# **APOTHEOSIS**

# Tirpude's National Journal of Business Research

Volume 7	Issue 2	July 2017 IS	SSN – 2319-5576
A Compar	ative Study Of	Ms. Prachi Bhede Non Performing Assets Management With Respect or Banks In India ( For Fy 2011-12 To 2015-16)	<b>2 – 28</b> To Public Sector
		l <b>ar</b> tention in DG set-Market at Kolkat, India: An Appli	<b>29 – 41</b> cation of Markov
		<b>Prof. Yamini Ghanghorkar</b> als of e-Grocery in Nagpur	42 – 48
		ukhavasi & Dr. Sathish Babu Adipudi Bank In Lending Towards Priority Sector	49 – 54
	lhya Bhagat work stress of	f Medical Practitioners	55 – 69
_	-	& Prof. Abhishek Shahu andals on Investment behaviour of Nagpur's investor	70 – 76

A Comparative Study Of Non Performing Assets Management With Respect To Public Sector Banks And Private Sector Banks In India (For Fy 2011-12 To 2015-16)

Cs. Akhil Ramteke

Ms. Prachi Bhede

#### **ABSTRACT**

A non-performing asset is a loan or lease that is not meeting its stated principal and interest payments. It is a debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The non-performing asset is therefore not yielding any income to the lender in the form of principal and interest payments.

An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank. A 'non- performing asset' (NPA) is defined as the credit facility in respect of which the interest and / or installment of principal has remained 'past due' for a specified period of time.

In this study, the comparison of NPAs of public & private sector has been done. The comparison is made on the basis of the ratios of Net NPA to Net advances. After comparing the NPA of all banks of public and private sector, the private sector banks are performing better than public sector. The NPAs of private sector banks are very low and they properly maintain their NPAs. The NPAs of public sector banks such as SBI, PNB & BOB have been increasing from last 3 to 4 years. Especially, in case of Punjab national bank, the NPA have been highly increased from 2012 to 2016 i.e. 2.93 to 12.90 respectively.

So the public sector banks should focus more on their NPAs and collection procedure. The regulations should be very strict and precise according to the needs of the banks so that the NPAs can be properly maintained. The bank should also make special account of the client wherein monthly loan concentration report should be maintained. It is also wise for the banks

to carry out special investigation audit of all financial transactions and books of accounts of the borrower when there is possibility of diversion of the funds and mismanagement.

**Keywords:** non-performing asset, debt obligation, interest and principal repayments, public & private sector banks, collection procedure, regulations, special investigation audit.

## **Introduction of Non Performing Assets**

The economic progress of a nation and development of banking is invariably interrelated. The Banking sector is an indispensable financial service sector, supporting development plans through channelizing funds for productive purpose, intermediating flow of funds from surplus to deficit units and supporting financial and economic policies of government. The importance of banks stability in a developing economy is noteworthy as any distress affects the development plans and, thereby the economic progress. The Indian banking sector accounts for a major portion of financial intermediation and is acknowledged as a main vehicle for monetary policy signals, credit channels and facilitator for payment systems.

<sup>1</sup>A Non-performing asset (NPA) refers to a classification for loans on the books of financial institutions that are in default or are in arrears on scheduled payments of principal or interest. In most cases, debt is classified as nonperforming when loan payments have not been made for a period of 90 days. While 90 days of nonpayment is the standard period of time for debt to be categorized as nonperforming, the amount of elapsed time may be shorter or longer depending on the terms and conditions set forth in each loan.

A non- performing asset is a loan or lease that is not meeting its stated principal and interest payments. Generally, it is an asset which is not producing income.

<sup>2</sup>A debt obligation where the borrower has not paid any previously agreed upon interest and principal repayments to the designated lender for an extended period of time. The non-

<sup>&</sup>lt;sup>1</sup> http://www.investopedia.com/terms/n/non-performing-assets.asp

<sup>&</sup>lt;sup>2</sup>http://gnu.inflibnet.ac.in/bitstream/123456789/1347/1/Impact%20of%20Non%20Performing%20Assets%20on%20Profitability%20for%20Public%20and%20Private%20Sector%20Banks.pdf

## **Apotheosis**

Volume 7 issue 2 July 2017 ISSN – 2319-5576

performing asset is therefore not yielding any income to the lender in the form of principal and interest payments.

<sup>3</sup>Non- performing assets, also called non- performing loans, are loans, made by bank or finance company, on which repayments or interest payments are not being made on time. A loan is an asset for a bank as the interest payments and the repayments of the principal create a stream of cash flows. It is from the interest payments that a bank makes its profits.

Banks usually treat assets as non-performing if they are not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late (usually 90 days), the loan is classified as non-performing.

# <sup>4</sup>All assets can be classified as being on one of the five stages:

- 1) Performing
- 2) Performing but compromised
- 3) Under-performing
- 4) Non-performing
- 5) Charge-offs

Technically, any Asset that belongs to you, that is not doing what it is supposed to do, is a Non-performing Asset (NPA). So if an asset performs, it's doing what's expected. A simple analogy is Kindergarten: You lend someone your crayon but they won't or can't give it back. They broke their promise. They did not perform.

A high level of non-performing assets compared to similar lenders may be a sign of problems; as also may be a sudden increase. However, this needs to be looked at in the context of the type of lending being done. Some banks lend to higher risk customers than others and therefore tend to have higher proportion of non-performing debts, but will make up for this by charging borrowers higher interest rates, increasing spreads.

# Types of NPA

<sup>&</sup>lt;sup>3</sup> Non-performing Assets in Indian Banks By Ambuj Gupta

<sup>&</sup>lt;sup>4</sup> Non- performing Assets in Indian Banking By Ambuj Gupta

# Apotheosis

Volume 7 issue 2 July 2017 ISSN – 2319-5576

- 1. Gross NPA
- 2. Net NPA

## 1. Gross NPA:

<sup>5</sup>As per RBI Guidelines, Gross NPA is the sum total of all loan assets that are classified as NPAs. It can be calculated with the help of following ratio:

Gross NPA ratio: Gross NPA

**Gross Advances** 

# 2. Net NPA:

<sup>6</sup>Net NPAs are those type of NPAs in which the bank has deducted the provision regarding NPAs. It can be calculated by the following ratio:

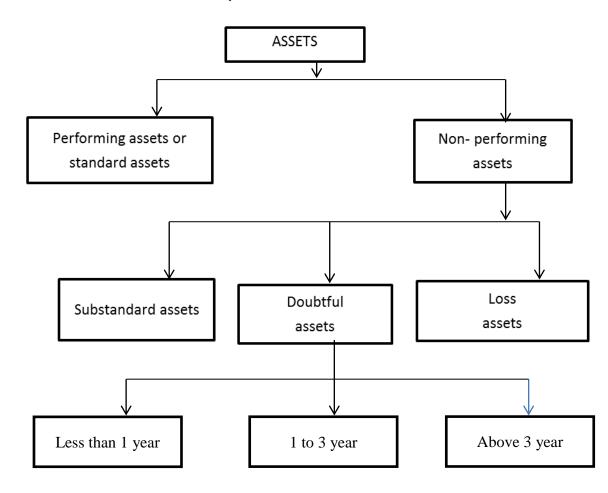
**Net NPA ratio:** Gross NPA – Provisions

Gross Advances-Provision

**Classification of NPA** 

<sup>&</sup>lt;sup>5</sup> http://www.indianmba.com/Faculty\_Column/FC1576/fc1576.html

<sup>&</sup>lt;sup>6</sup> http://www.indianmba.com/Faculty\_Column/FC1576/fc1576.html



# <sup>7</sup>NPA have been divided or classified into following four types:

# 1. Standard Assets:

Standard assets are the ones in which the bank is receiving interest as well as the principal amount of the loan regularly from the customer. Here it is also very important that in this case the arrears of interest and the principal amount of loan do not exceed 90 days at the end of financial year. If asset fails to be in category of standard asset that is amount due more than 90 days then it is NPA and NPAs are further need to classify in sub categories. Banks are required to classify non-performing assets further into the following three categories based on the period for which the asset has remained non-performing and the reliability of the dues.

#### 2. Sub-standard Assets:

<sup>&</sup>lt;sup>7</sup> http://www.bank4study.com/2015/07/non-performing-assetsnpa-and-sarfaesi.html

A substandard asset is one, which has remained NPA for a period less than or equal to 12 month.

# 3. Doubtful Assets:

All those assets which are considered as non-performing for period of more than 12 months are called as Doubtful Assets.

#### 4. Loss Assets:

All those assets which cannot be recovered are called as Loss Assets. In this case 100% provision is made by bank. The account can be written off and all the assets will hand over to recovery agents for sale.

## Identification of Accounts as NPA

In line with the international practices and as per the recommendations made by the committee on the financial system (Chairman Shri M. Narasimham) the Reserve Bank of India has introduced *Prudential Norms on Income Recognition, Asset Classification and Provisioning Pertaining to Advances Portfolio* of the banks. The first Master Circular was issued during financial year 1992-93 and the last Master Circular was issued by Reserve Bank of India on 1<sup>st</sup> July 2015.

<sup>8</sup>As per Prudential Norms of RBI: An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.

