key Finding

1. MUDRA schemes have been offering refinancing facilities to micro units (new entrepreneurs) through financial institutions for the development of rural industry in India; providing under three scheme heads, namely, Shishu, Kishore and Tarun, covering loans at the range of up to 10 lakhs.

2. From table no. 1, it is found that 5,63,010 of new entrepreneurs from NER of India have open accounts in MUDRA bank to avail the services from the first year itself (2015-16) of its launching. It is found to be increasing with 15,99,339 members in 2016-17 to 2,2,31,745 in 2017-18.

3. From chart no. 1, it is found that the sanctioned amounts under MUDRA schemes in the first year (2015-16) was Rs. 2,793.81 crore out of which Rs. 1,743.80 crore has been disbursed as loans to the new entrepreneurs. In the second year (2016-17) sanctioned loans was Rs. 6,648.61 crore and disbursed amounts was Rs. 6,490.67 crore and in 2017-18 the sanctioned amount was Rs. 9,094.08 crore and disbursed amounts was Rs. 8,920.95 crore.

4. From chart no. 3, we found that Assam has the highest number of new entrepreneurs registered under Shishu scheme were- 3,90,320 in 2015-16, 12,14,502 in 2016-17 and 15,58,335 in 2017-18. The state Tripura stood the second highest with number of entrepreneurs registered at 59,298 in 2015-16, 2, 43,249 in 2016-17 and 3,66,127 in 2017-18. Among all the state of the region, Arunachal Pradesh has the lowest number

of entrepreneurs registered at 3,194in 2015-16 but in the 2017-18 the state Mizoram shows lowest with 6,474 members.

5.From chart no. 4 and 5, it is revealed that the highest sanctioned amount under Shishu scheme was in the state of Assam. We found that in 2015-16 sanctioned amount was Rs. 770.80 crore in which Rs. 759.22 crore has disbursed as loans. In 2016-17, sanctioned amount reached at Rs. 3,600 crore and disbursed Rs. 3,593.18 crore, and in 2017-18, sanctioned was Rs. 4,320.53 crore and disbursed amount was Rs. 4,311.15 crore; Tripura stood the second highest in sanctioned as well as in disbursement amount. The performance of loans sanctioned and disbursement under Shishu scheme stood the lowest in the state of Arunachal Pradesh during the study period.

6.From chart no. 6, it is found that the state of Assam has the highest number of new entrepreneurs registered under Kishore scheme. In 2015-16 it is found that 32,121 new accounts were registered; entrepreneurs of 34,363 and 14,5421 were registered in 2017 and 2018 respectively. The state of Arunachal Pradesh stood at lowest in 2016 whereas, Sikkim had stood the lowest registration of entrepreneurs in 2018.

7.From chart no. 7 and 8, it is found that the amount of sanctioned and disbursement of Kishore scheme were highest in the state of Assam. In the year 2015-16 it had the sanctioned amount of Rs. 679.93 crore and disbursed amount of Rs. Rs. 614.57 crore, in 2016-17 it had a sanctioned amount of Rs. 785.98 crore and disbursed amount of Rs. 725.46 crore and in 2017-18 it had a sanctioned Rs. 1646.95 crore and disbursed amount of Rs. 1,583.47 crore; Tripura had stood the second highest in 2015-16 with a sanctioned amount of Rs. 167.60 crore and a disbursed amount of Rs. 141.05 crore, whereas, in 2016-17 it had a sanctioned amount of Rs. 188.43 crore and a disbursed amount of Rs.166.65 crore and in 2017-18, it has a sanctioned amount of Rs. 348.26 and a disbursed amount of Rs. 330.41 crore.

8.From chart no. 9, it is observed that the number of account registered under Tarun scheme was highest in Assam;new entrepreneurs registered were- 4831in 2015-16, 6889 in 2016-17 and 9248 in 2017-18. Tripura stood the second highest in numbers of new entrepreneurs registered in the scheme.

9.From chart no. 10, it is observed that the highest amount of loans under the Tarun scheme is sanctioned in the state of Assam. It is found that Rs. 366.89 crore was sanctioned in the first year (2015-16) itself, in 2016-17 it had a sanctioned amount of Rs. 521.56 crore and Rs. 702.26 in 2017-18. Further, the disbursed amount of Tarun loans is found to be highest in Assam, with Rs. 354.67 crore in 2015-16, Rs. 505.91 crore in 2016-17 and Rs. 675.7 crore in 2017-18.