ACCOUNT TYPE	CONDITIONS
Term Loan	Interest and / or installment of principal remain overdue for a
	period of more than 90 days in respect of a term loan.
Overdraft/cash credit	The account remains 'out of order' for a period of more than 90
(od/cc)	days, in respect of an Overdraft Cash Credit (OD/CC).
Bill Purchased	The bill remains overdue for a period of more than 90 days in the
	case of bills purchased and discounted,
Agriculture Advances	Interest and/or installment of principal remains overdue for two

<sup>8</sup> www.rbi.org.in/scripts/BS\_ViewMasCirculardetails.aspx?id=9908#5a

\_

	arvest seasons for sho	t duration	crops	and	one	for	long
	uration crops.						
Other credit facilities	Any amount to be received remains overdue for a period of more						
	than 90 days in respect of other accounts.						

- The amount liquidity facility remains outstanding for more than 90 days, in respect of securitization transaction undertaken in terms of guidelines on securitization dated Feb 1, 2006.
- In respect of derivative transactions, the overdue receivables representing positive mark to market value of a derivative contract, if these remains unpaid for a period of 90 days from the specified due date of payment.

# <sup>9</sup>Provision Norms of RBI on types of assets:

Provision is allocating money every year to meet possible future loss. As per RBI guidelines:

Sr.No.	Type of Assets	Provisions (%)
1	Standard Assets	
	a) Direct advances to agricultural and SME	0.25%
	b) Advances to Commercial Real Estate	1.00%
	Sector	
	c) Advances to CRE – Residential Housing	0.75%
	Sector	
	d) All other loans and advances not	0.40%
	included above	
2	Substandard Assets	
	a) Secured exposures	15%
	b) Unsecured exposures	25%
	c) Unsecured exposures with respect to	20%

<sup>9</sup> https://www.rbi.org.in/scripts/BS\_ViewMasCirculardetails.aspx?id=9908

	Infrastructure loan accounts where	
	certain safeguards like escrow	
	accounts are available0	
3	Doubtful Assets	
	-Up to One Year	100% of Unsecured Advances
		and 25% of Secured Advances
	-One to three	100% of Unsecured Advances
		and 40% of Secured Advances
	-More than three years	100% of Unsecured Advances
		and 100% of Secured Advances
4	Loss Assets	100% of Unsecured Advances
		and 100% of Secured Advances

# <sup>10</sup>Causes of NPA

# NPA arises due to a number of factors or causes like:-

- **Speculation:** Investing in high risk assets to earn high income.
- **Default:** Willful default by the borrowers.
- **Fraudulent practices:** Fraudulent practices like advancing loans to ineligible persons, advances without security or reference, etc.
- **Diversion of funds:** Most of the funds are diverted for unnecessary expansion and diversion of business.
- **Internal reasons:** Many internal reasons like inefficient management, inappropriate technology, labour problems, marketing failure, etc. resulting in poor performance of the companies.
- **External reasons:** External reasons like a recession in the economy, infrastructural problems, price rise, delay in release of sanctioned limits by banks, delays in settlements of payments by government, natural calamities, etc.

## Other factors responsible for NPA are:

 $^{10}\,http://kalyan\text{-}city.blogspot.in/2011/07/non\text{-}performing\text{-}assets\text{-}npa\text{-}meaning\text{-}types.html}$ 

#### 1. Economic slowdown:

The global economy is still in the throes of an economic crisis that is looming large both in the US and Europe. There is a general slackening of domestic economic activity in India both in manufacturing and the services sectors. A sluggish economy will have a direct impact on the balance sheets and profitability of many firms who have availed of loans from the banking industry. Over a period of time, some of the hard hit firms will be compelled to default on their loans. There is a groundswell of expert opinion in India that NPAs are more an outcome of economic factors rather than any internal systemic failures.

# 2. High interest rates:

It is a known fact that interest rates have been revised upwards, 10 times in the past two years with a view to curb inflation. High interest rate increases the cost of funds to the credit users and has a debilitating effect especially on the repayment capacity of small and medium enterprises. Banks need to maintain their Net interest margin and hence pass on any interest rate hike to the borrowers. A high rate of inflation dilutes the quality of assets of the banking sector. Weak supply demand scenario, High Borrowing or leveraging and intense competition contributes to loan defaults.

## 3. New reporting system:

Indian banks are to report NPAs from April 2012 in a computer recognized / identified format. It is stated that almost 90% of all bank's loan portfolio is under the computerized system of NPA reporting or system based reporting. The discretion of bank managers in classifying assets according to their local judgment is eliminated. This change in reporting pattern makes identification of NPAs a machine driven objective activity. However, credit risk analysis does have a subjective and judgmental element to it.

#### 4. Aviation sector:

The Indian banking system has a total exposure of around Rs.40,000 Crores to the ailing aviation sector. SBI alone has an exposure of 5,000 crores to the aviation industry. It is common knowledge that many airlines are either in the red or marginally profitable. According to an RBI report, nearly three-fourths of the top banks' loans to the aviation sector are either impaired or restructured. Kingfisher airlines and Air India have been the significant aviation borrowers whose performance is below par.

# <sup>11</sup>Impact of NPA

- As the NPA of the banks will rise, it will bring a scarcity of funds in the Indian security markets. Few banks will be willing to lend if they are not sure of the recovery of their money.
- The shareholders of the banks will lose a lot of money as banks themselves will find it tough to survive in the market.
- This will lead to a crisis of confidence in the market. The price of loans, i.e. the interest rates will shoot up badly. Shooting of interest rates will directly impact the investors who wish to take loans for setting up infrastructural, industrial projects etc.
- It will also impact the retail consumers like us, who will have to shell out a higher interest rate for a loan.
- All of this will lead to a situation of low off take of funds from the security market. This will hurt the overall demand in the Indian economy. And, finally it will lead to lower growth rates and of course higher inflation because of the higher cost of capital.
- This trend may continue in a vicious circle and deepen the crisis.

## Measures to solve problems of NPA

The problems of NPA have receiving greater attention since 1991 in India. In the 1990's, the Government of India (GOI) introduced a number of reforms to deal with the problems of NPA.

Major steps taken to solve the problems of Non-Performing Assets in India:-

## 1. Debt recovery tribunals (DRTs):

<sup>12</sup>The Debts Recovery Tribunals (DRTs) and Debts Recovery Appellate Tribunal (DRATs) were established under the Recovery of Debts Due to Banks and Financial Institutions Act (RDDBFI Act), 1993 with the specific objective of providing expeditious adjudication and recovery of debts due to Banks and Financial Institution. Presently 38 DRT's and 5 DRAT's are functioning in India.

-

<sup>&</sup>lt;sup>11</sup> http://www.insightsonindia.com/2014/07/05/banking-system-india-non-performing-assets/

<sup>12</sup> https://www.drt.gov.in/

#### 2. Securitization Act 2002:

<sup>13</sup>Securitization and Reconstruction of Financial Assets and enforcement of Security Interest Act 2002 is popularly known as Securitization Act i.e SARFAESI Act 2002. This act enables the banks to issue notices to defaulters who have to pay the debts within 60 days. Once the notice is issued the borrower cannot sell or dispose the assets without the consent of the lender. The Securitization Act further empowers the banks to take over the possession of the assets and management of the company. The lenders can recover the dues by selling the assets or changing the management of the firms. The act also enables the establishment of Asset Reconstruction Companies for acquiring NPA, according to the provisions of the Act, Asset Reconstruction Company of India Ltd. With eight shareholders are HDFC, HDFC Bank, IDBI, IDBI Bank, SBI, ICICI, Federal Bank and South Indian Bank.

## 3. Lok Adalats:

<sup>14</sup>Lok Adalats (people's courts) settle dispute through conciliation and compromise. Legal Services Authorities Act 1987, First time held at Junagadh (Gujarat) in October 1982. It accept cases pending in regular court under their jurisdiction. The Lok Adalat is presided over by a sitting or retired judicial officer as the chairman, with two other members, usually a lawyer and a social worker. Main condition of the Lok Adalat is that both parties in dispute should agree for settlement. There is no court fee. If the case is already filed in the regular court, the fee paid will be refunded if the dispute is settled at the Lok Adalat. The procedural laws and the Evidence Act are not strictly followed while assessing the merits of the claim by the Lok Adalat. The decision of the Lok Adalat is binding on the parties to the dispute and its order is capable of execution through legal process. No appeal lies against the order of the Lok Adalat.

## 4. Compromise Settlement:

<sup>15</sup>Pipdic has reintroduced compromise settlement scheme for non-performing assets' (NPA) accounts of less than Rs 20 lakh as on March 31, 2014 in an effort to reduce its NPA and

<sup>&</sup>lt;sup>13</sup>https://en.wikipedia.org/wiki/Securitisation\_and\_Reconstruction\_of\_Financial\_Assets\_and\_Enforcement\_of\_Security\_Interest\_Act, 2002

<sup>&</sup>lt;sup>14</sup> https://en.wikipedia.org/wiki/Lok Adalat

<sup>&</sup>lt;sup>15</sup> http://timesofindia.indiatimes.com/toireporter/Compromise-settlement-scheme/speednewsbytopic/keyid-2871978.cms

enable borrowers to settle their loan accounts by availing interest concession. The corporation will extend the scheme until August 31, 2015. As per the scheme the borrowers shall pay 25% of the compromise settlement amount before June 30. It covers suit filed cases and cases pending with courts and DRTs (Debt Recovery tribunals). Cases of Willful default and fraud were excluded.