Conclusions

Government of India has recognized the hindrance of budding rural entrepreneurs and had clearly indicated that the issue was none other than financial constrained. In order to stabilize this problem and upgrade the living standard of rural areas, MUDRA bank was launched for more transparency. The prospect of this scheme will now facilitate both the entrepreneurs and financial institutions for easy incubation. Under the scheme of thebank, the government has sanctioned a corpus of US$ 3.0 billion and a credit guarantee fund of US$ 450 million. Initially it will function as a non-banking financial institution and as a subsidiary of Small Industries Development Bank of India, and later to serve as a regulating body of Micro finance institution.

At its inception, MUDRA Bank has launched three categories of schemes: Shishu (0 - 50,000), Kishor (50,000 – 5 lakh) and Tarun (5 lakh – 10 lakh), 60% of the sanction amount is to be credited on Shishu category and the balance to Kishore and Tarun categories. The salient features of the schemes are to be categories into various areas: Sector Specific Schemes, Micro Credit Scheme, Missing Middle Credit Scheme, Refinance Scheme for RRB / Scheduled Co-operative Banks, MahilaUddyami Scheme, Business Loan for Traders and Shopkeepers, and Equipment Finance for Micro Units. Apart from this areasof schemes, there is also an offering of innovation: MUDRA card, Portfolio Credit Guarantee, Creation of Resources for Credit Enhancement / Guarantee Facility, Underwriting for Intermediaries and Business/Banking Correspondent Model. MUDRA Bank being a refinancing agency, it promises to

reduce the rate of interest on loans to the beneficiaries which will be affordable and reasonable. Even it ensure to minimize the current rate of interest for micro financial institutions which is at present 10% for portfolio loans of 100 crore and 12% on portfolio loans less than 100 crore. Moreover MUDRA Bank has guarantee that the cost of funds of MUDRA should be 150 bps to 200 bps below the benchmark of repo rates. This seems to be very much pragmatic as GoI is willing to support MUDRA in mobilizing low cost funds through refinance support from RBI.

By and large, the provisions and offerings of MUDRA bank have rekindled the spirit of adventure for the beneficiaries into a dream. The bondage of acquiring capitals for their business in the past have brought to a wonderland with liberal finance, low rate of cost on capital and a simplified regulatory system to the rural entrepreneurs as well as to the MFIs. The NER has witness rapid growth of new entrepreneurs especially under the scheme of Shishu. The amount of sanctioned loans and disbursement loans in all the three schemes were increasing in speedy pace in NER of India. The comparison of state-wise shows that the performance of MUDRA bank in promoting new entrepreneurs has taken great initiativein NER of India, especially Assam shows best performance in all the three schemes. Finally, it can be concluded that MUDRA bank had become a great initiation of the government of India in promoting rural entrepreneurs in the region and if the growth rate continues to increase steadily then the NER of India will witness tremendous changes within 10 years of time.

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Occupational Pattern and Socio-Economic Condition of Dimasa Tribe of Dima Hasao District of Assam in the post liberalisation Period

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Abstract

This study seeks to understand specific issues pertaining to the socio-economic condition of Dimasa Tribe of Dima Hasao District of Assam and their occupational pattern in the post liberalisation period. The study also attempts to find out the emergence of entrepreneurship and business as an occupation among the Dimasa tribe of the study area.   Both descriptive and analytical research designs have been applied in the present study. A sample of 108 Dimasa households have been considered and found that there is no significant relationship between the occupational pattern and area of settlement, whereas there is significant relationship between occupational pattern and in-come as well as significant relationship between occupational pattern and housing conditions of Dimasa households of the study area. No significant relationship between the occupational pattern and some of the durable assets like television, motorcycle and computer has also been found in the present study.

Keywords: Occupation, socio-economic, poverty

Introduction

The post- liberalisation period witnesses a drastic change in both the occupational and consumption pattern of the Indian society. The influence of dominant and corporate culture have fuelled the sense of individualism, hence, created a state of contradictions and controversies in such a society which have a long tradition of holding joint or common property. The tribal society of the country is also of no exception. The shifting of the ideas and institutions like 'common property to private property' has been seen prominently in the tribal areas of the country in the post liberalisation period. During this period, there is an emergence of a new creamy class among the Scheduled Tribes (ST); however, the problems of poverty, illiteracy and lack of access to basic needs like healthcare are common in the tribal areas of the country. Evidences of such problems are found in the World Bank India Poverty Assessment Report 2009, Census 2001 and 2011, various reports of Indian National Sample Survey (NSS) and Indian National Family Health Survey (NHFS). Hence, the 'development mantra' which is based on market is beyond its capacity to resolve certain issues pertaining to economically and socially deprived sections of the society like Scheduled Tribes of the country.

There are a number of communities who belong to Scheduled Tribes (ST) and they stay in different parts of the country. Assam is one of the states in India which has a large number of ST populations. It is also called as 'a land of number of Scheduled Tribes (ST)'. There are 23 notified STs including 37 different sub - Kuki tribes in Assam; out of them,   14 are considered as ST hill tribes and 9 are considered as ST plain. Dimasa is one of the ST hill tribes and settle in three hill districts of Assam and some areas of Barak valley. According to Census 2011, ST constitutes 12.4 percent of the total population of the state; out of the total ST population, 95.3 percent live in rural areas and only 4.7 percent is in urban areas. Of the eight major STs, of Assam, Dimasa tribe has recorded the highest (10.4 percent) urban population followed by

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Karbis as 8.3 percent. It clearly indicates that majority of the hill tribes are staying in rural areas. Till today, however, the rural areas, particularly remote hill areas are highly inaccessible by road network and modern transport system. According to Gogoi, (2013), Regarding the road density, Dima Hasao district belong to lower rate density region and recorded as 38.38 / 00 Sq Km. Accessibility of road and modern transport system is one of the most important criterions of a developed region. If India wants to join the race of development, the government has to take a major responsibility in improving the infrastructural development in remote and backward areas of the country. The socio-economic condition of STs of hill districts of Assam can also be developed at large extent if there is improvement in the infrastructural development. In this background the present paper attempts to examine the occupational pattern and socio-economic condition of Dimasa tribe in the post liberalisation period.

Rationality of the study

The Scheduled Tribe community is one of the socially and economically deprived sections of the society. India has a sizable number of populations who belong to Scheduled Tribe. In the north- east region of India, they are also called as indigenous people. The goal of sustainable development and inclusive growth can not be achieved without the development of the socio-economic condition of Scheduled Tribes. Hence, a study on socio-economic condition of Scheduled Tribes is highly necessary in the present day. Tremendous changes have been taken place in the consumption and living style of the country in the post liberalisation period. Are such changes occurred among the Dimasa tribe of Assam? Dimasa is one of the oldest tribal communities who live in hill districts of Assam. They are said to be the earliest inhabitants of the Brahmaputra valley of Assam and belong to the Indo – Mongoloid group. Then, what is their main occupation? The present paper explores and examines the above mentioned issues.

Review of Literature

A good number of studies have revealed that the major occupation of tribal people is agriculture and allied activities. The studies of Sikha, et,al, (2017), Basumatary (2016) , Rao (2013), etc have clearly revealed it. According to them, some of the socio economic problems faced by them are   poverty, illiteracy, superstition, negligence of women education, domestic violence etc. and the various types of income sources of the tribal people in Assam are local wine making, The similar findings are also seen in the study of Rao (2013), which was conducted in Vishakahapatnam district of Andhra Pradesh . Regarding the socio-economic condition of Oraon Tribe of West Bengal, the study of Ali & Basak (2018) reveals that tribals of the study area are deprived from basic necessities of life and. most of them are facing the problem of unemployment, low incomes and they are stressed with education, economic and social backwardness. Regarding the importance of conducting research on socio-economic status of a community, studies like Kashari & Maity (2015) considers that the study of socio–economic status is very much important to know in any caste and communities' economic development. In their study, they consider determinants such as, per capita income, literacy rate, health and nutrition, sanitation, family size to assess the socio–economic status of the Bodo Community in Udalguri District, Assam. There are also studies which considered family size, occupation, income, expenditure pattern and debt as the major parameters to measure the socio-economic condition of tribes. It is seen in the study of Babu's (2012), Kumar, et,al (2018), Jayantakumar & Palaniyammal (2016) and Abu & Praveen (2007),etc. Abu & Praveen (2007) investigate the socio-economic characteristics of Tribal people of Ranggamati Sadar in their study. The authors consider income an important indicator of socio-economic condition of a community. They argue that a community with higher income can meet their basic needs and enjoy their livelihood and the main source of household income is service, agriculture and business.

Objectives

1. To investigate the occupational pattern among the Dimasa Households of the study area in the post liberalisation period
2. To examine the socio-economic condition of Dimasa Households of the study area in the post liberalisation period
3. To examine the relationship between the occupation and socio-economic condition of Households of the study area in the post liberalisation period.

Hypotheses

H_{01}: there is no significant relationship between the place of settlement and occupational pattern among the Dimasas Households of the study area in the post liberalisation period.