#### 5. Credit Information Bureau:

<sup>16</sup>Credit Information Report (CIR) has become very important in the recent past largely due to defaults on payments made by the borrowers, leading to huge losses suffered by Banks and other Financial Institutions. It is being observed that Banking institutions are under stress as Non Performing Assets (NPAs) continue to rise. This has lead to lending institution being very stringent with their norms for granting loans. Credit Information Bureau India Limited (CIBIL) maintains and provides record of the past financial transactions and credit history of an Individual or Firm which helps the Banks and Non Banking Financial Companies (NBFC) to decide on their respective loans and credit card applications. Credit Information Bureau India Limited (CIBIL) came into existence in the year 2000.

## **Impact on Non-Performing Assets on Commercial Banks:**

<sup>17</sup>The banking system in India comprises of commercial and cooperative banks, of which the former accounts for more than 90 per cent of banking system's assets. Besides a few foreign and Indian private banks, the commercial banks comprise of nationalized banks (majority equity holding is with the Government), the State Bank of India (SBI) (majority equity holding being with the Reserve Bank of India) and the associate banks of SBI (majority holding being with State Bank of India). These banks, along with regional rural banks, constitute the public sector (state owned) banking system in India The banking industry has undergone a sea change after the first phase of economic liberalization in 1991 and hence credit management. Public and private sector banks profitability, Liquidity and also competitive functioning are been affected by the non-performing assets and as a result the

-

<sup>&</sup>lt;sup>16</sup> http://wealthtechspeaks.in/credit-information-bureau-india-limited-cibil.html

<sup>17</sup> https://www.scmspune.ac.in/chapter/2016/Chapter%209.pdf

psychology of the bankers will also affected by NPAs who are deposing towards the credits as well as in the expansions of credits.

## The Non-Performing Assets impact on profitability:

<sup>18</sup>NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client. Because of the money getting blocked the prodigality of bank decreases not only by the amount of NPA but NPA lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPA does not affect current profit but also future stream of profit, which may lead to loss of some long-term beneficial opportunity. Another impact of reduction in profitability is low ROI (return on investment), which adversely affect current earning of banks. The huge provision of NPAs combined by grasping cost of those assets of non productive nature is performed from so many years and has a severe drain on the profitability of PSBs. In the issues of the nationalized banks regarding equity have been already strikes on the market and in the secondary market are now quoted at the discount. As a substitute this has been forced PSBs to have a loan seriously from the market of debts to built Tier II capital in order to meet rule of the capital adequacy by keeping serious pressure up on the restrictions of their profits.

# The Role of Technology in NPA Management

<sup>19</sup>The RBI has made it clear to all banks that they must automate data management and record keeping as far as possible, and complete periodic regularity reporting of NPAs without intervening manually. The regulator is also exploring the creation of a central server to store the data of the different banks.

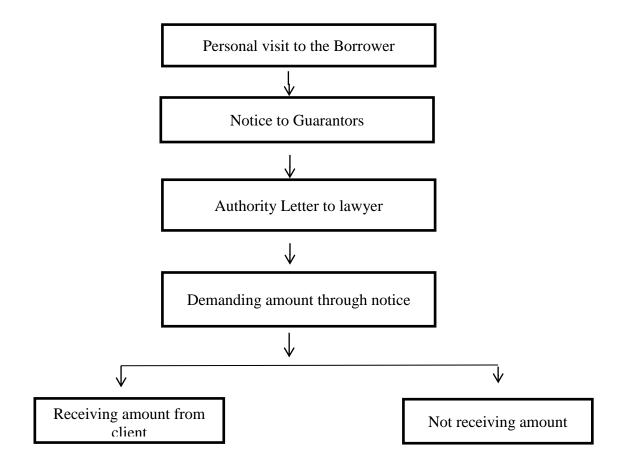
The use of technology will bring about a fundamental shift in the way Indian banks manage their NPAs. Implementing automated solutions not just helps in finer analysis of data but more importantly enables early warning indicators before the situations worsens, thus giving banks more time to take appropriate measures. A core banking application is a pre-requisite for this. But most of all, it can put a step to the manipulation of NPAs, a common practice in the manual system.

18 https://www.abhinavjournal.com/images/Commerce\_&\_Management/Jul12/5.pdf

<sup>&</sup>lt;sup>19</sup> https://www.edgeverve.com/wp-content/uploads/2017/03/non-performing-assets-indian-perspective.pdf

Besides improving compliance, a core banking solution can add value by aggregating data across the organization and its touch points, making it easily accessible to the bank as a single unified view of each customer. That being said, not all technology solutions are alike, and banks must choose carefully to pick one with strong credentials as well as comprehensive functionality.

# <sup>20</sup>Legal process of Recovery



## LITERATURE REVIEW

Many published articles are available in the area of non-performing assets and large number of researches ad studied the issue of NPA in Indian banking sector. The review of the relevant literature has been described as under:

15

<sup>21</sup>Gupta (2012) in her study "A Comparative Study of Non-Performing Assets of SBI & Associates & Other Public Sector Banks" had concluded that each bank should have its own independence credit rating agency which should evaluate the financial capacity of the borrower before than credit facility. An effective committee can be formed for management of NPA comprising of financial experts who have wide knowledge in this field. Banks can appoint professionals to identify the genuine borrowers & can analyze their profile. NPA can be considered as a crucial rating factor for any bank. <sup>22</sup>Bhatia, B.S., Waraich, S., Gautam, V. (2013): This study was made on "District Central Cooperative Bank of Punjab", the study tried to analyze the impact of some new product lines on non performing advances in cooperative banks and trends in NPA against loan schemes.<sup>23</sup> Pach Malyadri(2011) in his research paper title "A comparative Study on NPAs in India banking Industry" analyze NPA in weaker sections of public Sector banks and private sector banks specifically in India. The study observed that there is increase in advances over the period of the study. <sup>24</sup>Chatterjee C., Mukherjee J. and Das (2012) in their study on "The Management of non-performing assets - a current scenario" has concluded that banks should find out the original reasons/purposes of the loan required by the borrower. Proper identification of the guarantor should be checked by the bank including scrutiny of his/her wealth. <sup>25</sup>**Prashanth K. Reddy** (2002) in his research paper on the topic, "A Comparative Study of NPA in India in the Global context' examined the similarities and dissimilarities, remedial measures. Financial Sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve 78 requirements, barriers to entry, prudential norms and risk – based supervision. The study reveals that the sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective. This paper deals with the experiences of the reforms on the level of NPA. <sup>26</sup>Kaur K. and Singh B. (2011) in their study on "Non-performing assets of public and private sector banks (a comparative study)" studied that NPAs are considered as an important parameter to judge the performance and financial health of banks. The level of

-

<sup>&</sup>lt;sup>21</sup> http://inpressco.com/wp-content/uploads/2014/07/Paper322468-24751.pdf

<sup>&</sup>lt;sup>22</sup> http://www.indusedu.org/pdfs/IJREISS/IJREISS 734 73870.pdf

<sup>&</sup>lt;sup>23</sup> http://shodhganga.inflibnet.ac.in/bitstream/10603/130506/10/10\_chapter%203.pdf

<sup>&</sup>lt;sup>24</sup> https://www.scmspune.ac.in/chapter/2016/Chapter%209.pdf

<sup>&</sup>lt;sup>25</sup> https://www.abhinavjournal.com

<sup>&</sup>lt;sup>26</sup> https://www.scmspune.ac.in/chapter/2016/Chapter%209.pdf

NPAs is one of the drivers of financial stability and growth of the banking sector. <sup>27</sup>**Ahmad Zahoor and Jegadeeshwaran DM.** (2013) in their study on "A Comparative study on NPA Management of nationalized banks", The reason being mounting nonperforming assets (NPAs), NPA account not only reduces profitability of banks by provisioning in the profit and loss account, but their carrying cost is also increased which results in excess & avoidable management attention.

#### RESEARCH METHODOLOGY

Research Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. Typically, it encompasses concepts such as paradigm, theoretical model, phases and quantitative or qualitative techniques.

A methodology does not set out to provide solutions - it is, therefore, not the same as a method. Instead, a methodology offers the theoretical underpinning for understanding which method, set of methods, or best practices can be applied to specific case; for example, to calculate a specific result.

## STATEMENT OF THE PROBLEM

The main motto of banks is to serve the people by providing loans and advances to the needy ones for their upliftment and even for the industry growth and for the growth of the economy. The borrowers are not repaying the amount to the banks regularly as per the due dates; it is affecting the performance of the banks. As per the new banking regulation if the borrower not paid the principle and interest amount within 90 days it is to be considered as Non-Performing Assets. The research gaps and relevant questions which strike the mind during observation of various studies on Non- performing assets that, what is the level of NPA in Commercial banks? What are the reasons for the assets becoming Non- Performing assets and what is its impact on performance of a bank, public, government and society. Hence there arises a need to address the aforesaid questions.

-

<sup>&</sup>lt;sup>27</sup> International Journal of Marketing, Financial Services & Management Research, Vol.2, No. 8, August 2013, pp.66-78.

#### **OBJECTIVES**

• To know the level & importance of NPA in Banks.

• To study the impact of Non- performing Assets on Banks.

• To compare the NPA between public & private sector banks.