H_{02}: there is no significant relationship between occupational pattern and socio-economic condition among the Dimasas Households of the study area in the post liberalisation period with regard to select socio-economic indicators.

Research Methodology

The present study is both descriptive and analytical in nature; it is also based on both the primary and secondary data. Primary data have been collected through structure schedule from 108 Dimasa households of four development blocks of Dima Hasao district of Assam which comprises 27 households from each development blocks. 'Convenience sampling' has been applied to select the sample households. Land holdings, place of settlement, income, housing condition and durable assets like television, mobile phone, bicycle , motorcycle, refrigerator, etc have been considered as socio-economic indicators. The data have been analysed through descriptive statistics and Pearson chi- square test has been applied to test the hypotheses. IBM SPSS has been used to analyse the primary data.

Results and Discussions

(a). Socio-economic profile of the households: The socio-economic profile of the sample households is shown in Table 1. It reveals that majority (63 percent) of the households are from rural area and about a half of the total households (48 percent) owns 1- 3 acres of land. Majority (56.5) of the households has a monthly income of Rs 14000.00 and above. Though, about a half of the total households (49 percent) of the study areas stay in semi pucca house , a sizable number (34 percent) still stay in kutcha houses which is made of mud and bamboo. While around 14 percent of the total households stay in single storey, there are 3 households which have 2 and multiple storey building.

Regarding the main occupation of the households, it is revealed from Table 2 that the main occupation is agricultural activities. The highest number of households are cultivators and agricultural labours (39. 8%), however, a large number are (38 .9 %) are in other services like government jobs. Further it is also revealed that about 19 % of the households engaged in entrepreneurial activities.

Hypothesis testing result : The hypotheses testing results are shown in Table 3 and Table 4. The computed Pearson Chi square test and Asmp. Sig. Result are shown in the respective tables. The decision of acceptance and rejection of hypotheses have been taken based on the 5 percent level of significance. In case of H01, since the $p < .05$, it is rejected, hence the another alternative hypothesis is developed as 'there is significant relationship between place of settlement and occupational patterns of sample Dimasa households of the study area'.

In case of H02, corollary 9 sub- null hypotheses have been developed and test result shows that in case of five sub Null hypotheses, the computed values are found as $p < .05$, hence, theses hypotheses are rejected while in case of four sub-Null hypotheses, the $p > .05$, hence theses hypotheses are accepted (table 4). Hence, the hypothesis that ' there is no significant relationship between occupational pattern and socio-economic condition among the Dimasas Households of the study area in the post liberalisation period with regard to select socio-economic indicators' is partially rejected. .

Major Findings

1. The land holding pattern shows that average land holding of the Dimasa households of the study area is 1-3 acre.

2. The average monthly income of the Dimasa households of the study area is Rs 8000.00 pm.

3. A huge number of Dimasa households still lives in Kutcha houses and only a countable number of households stay in pure pucca houses.

4.There is significant relationship between the place of settlement and type of occupation among the . Dimasa households.

5.There is significant relationship between occupation and income, housing condition of Dimasa households. It indicates that the households who are in other activities have higher income and housing condition from those who are in agriculture and allied activities.

6.There is significant relationship between the occupation and holding of some of the durable assets like Television, Motorcycle and computer. It indicates that holding of such durable assets are based on the type of occupation.

7.There is no significant relationship between the occupation of the household and holding of durable assets like mobile phone, bicycle and refrigerator. It clearly indicates the change in the consumption culture among the Dimasa households of the study area.

8.While H0 1 is rejected, in case of the H02 is partially rejected.

Conclusion

From the above discussions on the 'occupation and socio-economic condition of Dimasa households' one major inference which can be drawn is that in the post liberalisation period, there is a change in the occupational pattern among the Dimasa tribes of the study area. Defying the traditional occupation of agriculture related activities like farming and agricultural labourers, some of the sample Dimasa households have taken Entrepreneurship and business as their occupation. However, from the study, it can also be derived that area of settlement has a strong bearings on the type of occupation. It means that there is strong possibility of rural households' main occupation is remained as agriculture and allied activities like cultivation whereas the urban households' main occupation is opposite to it. The modern gadgets like mobile phone and modern durable assets like refrigerators are part and partial of the Tribal households. Irrespective of settlement in urban or rural, farmer or businessmen, mobile phone becomes the asset of all walk of life. It can be observed from the study that the type of occupation does not have any bearing on holding of such type of assets; however, it can be mentioned here that a sizable number (30%) of the Dimasa households have the monthly income of below Rs 8000 and it is the indication that even they own modern gadgets and follow the modern consumerist culture, they can not come out from the problem of poverty. Hence, in conclusion, it is suggested that to develop the socio-economic condition of Dimasa households, the problem of poverty is to be arrested. It is firmly believed by the author that 'Entrepreneurship development as well as speedy infrastructural development in tribal areas 'will solve the problem of poverty at larger scale.

Notes:

(a)A survey conducted by Centre for Environment and Food Security in 2005 in ST areas in two Indian states found that 99 percent of the sample ST households faced chronic hunger, one-quarter faced semi-starvation during the previous week, and not a single household had more than 4 of 10 assets from a list that included such basic items as a blanket, a pair of shoes, or a radio (Centre for Environment and Food Security. 2005. Political economy of hunger in Adivasi areas. New Delhi).

(b)In India, out of 23.3 million ST households, only one-tenth of ST households have houses with concrete roofs and only one–fourth have tap water (Census 2011)

(c)Who is Scheduled Tribes (ST)? The term - 'Scheduled Tribes (ST)' is a category concocted by the post- independence Indian state (Radhakrishna, 2016). Article 366 (25) of the Indian Constitution defines Scheduled Tribes (ST) as "such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this constitution"

Table 1: Socio-economic Profile of households

	Settlement	Frequency	Percent	Valid Percent	Cumulative Percent
	urban	40	37.0	37.0	37.0
	rural	68	63.0	63.0	100.0
	Total	108	100.0	100.0	
	Land holding	Frequency	Percent	Valid Percent	Cumulative Percent
	less than 1 acre	33	30.6	30.6	30.6
	1-3 acre	52	48.1	48.1	78.7
	3-5 acre	11	10.2	10.2	88.9
	5-8 acre	6	5.6	5.6	94.4
	above 8 acre	6	5.6	5.6	100.0
	Total	108	100.0	100.0	
	Income (in Rs pm)	Frequency	Percent	Valid Percent	Cumulative Percent
	less than 2000	2	1.9	1.9	1.9
	2001-4000	6	5.6	5.6	7.4
Valid	4001-6000	17	15.7	15.7	23.1
	6001-8000	3	2.8	2.8	25.9
	8001-1000	5	4.6	4.6	30.6
	10001-12000	9	8.3	8.3	38.9
	12001-14000	5	4.6	4.6	43.5
	14000 and above	61	56.5	56.5	100.0
	Total	108	100.0	100.0	
	Housing condition	Frequency	Percent	Valid Percent	Cumulative Percent
	multi storey	1	.9	.9	.9
	2 storey	2	1.9	1.9	2.8
	single storey	15	13.9	13.9	16.7
	semi pucca	53	49.1	49.1	65.7
	Kutcha	37	34.3	34.3	100.0
	Total	108	100.0	100.0	

Source: field survey

Table 2 Occupation of the households

	Occupation	Frequency	Percent	Valid Percent	Cumulative Percent
	Cultivator and agricultural labourer	43	39.8	39.8	39.8
	household industry worker	3	2.8	2.8	42.6
Valid	Entrepreneurship and self employed	20	18.5	18.5	61.1
	Others	42	38.9	38.9	100.0
	Total	108	100.0	100.0	

Source: field survey

Table 3. Relationship between area of settlement of households and occupational pattern

Type of test	Pearson Chi-Square Value	df	Asymp. Sig. (2-sided)	Result (at 5% level of significance)
Pearson Chi-Square	12.511			Rejected
		5	.028	
Likelihood Ratio	13.096			
No of valid cases	181			

Table 4. Relationship between occupational pattern and select socio-economic indicators

Relationship with	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)	Result of Hypotheses testing *
Land holding	16.644	20	.796	Accepted
Income	71.237	35	.000	Rejected
Housing	45.590	20	.001	Rejected
Durable Asset 1	21.068	5	.001	Rejected
Durable Asset 2	4.356	5	.499	Accepted
Durable Asset 3	8.602	5	.126	Accepted
Durable Asset 4	20.886	5	.001	Rejected
Durable Asset 5	8.126	5	.149	Accepted
Durable Asset 6	11.649	5	.040	Rejected
Number of valid cases	181			

- At 5 % level of significance

  Durable Asset 1= Television, Durable Asset 2=mobile phone , Durable Asset3=Bicycle,

  Durable Asset4= Motorcycle Durable Asset 5 = Refrigerator, Durable Asset 6=Computer

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