• To study the significant difference in NPA levels of public sector banks and private

sector banks.

## LIMITATIONS OF THE STUDY

Every study has certain limitations. Same is true with this study also. Some of the limitations faced during this study are:

1. For the purpose of this study only data of 5 years has been taken that is from financial year

2012 to 2016.

2. The data would be collected from only 6 banks i.e. 3 public sector banks and 3 private

sector banks.

3. The study covers only one aspect that is comparison of trend and amount of NPA in

different public sector banks and private sector banks.

4. NPAs are changing from time by time by the performance of the bank, but study does not

concentrate on future consequences.

## **RESEARCH DESIGNS**

a. **Type of research:** Descriptive research

b. **Method of data collection:** Secondary:

(Name the sources):

1: Banks annual report

2: RBI Bulletins

3: Banks publications

c. Sampling Framework:

**Population:** All Banks

Sample Size: 6 banks (3 from public sector – SBI, PNB, BoB & 3 from private sector

- Axis, ICICI, HDFC)
- Sampling Technique: judgmental sampling.
- d. **Data analysis techniques and tests to be used:** Tabulation and collected in excel format, bar chart, graphs, statistical measures- ratios, trends of Bank.

## **DATA ANALYSIS**

# Comparison between public sector & private sector Banks

**Table 1: Gross and Net NPAs of public sector banks:** (in lakhs)

	<sup>28</sup> SBI Bank				
	2011-12	2012-13	2013-14	2014-15	2015-16
Gross NPA	39,676.46	51,189.39	61605.35	56725.34	98172.80
% of Gross NPA	4.44%	4.75%	4.95%	4.25%	6.50%
Net NPA	15,818.85	21956.48	31096.07	27590.58	55807.02
% of Net NPA	1.82%	2.10%	2.57%	2.12%	3.81%

	<sup>29</sup> PNB Bank					
	2011-12	2012-13	2013-14	2014-15	2015-16	
Gross NPA	8719.62	13456.79	18880.06	25694.86	55818.33	
% of Gross NPA	2.93%	4.27%	5.25%	6.55%	12.90%	
Net NPA	4454.23	7236.50	9916.99	15396.50	35422.57	
% of Net NPA	1.52%	2.35%	5.25%	4.06%	8.61%	

	<sup>30</sup> BOB						
	2011-12	2012-13	2013-14	2014-15	2015-16		
Gross NPA	4464.75	7982.58	1188.75	1626.14	4052.10		
% of Gross NPA	1.53%	2.4%	2.94%	3.72%	9.99%		

<sup>&</sup>lt;sup>28</sup> http://www.moneycontrol.com/financials/statebankindia/results/yearly/SBI

19

<sup>&</sup>lt;sup>29</sup> http://www.moneycontrol.com/financials/punjabnationalbank/results/yearly/PNB05

<sup>&</sup>lt;sup>30</sup> http://www.moneycontrol.com/financials/bankofbaroda/results/yearly-results/BOB

Volume 7 issue 2 July 2017 ISSN - 2319-5576

Net NPA	1543.64	4192.02	6034.76	8069	1940.64
% of Net NPA	0.54%	1.28%	1.52%	1.89%	5.06%

**Table 2: NPAs of private sector Banks:** (in lakhs)

	<sup>31</sup> HDFC Ba				
	2011-12	2012-13	2013-14	2014-15	2015-16
Gross NPA	1999.39	2334.64	2989.28	3438.38	4392.83
% of Gross NPA	1.02%	0.97%	1.00%	0.90%	0.94%
Net NPA	352.33	468.95	820.03	896.28	1320.37
% of Net NPA	0.20%	0.20%	0.30%	0.20%	0.28%

	<sup>32</sup> AXIS Bank				
	2011-12	2012-13	2013-14	2014-15	2015-16
Gross NPA	1806.30	2393.42	3146.41	4110.19	60.88
% of Gross NPA	0.94%	1.06%	1.22%	1.34%	1.67%
Net NPA	472.64	704.13	1024.62	1316.71	2522.21
% of Net NPA	0.25%	0.32%	0.40%	0.44%	0.70%

	<sup>33</sup> ICICI Banl				
	2011-12	2012-13	2013-14	2014-15	2015-16
Gross NPA	9475.33	9607.75	10505.84	15094.69	226221.25
% of Gross NPA	3.62%	3.22%	3.03%	3.78%	5.82%
Net NPA	1860.84	2230.56	3297.96	6255.53	12963.08
% of Net NPA	0.73%	0.77%	0.97%	1.61%	2.98%

<sup>34</sup>Table 3: Gross Advances of Public Sectors Banks (in lakhs)

20

 $<sup>^{31}</sup>$  http://www.moneycontrol.com/financials/hdfcbank/results/yearly-results/HDF01  $^{32}$  http://www.moneycontrol.com/financials/axisbank/results/yearly-results/AB16  $^{33}$  http://www.moneycontrol.com/financials/icicibank/results/yearly/ICI02

Gross Advances of Public Sector Banks					
Banks	SBI	PNB	BOB		
Year					
2011-12	8657.79	293774.76	287377.29		
2012-13	10456.17	308725.21	328185.76		
2013-14	12098.29	349269.13	397005.81		
2014-15	130026.39	380534.40	428065.14		
2015-16	14637.04	6123.25	838.77		

# 35Table: 4 Gross Advances of Private Sector banks (in lakhs)

Gross Advances of	Gross Advances of Private Sector Banks					
Banks	ICICI	HDFC	Axis			
Year						
2011-12	253727.66	217141.67	169759.54			
2012-13	290249.44	258735.05	196965.96			
2013-14	338702.65	328124.87	230066.76			
2014-15	387522.07	384589.94	281083.03			
2015-2016	4352.63	5026.97	3387.73			

 $<sup>^{34}</sup> https://www.rbi.org.in/scripts/Annual Publications.aspx?head=Statistical\%20 Tables\%20 Relating\%20 to\%20 Banks\%20 in\%20 India$ 

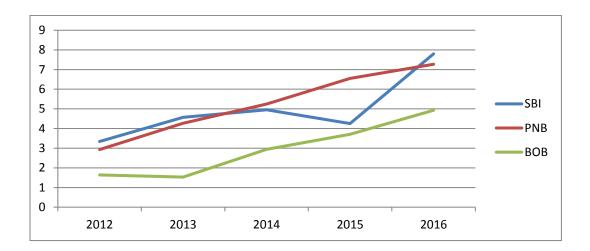
 $https://www.rbi.org.in/scripts/Annual Publications.aspx?head = Statistical \%\,20 Tables\%\,20 Relating\%\,20 to\%\,20 Banks\%\,20 in\%\,20 India$ 

**❖** Public Sector Banks

\*

# **Ratios of Gross NPA to Gross Advances:**

Gross NPA to Gross advances of public sector banks					
Public sector					
Banks	SBI	PNB	ВОВ	Average	
Year					
2012	3.34%	2.93%	1.64%	2.63%	
2013	4.57%	4.27%	1.53%	3.45%	
2014	4.95%	5.25%	2.94%	4.38%	
2015	4.25%	6.55%	3.71%	4.83%	
2016	4.75%	7.27%	4.93%	5.65%	



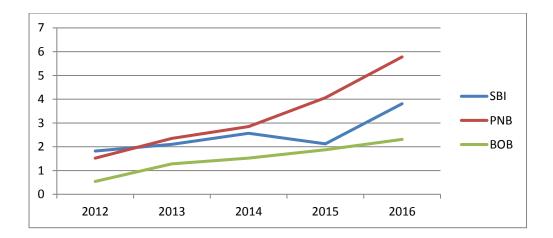
# **Interpretation:**

Above graph shows that Non-performing Assets of SBI decreased in 2012 and then increased from 2013 then decreased in 2015 and increased in 2016. Non-performing Assets of PNB decreased in 2012 and then increased from 2013 till 2016. Non-performing Assets of BOB increased in 2012 then decreased in 2013 and then continuously increases from 2014 to 2016.

Thus, there is continuous increase in Gross NPA of Public Sector Banks.

# **Ratios of NET NPA to NET advances**

Net NPA perce	Net NPA percentage of public sector banks						
Public sector							
Banks	SBI	PNB	ВОВ	Average			
Year							
2012	1.82%	1.52%	0.54%	1.29%			
2013	2.1%	2.35%	1.28%	1.91%			
2014	2.57%	2.85%	1.52%	2.31%			
2015	2.12%	4.06%	1.87%	2.68%			
2016	3.81%	5.78%	2.31%	3.96%			



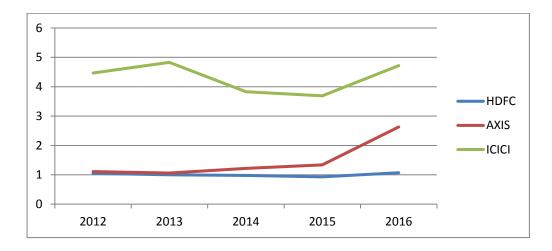
# **Interpretation:**

Non-performing Assets of SBI increased in 2012 and then started increasing till 2014, decreased in 2015 and then started increasing thereafter. Non-performing Assets of PNB started increasing in 2012 and continued increasing till 2016. Non-Performing Assets of BOB started increasing in 2012 and continued increasing till 2016. Thus, Net NPA of Public Sector Banks started increasing continuously

# **Private Sector Banks**

# **Ratio of Gross NPA to Gross Advance:**

Gross NPA to Gross advance of private sector banks						
Banks	HDFC	AXIS	ICICI	Average		
Year						
2012	1.05%	1.11%	4.47%	2.21%		
2013	1%	1.06%	4.83%	2.3%		
2014	0.98%	1.22%	3.83%	2.01%		
2015	0.93%	1.34%	3.69%	1.98%		
2016	1.07%	2.63%	4.72%	2.80%		

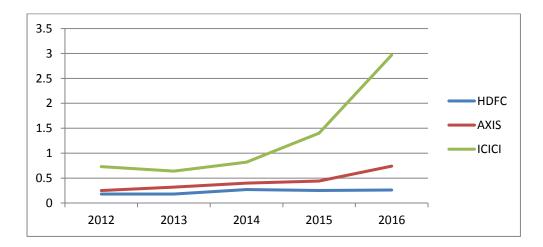


# **Interpretation:**

Above graph shows that Non-performing assets of HDFC decreased in 2012 and continued decreasing till 2015 and then increased in 2016. Non- performing Assets of Axis increased in 2012 and then decreased in 2013 and increased thereafter. Non-performing Assets of ICICI decreased in 2012 and then increased in 2013 then decreased till 2015 and increased in 2016. Thus, the Gross NPA of Private sector banks is increasing continuously.

# **A** Ratios of NET NPA to NET advances:

Banks	HDFC	AXIS	ICICI	Average
Year				
2012	0.18%	0.25%	0.73%	0.38%
2013	0.18%	0.32%	0.64%	0.38%
2014	0.27%	0.4%	0.82%	0.49%
2015	0.25%	0.44%	1.4%	0.69%
2016	0.26%	0.74%	2.97%	1.32%



# **Interpretation:**

Above graph states that the Net NPA of HDFC bank increased in 2012 and then increases continuously till 2016. Net NPA of AXIS bank increases in 2012 and then continues to increase till 2016. Net NPA of ICICI increased in 2012 and continues to increase thereafter till 2016. Thus, there is continuous increase in net NPA of Private Sector banks.

# **MAJOR FINDINGS**

- It is found that Gross NPA & Net NPA of public sector banks is increasing every year.
- There is an adverse effect on the liquidity of Banks.

- There is no significant difference between the Gross NPA of public and private sector banks
- There is significant difference between the NET NPA of public sector banks.
- Banks is unable to gives the loans to the new customers due to lack of funds which arise due to NPA.
- There is increase in NPAs of public sector banks such as SBI, PNB, and BOB. The NPAs of PNB has highly increased from the year 2012 i.e. 1.52% to 5.78% in 2016.and the NPA of SBI has increased from the year 2012 i.e. 1.82% to 2.57% in year 2014 and then decreased by 2.12% in the year 2015 and again increased in 2016 to 3.81%. Whereas the NPA of BOB has continuously increased from the year 2012 i.e. 0.54% to 2.31% in 2016.
- The overall NPA of private sector Banks such as HDFC, AXIS and ICICI have been increased in 2016. In case of HDFC the NPA has increased from the year 2012 that is 0.18% to 0.27% in 2014 and then slightly decreased to 0.25 % in 2015 and slightly increased to 026% in 2016. The NPA of Axis bank has continuously increased from the year 2012 that is 0.25% to 0.74 % in the year 2016. Whereas the NPA of ICICI has been increased from the year 2012 that is 0.73% to 2.97 % in 2016.

## **CONCLUSION**

To conclude, the study shows that the NPA of the public sector banks are higher when comparing to the private sector banks. The year 2016 is the black mark for the public sector banks the percentage of the NPA is more than the double from the previous year. For that various steps have been taken by the government to reduce NPA by amendment of the bill for the fastest recovery of loan in May 2016. Looking at the giant size of the banking industry, there can be hardly any doubt that the menace of NPAs needs to be curbed. It poses a big threat to the macro-economic stability of the Indian economy. An analysis of the present situation brings us to the point that the problem is multi-faceted and has roots in economic slowdown; deteriorating business climate in India; shortages in the legal system; and the operational shortcoming of the banks. Therefore, it has to be dealt at multiple levels. The government can't be expected to rescue the state-run banks with tax-payer's money every time they fall into a crisis. But, the kind of attention with which this problem has been received by policymakers and bankers alike is a big ray of hope. Right steps, timely and

#### **Apotheosis**

Volume 7 issue 2 July 2017 ISSN – 2319-5576

concerted actions and a revival of the Indian economy will put a lid on NPAs. Prevention, however, has to become a priority than mere cure. Gross NPAs ratio of Private sector Banks is less and it has been reduced over the period in comparison to public sector Bank. On the other side as far as Private Banks are concerned, it has better performance in comparison to public sector bank. So, it is very necessary for bank to keep the level of NPA as low as possible. Because NPA is one kind of obstacle in the success of bank and affects the performance of banks negatively so, for that the management of NPA in bank is necessary.

#### **SUGGESTIONS**

Proper NPA management is required in case of public sector banks regarding the issue of loan. The regulations and restriction regarding the credit cheques should be more stringent in case of public sector banks. The public sector banks should adopt new collection procedure.

The use of advance technology should be made for collecting the loan payments.

The banks have to conduct the awareness regarding impact of NPAs on the borrowers and The NPAs of public sector bank is rising year by year when it was compare to the private sector bank, the public sector bakers has to know the procedures that has been followed by the private sector.

The banker has to identify the prompt payers of loan and appreciates them and also to plan for the recovery camp in the defaulter's area. The banker has to give special interest for big loans than the small loan because the percentage of NPA is mainly gets affected form the big loans, large amount of the interest and principle amount locked up in the large loans. While lending the loan to borrowers, banks have to take all the necessary steps honestly without skipping any of the steps in the procedure.

#### **Apotheosis**

Volume 7 issue 2 July 2017 ISSN – 2319-5576

The bankers has to take corrective measures to avoid default i.e., data analysis on regular interval for the prediction of defaulter and take necessary action on predicted defaulter in advance. How it will affect on the profitability of the banks and also on the economy of the country.

#### **REFERENCES**

#### Websites

https://rbi.org.in/

https://rbi.org.in/scripts/BS\_ViewMasCirculardetails.aspx?id=7357

http://www.moneycontrol.com/stocks/data-bank/standalone/banks-private-

sector/1/annual/gnpa-per

http://economictimes.indiatimes.com/topic/NPA/news

https://en.wikipedia.org/wiki/Non-performing\_asset

https://en.wikipedia.org/wiki/Recovery\_of\_loans

http://kalyan-city.blogspot.in/2011/07/measures-to-solve-problems-of-non.html

http://www.thehindubusinessline.com/topics/tag/non-performing-assets/52576/

http://economictimes.indiatimes.com/topic/NPA

http://economictimes.indiatimes.com/definition/non-performing-assets

http://www.investopedia.com/terms/n/non-performing-assets.asp

## Books

Management of Non-Performing Advances by Dr.T.V Gopalakrishnan

"Indian Financial System" by Dr. V. K. Jain and Dr. Parizad P. Dungore

"Research Methodology: tools and techniques" by Dr. Prabhat Pandey and Dr. Meenu Mishra Pandey.

A Study on Customer Retention in DG set-Market at Kolkat, India: An Application of Markov Chain Process

-Prof. Anirban Majumdar

**ABSTRACT** 

In globalized India, when economic and business environment has become highly competitive with a number of suppliers supplying quality products or services in more or less same prices, it is important to build up good relationship with the existing customer base and to ensure customer retention. In the modern business scenario ensuring customer retention is considered as more effective strategy than the strategy of generating new customers. Most of the successful business firms are concerned about customer relationship management, customer retention and customer loyalty.

When it is realized that the customer retention is a key marketing strategy to encounter competitors, then it becomes necessary for marketers of every business firm to conduct research to understand and measure customer retention and customer loss in favor of their firm on regular basis. The focus of this paper is to measure the customer retention for three brands of DG sets (Diesel Generator sets) at Kolkata by applying Markov Chain model. The paper has also an objective to determine the chance of brand switching amongst customers and to predict the future position of those three brands in terms of their customer base.

In the research methodology of this study, a mathematical tool called Markov Chain will be applied. Markov chain basically deals with different matrices viz. customer gain matrix, customer loss matrix and customer retention matrix. All the above-mentioned matrices are used to generate a transition matrix that explains the chance of brand switching. The transition matrix is also utilized to determine the future customer base for n<sup>th</sup> time period on the basis of present customer base.

**Key Words: Customer Retention, Customer Loss, Customer Gain, Brand Switching, Transition Matrix and Markov Chain** 

#### INTRODUCTION

In the competitive environment, customer retention practice is important for firms to improve their performance in terms of non financial aspects (Gengeswari et.al. 2013). In the globalized world with rising competition, industries need to adopt strategies for customer retention to improve their performance in terms of market share, sales and profitability (Talak and Albert 2013). From cost perspective it can be stated that retaining a customer costs less than creating a new one (Gan et. al. 2006). Therefore, in an organization, marketer generally wants to reduce customer defection by taking proper action which is known as customer retention that ultimately creates reputation of a company across the marketplace (Singh and Khan, 2012). Customer retention can be considered as a base for better performance and competitive advantage of an organization(Qadri and Shah Khan, 2014). Customer retention is the evidence for quality product and services provided by a company to customers (Singh and Khan, 2012). As customer retention is a source of better performance for different firms, they should emphasize to conduct diverse activities and survey to understand the customer retention in their firms (Qadri and Shah Khan, 2014). Customer retention has long run effect on growth and sustainability of a firm when market shrinkage takes place (Gee et.al. 2008). Customer retention is ensured by adopting customer relationship management process in a successful organization (Roberts-Lombard, 2011).

## LITERATURE REVIEW

# **Customer retention – Concept and Meaning**

According to Blattberg et. al. (2001), customer retention refers to a specific behavior of customer by which customers keep on buying the same market offering over a long period of time. Customer Retention refers to some sort of activities that an organization carries out to reduce customer defections. Customer Loyalty is often identified as customer retention, which is a key area of customer relationship management (CRM) (Gustafsson et.al.,2005). Customer retention has been confirmed while customer relationship is established in an organization (Singh and Khan 2012). Molapo and Mukwada(2011), in their study, explored that customer retention is the best strategy that worked in the South African cellular industry. The customer retention in cellular industry in South Africa was affected by quality, service and price provided to customer. According to Ang and Buttle (2006),

customer retention depends more on complaints-handling process than the practice of general management viz. planning, budgeting and assigning accountability. Magatef and Tomalieh (2015), in their study, have shown that the loyalty programmes are more effective to maintain customer retention. It is important to measure customer retention rate in order to improve the customer loyalty status of a company or brand (Payne, 2000).

## **Methods of Measuring Customer Retention:**

Bowen and Chen (2001) suggested three methods of measuring customer retention rates. These are behavioral, attitudinal and composite measurement. According to Ahmad and Buttle (2002), customer retention rate is measured by applying Key Performance Indicator According to Petzer et.al. (2009), there are two methods for (KPI) related metrics. measuring customer retention rate. These are 1) an electronic database management programme with a guest history feature and 2) use of questionnaires when guests check in. Gupta et. al. (2006) suggested a model of Customer Lifetime Value where they considered Markov chain model to determine the customer retention rate on the basis of the probability of permanent customer defection and customer switching. Zu et.al. (2010) considered Markov chain as a method to determine the change of state of customer from past to present and present to future and thereby a method of prediction of customer retention for a particular company or brand in future. Flordal and Friberg (2013), in their research thesis on Modeling of Customer Lifetime Value in Telecom Industry have shown that the customer retention has been measured by developing transition matrix based on Markov Chain Model. Pasaribu et.al. (2015) applied Markov Chain model to determine customer retention. Hwang (2016) applied Markov chain to measure customer retention in Telecommunication Industry in Korea.

From the above discussion, it is clear that customers may shift from one brand to other brands. At the same time there is a chance that some customers may continue the same brand. The continuation of same brand indicates customer retention. The customer retention can be measured by determining the chance of transition of customer from one brand to other brands. Therefore, it is relevant to apply Markov Chain model which helps form the above mentioned transition matrix corresponding to different brands and helps determine the customer retention probability.

#### **OBJECTIVES OF THE STUDY**

- a) To measure the retention of customers considering three brands like Greaves, Jackson, Kirloskar of Diesel Generator sets (DG sets)
- b) To determine the loss and gain of customers of Greaves, Jackson and Kirloskar.
- c) To understand a brand switching trend
- d) To predict the future market share of those three brands at Kolkata

#### RESEARCH METHODOLOGY

**Data Collection:** A questionnaire survey has been conducted mostly with respondents having business of Real Estates who are the customers of DG sets and use those DG sets to provide uninterrupted power supply at housing complex, shopping mall, office complex etc. Three prominent brands have been identified which are most popular at Kolkata. These are Greaves, Jackson and Kirloskar. Therefore, the entire data analysis has been done considering the above-mentioned three brands. A sample of 74 respondents was surveyed at North, Central and South Kolkata. It has been observed that 57 out of 74 are the users of DG sets of three brands viz. Greaves, Jackson and Kirloskar. Rest of 17 is customers of local brands or brands that are not prominent. The focus of the questionnaire was to understand what brand of DG sets they use at present and after few years if they want to change their DG sets what brand they will chose. The intention was to know whether they switch over from one brand to other or continue with the same brand after few years whenever they decide to purchase a new DG sets replacing the existing one.

#### **DATA ANALYSIS**

Data analysis has been conducted by applying Markov Chain model. Markov process is stochastic process which is used to analyze decision problems in which the occurrence of a specific event depends on the occurrence of the event immediately prior to the current event. Basically Markov process helps to identify

- a) a specific state of the system being studied, and
- b) the state- transition relationship.

The occurrence for a customer base of DG sets at a specified point in time that is  $1^{st}$  period,  $2^{nd}$  period to nth period puts the system in a given state, say  $A_0$ . If, after the passage of one

time unit, another event like demand for DG sets occurs has moved from state  $A_0$  to state  $A_{0+1}$ ,  $A_{0+2}$ ,  $A_{0+n}$ . For example,  $A_t$  may represent the customer base of DG sets at time t. As time changes to t+1 the customer base of DG sets also changes to  $A_{t+1}$ . The probability of moving from one state to another or remain in the same state in a single time period is called transition probability. From the point of view of marketing research, it is assumed that the number of states brands) are finite and the decision of change of brand is taken periodically, so that such changes will occur over a period of time. In general let  $A_i$  = finite number of possible outcomes (i = 1,2,.....n) of each of the sequence of events or experiments.  $P_{ij}$  = conditional probability of outcomes  $A_j$  occurred for the immediately preceding extent or experiment.

## **FINDINGS**

As Per the Survey result it has been found that 24 customers using Greaves DG sets want to stay with their existing brand and 5 customers who are using Jackson's DG sets want to change their brand and shifted to Greaves and 2 customers who are using Kirloskar's DG sets want to switch over from Kirloskar to Greaves. On the other hand 1 customer want to switchover from Greaves to Jackson and other 2 customers want to shft from Greaves to Kirlosker. 10 customers want to stay with Jackson and none of the user of Jackson wants to switch over to Kirloskar. 13 customers want to stay with Kirloskar and none of them want to switch over from Jackson to Kirloskar. Table – 1 presents figures of customer retention and customer switching from one brand to other.

Table – 1: Retention and Switch Over of Customers of DG sets							
From	From  GREAVES JACKSON KIRLOSKAR						
To GREAVES	24	5	2				
JACKSON	1	10	0				

KIRLOSKAR	2	0	13

# **Development of Customer Loss and Gain Matrix**

From the above table (Table -1), another table has been developed to explain the customer gain for different brands of DG sets. It can be stated that, Greaves has gained 7 customers -5 from Jackson and 2 from Kirloskar, Jackson has gained 1 customer from Greaves and Kirloskar has gained 2 customers from Greaves. At the beginning Greaves has 24 customers, Jackson has 10 and Kirloskar has 13 customers. Table -2 presents the figures of gains for each brand of DG sets.

Table - 2 Gain Matrix					
Brand	Customers at the Beginning	From Greaves	From Jackson	From Kirloskar	
То	24	0	5	2	
GREAVES					
То	10	1	0	0	
JACKSON					
То	13	2	0	0	
KIRLOSKAR					

From Table -1, a matrix representing customer loss for each brand has also been developed. Greaves has lost 3 customers. Therefore, at the end total number customers of Greaves becomes 28. Jackson has lost 5 customers and the total customers of Jackson become 6 and finally Kirloskar has lost 2 customers and the total for Kirloskar becomes 13. Table -3 presents the loss matrix and shows the total number customers for each brand at the end

Table - 3: Loss Matrix					
BRAND	TO	TO	ТО	Customers	
DRAND	GREAVES	JACKSON	KIRLOSKAR	at the End	
GREAVES	0	1	2	28	

# Apotheosis

V	olume 7 issue 2		July 2017	IS	SN – 2319-5576
	JACKSON	5	0	0	6
	KIRLOSKAR	2	0	0	13

# **Determination of Customer Retention Probabilities**

The retention probabilities of customers for each brand have been calculated on the basis of the customers of beginning period and the customer loss. Table -4 shows the Customer retention probabilities.

Table – 4 : Calculation Of Retention Probability						
BRANDS	Customers at the Beginning	Number Lost	Number Retained	Retention Probability		
GREAVES	24	3	21	0.875		
JACKSON	10	5	5	0.5		
KIRLOSKAR	13	2	11	0.846154		

As per the result displayed in above table (Table -4), the probability of retention of customers are 0.875, 0.5, 0.846 approximately for the brand Greaves, Jackson and Kirloskar respectively. As per the results of Table -4, the customer retention probability for Greaves is highest.

## **Development of Transition Matrix**

A transition matrix has been formed by applying the theory of Markov Chain as discussed in research Methodology section. Table -5 represents the transition matrix. As per the Transition matrix the chance of switch over from Greaves to other brands is less than the chance of switch over of customers from other brands to greaves.

Table – 5: Transitional Matrix					
From					
То	GREAVES	JACKSON	KIRLOSKAR		

GREAVES	0.875	0.5	0.1538
JACKSON	0.04167	0.5	0
KIRLOSKAR	0.08333	0	0.8461

A diagrammatic presentation has been displayed in figure one to explain how brands switching takes place amongst three brands of DG sets at Kolkata

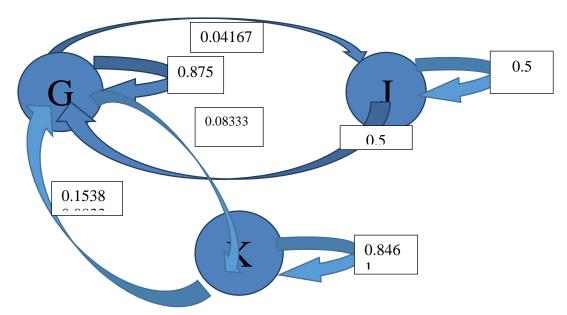


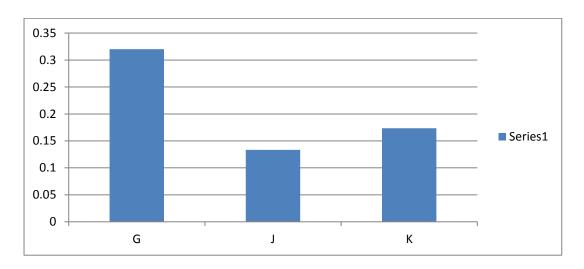
FIG: 1

As per Table – 5, in transition matrix, the retention probability has been diagonally represented in the matrix and other probabilities of loss have been considered in different cells except diagonal cells. Transition matrix indicates the chance of transition of customers from one brand to other brands and their retention to other brand.

## Prediction of Customer Base of DG Sets of Different Brand at Kolkata

The sample proportion has been calculated on the basis of percentage of customers of each of the three brands viz. Greaves, Jackson and Kirloskar. Table -6 shows the percentage of customer of the above-mentioned three brands of DG sets in decimals

Table-6: Present Customer Base			
GREAVES	JACKSON	KIRLOSKAR	
0.32	0.13	0.17	

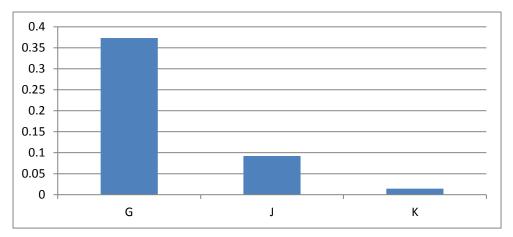


Population proportion of customers base of the present stage for three brands has been estimated based on point estimation method . These are 32% for Greaves , 13% for Jackson and 17% for Kirloskar. This figures indicate the Relative Market Share (RMS) of all those brands in percentage at present stage. As per the graphical presentation, RMS of Greaves is high and RMS of Jackson is very much lower than Greaves, but relatively RMS of Kirloskar is higher than Jackson but comparatively lower than Greaves.

Some customers were willing to change their DG sets after five years and some of them wanted to continue with the new sets after five years. 57 such customers wanted to change their DG sets. Some wanted to purchase the same brand that they were using and some wanted to shift to new brands. However, all these 57 customers have selected their brands considering three options viz. Greaves, Jackson and Kirloskar. The future market share of those three brands after five years has been determined by implementing the matrix operation between the matrix of market share of present time and transitional matrix as per the Markov Chain theory.

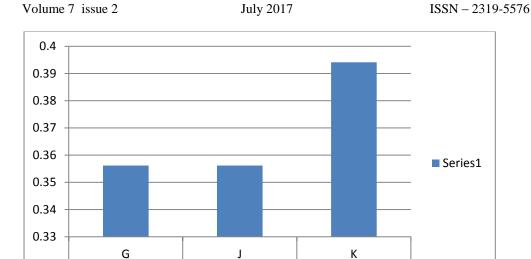
Table -7 shows the market share of the three brands of DG sets in decimals. In the second period the market share of Kirloskar will be lowest. The market share of Jackson will also come down whereas market share of greaves will be increasing.

Table – 7: RMS at Second Period					
GREAVES	GREAVES JACKSON KIRLOSKAR				
( <b>G</b> )	<b>(J)</b>	<b>(K)</b>			
0.37	0.09	0.01			



In the next step of research, the change in RMS of those three brands has been predicted at nth period. Table -8 shows the RMS of the three brands after nth period where n is considered a long time period.

Table -8 : RMS at nth Period				
GREAVES	JACKSON	KIRLOSKAR		
0.35	0.35	0.39		



nth Period Customer Base

It shows that RMS of Kirloskar will be highest whereas Greaves and Jackson will have more or less same market share. Therefore, it can be interpreted that if all other factors remain constant then greaves will not perform in long run where as both Jackson and Kirloskar may have a chance to develop their RMS.

#### **CONCLUSION**

It has been observed that initially Greaves has large customer base representing 32%. After five years Greaves will be able to retain their customers at the same time they will gain some customers to increase their RMS. However in long run Greaves will lose number of customers resulting a sharp down in their RMS. On the other hand in long run both Kirloskar and Jackson will be able to increase their RMS by retaining their existing customer and also adding some new customers. In this context, it can be interpreted that Kirloskar will have highest RMS and will be highest gainer amongst the three brands in long run.

#### REFERENCE

Ahmad, R. and Buttle, F. (2002). Customer Retention Management – A Reflection of Theory and Practice: A Case Study. Marketing Intelligence and Planning, Vol. 20(3), 149-161.

Ang, L and Buttle, F (2006). Customer Retention Management Processes: A Quantitative Study. European Journal of Marketing, Vol. 40 (1/2), 83-99

Blattberg, R. C., Getz, G. and Thomas, J.S. (2001). Customer equity building and managing relationships as valuable assets. Boston, Massachusetts: Harvard Business School Press

Bowen, J. and Chen, S. (2001). The Relationship between Customer Loyalty and Customer Satisfaction. International Journal of Contemporary Hospitality Management, Vol. 13(5), 213-217.

Flordal, P. and Friberg, J.(2013). Modeling Customer Lifetime Value in the Telecom Industry. www.pm.lth.se/fileadmin/pm/Exjobb/.../CLV\_ERICSSON\_Flordal\_Friberg.pdf

Gan, C., Cohen, D., Clemes, M. and Chong, E(2006). A Survey of Customer Retention in The New Zealand Banking Industry. Banks and Bank Systems, Vol.1(4), 83-99

Gengeswari, K., Padmashantini, P. and Sharmeela-Banu, S.A. (2013). Impact of Customer Retention Practices on Firm Performance. International Journal of Academic Research in Business and Social Sciences, Vol. 3(7), 68-84

Gee, R., Coates, G. and Nicholson, M. (2008). Understanding and profitably managing customer loyalty. Journal of Marketing Intelligence and Planning, Vol. 26(4),359-374.

Gupta, S., Hanssens, D., Hardie, B., Kahn, W., Kumar, V., Lin, N, Ravishanker, N. and Sriram, S. (2006). Modeling Customer Lifetime Value. Journal of Service Research, Vol. 9(2), 139-155

Gustafsson, A., Johnson, D. M. and Roos, I. (2005). The Effects of Customer Satisfaction, Relationship Commitment Dimensions, and Triggers on Customer Retention. Journal of Marketing, Vol. 69 (October), 210–218

Hwang, H-S. (2016). A Stochastic Approach for Valuing Customers: A Case Study. International Journal of Software Engineering and Its Applications, Vol. 10(3), 67-82

Magatef, G. S. and Tomalieh, F. E. (2015). The Impact of Customer Loyalty Programs on Customer Retention. International Journal of Business and Social Science, Vol. 6(8(1)), 78-93

Molapo, E.M. and Mukwada, G.(2011). The Impact of Customer Retention Strategies in the South African Cellular Industry: The Case of the Eastern Free State. International Journal of Business, Humanities and Technology Vol. 1 (2),52-60

Pasaribu, S.U., Fathimah al-Ma'shumah, Permana, D.(2015). Markov Chain Model of Customer Lifetime Value Using Flower Pollination Algorithm. Applied Mathematical Sciences, Vol. 9(69), 3409 - 3418

Payne, A (2000a). 'Customer retention'. (In Cranfield School of Management. (ed.). Marketing management: a relationship marketing perspective. Houndmills: Macmillan Press, 110-122

Volume 7 issue 2 July 2017 ISSN – 2319-5576

Petzer, D.J., Steyn, J. F. T. and Mostert, G.P. (2009). Customer retention practices of small, medium and large hotels In South Africa: An exploratory study. African Journal of Marketing Management, Vol. 1(1), 032-042

Qadri, A.U. and Shah Khan, M. M.(2014). Factors Affecting On Customer Retention: A Case Study of Cellular Industry of Pakistan. International Journal of Recent Research in Commerce Economics and Management (IJRRCEM), Vol. 1(1),1-22

Roberts-Lombard, M.(2011). Customer retention through customer relationship management: The exploration of two-way communication and conflict handling. African Journal of Business Management Vol.5 (9), 3487-3496

Singh, R. and Khan, A.I. (2012). An Approach to Increase Customer Retention and Loyalty in B2C World. International Journal of Scientific and Research Publications, Vol.2(6), 1-5 Talak, M. and Albert, M. (2013). Customer Retention Strategies by mobile phone Service providers in Zimbabwe: Case of Masvingo City. IOSR Journal of Business and Management (IOSR-JBM), Vol.9(4), 71-82

Zu, Q., Wu, T. and Wang, H.(2010). A Multi-Factor Customer Classification Evaluation Model. Computing and Informatics, Vol. 29, 509–520

A Survey to find Potentials of e-Grocery in Nagpur

Prof. Shree Jaiswal Prof. Yamini Ghanghorkar

**Abstract:** 

Technology has made lives of human beings simple and better. The developments on this front are constantly growing and as a result technology has found utility in almost every sphere of human activity. Purchasing grocery for running a home is nothing new. It exists ever since the culture of 'Kirana Shops' came into being. But technology has now provided a

platform to shop for grocery items online.

Marketers have huge opportunity to explore this field as, customers are buying & spending more time online as compare to earlier times, since this saves them time and also cost of a physical visit. To grab this opportunity, retailers are using various strategies to attract customers to shop online. An 'online grocery store' is a website that allows users to purchase grocery products over the Internet to be delivered to the purchaser at a later time. The products offered by an online grocery store are identical to any normal grocery store. But the question is, 'how do the consumers look at these online grocery stores and what potential

exists in this segment'?

This paper seeks to understand the patterns of grocery shopping in Nagpur city, perception of people regarding this and it also explores factors & trends influencing online grocery shopping improvements required for better facilitation. Survey method was used to conduct this study. Data was collected from a sample of 250 consumers by way of structured questionnaire, which provided for registering responses on a scale of 1 to 5. Appropriate statistical tools were used for analysis of the collected data and conclusions were drawn.

**Keywords:** Online shopping, Grocery store, Bargaining, Preference, Technology.

**INTRODUCTION** 

42

Volume 7 issue 2 July 2017 ISSN – 2319-5576

India has a large and growing population and one that uses internet services for various needs. Due to technology advancement, access to internet, increase in exposure and income, shopping via internet has been showing signs of growth. These technological advancement lead to better lives and have provided a platform to shop for grocery items online. Looking at this niche segment and potential of upcoming vibrant market, it would be interesting to understand Customer perception on such services. This trend requires different insight to understand and analyze how online shopping is considerably different from store-based shopping. Marketers have huge opportunity to explore this field as Customers are buying & spending more time online as compare to old times. To grab this opportunity retailers are using various strategies to attract Customers to shop online. This paper seeks to understand the patterns of grocery shopping in Nagpur city and explores factors & trends influencing online grocery shopping.

An online grocery store- An online grocery store is a website that allows users to purchase grocery products over the Internet to be delivered to the purchaser at a later time. The products offered by an online grocery store are identical to any normal grocery store. Caught in the city's fast pace, tedious commuting and long working hours, many people don't have the time to buy groceries or would like to avoid the chore. The research paper deals with ascertaining purchase attitude of Nagpur residents with respect to online grocery stores.

#### RATIONALE OF THE STUDY

Today the rapid growth of e-commerce is being driven by greater customer choice and improved convenience. Online grocery shopping is dramatically changing the consumer's preferences and attracting more and more people towards it. However, not everyone is enthused by the rapidly growing e-commerce facilities and a large section of society finds it convenient to buy commodities from traditional brick and mortar shops.

Under such backdrop, our study aims to know the existing buying pattern for groceries and impact of online shopping facilities on buyers in Nagpur city. The respondents have been asked various questions to understand their perception of online grocery stores. The study further invites opinions of respondents regarding online grocery stores.

This study will enlighten the readers on various aspects of online grocery shopping and will provide a comparison between traditional stores based shops and online stores. It will be

beneficial for upcoming online ventures and startups to understand the expectations of people from online grocery shops.

#### **OBJECTIVES**

- 1. To know the existing pattern & frequency of buying grocery among citizens in Nagpur.
- 2. To know the perception of city residents regarding online grocery shopping.
- 3. To find improvement areas for online shopping through feedback of respondents.

#### **BASIS OF SAMPLING**

The sample has been selected so as to cover all strata of people from all areas in Nagpur city. The total sample size for the survey was 250, out of which 20 responses were invalid. For maintaining the authenticity of study 230 responses are taken under consideration for drawing meaningful interpretations & conclusions.

#### **SURVEY METHOD**

The first phase of survey included developing a formal concept and questionnaire for the survey. In this phase objectives of survey, design of questionnaire, sampling plan, data collection & compilation and research tools for the survey were decided.

In the second phase of survey the team prepared questionnaire and got it filled by registering responses of the respondents.

The data collected in second phase was compiled and analysed in third phase.

The final report of the survey was prepared for publication under the fourth phase.

#### **QUESTIONNAIRE**

The questionnaire consisted of questions wherein opinion of respondents was sought on various statements concerning online stores. Also, questions were asked in respect of strength of local stores so as to understand the reluctance of respondents to purchase online groceries.

Respondents were asked to reply on various statements on a scale of 1 to 5 where 1 meant lowest and 5 meant highest rating. This rating from 1 to 5 helped us to ascertain the degree of influence each factor had on decision making of a respondent. Interpretation of responses was done as under:

#### 1 to 2- was considered "Less agreed"

Volume 7 issue 2 July 2017 ISSN – 2319-5576

#### 3- was considered as "Agreed"

# 4, 5- was considered as "Most agreed"

In our study, we have considered that responses of 3, 4 & 5 indicate that respondents agree with the respective statements of the questionnaire. Accordingly, the data analysis has been done and conclusions drawn.

#### **LIMITATIONS**

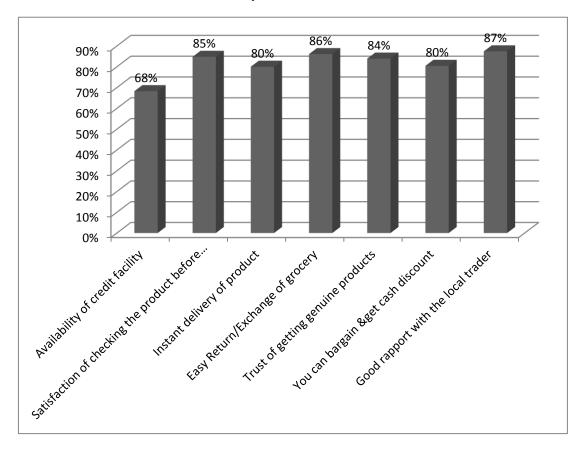
Even though huge efforts have been put in for an elaborate report, there are some constrains and limitations for the same, which are as follows:

- Perception / Opinion of the respondent may not be based on his/ her own experience,
   but may be influenced by external factors like media and opinion of other people.
- Some respondent were reluctant in answering some questions and thus a few blanks appear for some responses.
- Oral feedback given by the respondents could not be compiled in the report.

#### **DATA ANALYSIS & INTERPRETATION**

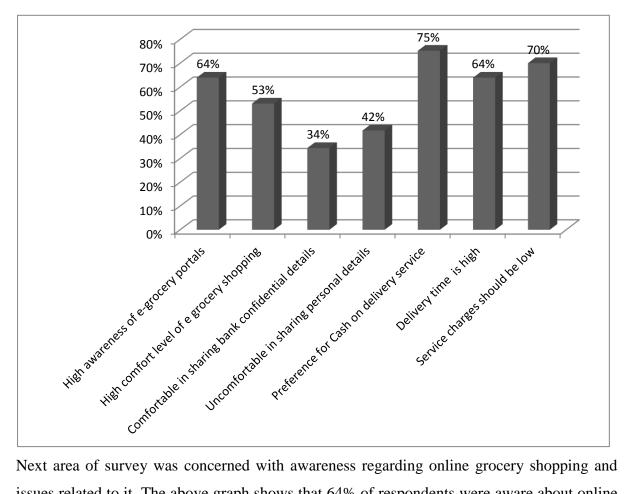
First part of the study was concerned with identifying the strengths of local store based shops in comparison to online stores. Respondents were asked to provide their opinion on various statements that highlighted strengths of local shops. This was important to understand the shortcomings of online shops and difficulties involved in buying online groceries. Results obtained are represented graphically as under.

#### Graph No.1



The above graph shows various statements indicating advantages of buying from local stores and rating given by the respondents to each statement. The majority of respondents believed that Good rapport with the local trader, easy return of grocery items and satisfaction of checking the product physically are the main reasons for buying grocery from local shops. Ratings for given reasons are 87%, 86% & 85% respectively. Whereas, other reasons are trust of getting genuine products, bargaining and cash discount, credit facility, which are agreed by 84%, 80%, and 80% of respondents respectively.

# Graph No.2



Next area of survey was concerned with awareness regarding online grocery shopping and issues related to it. The above graph shows that 64% of respondents were aware about online grocery service & only 53% of respondents were having high comfort level in grocery shopping. Majority of the respondents agreed that cash on delivery (COD) is the significant factor for preferring online grocery shopping; their percentage was 75%. Moreover, 64% respondents said that delivery time for online grocery products is high and 70% respondents feel that Service charges for shipping and delivery should be low.

On the other hand, the remarkable fact that came out is respondents are not comfortable in sharing their personal details; according to survey 42% of the respondents were uncomfortable in sharing their personal details like address, phone number etc. Moreover only 34% of respondents agreed that they are comfortable in sharing their confidential bank details with online stores.

Volume 7 issue 2 July 2017 ISSN – 2319-5576

#### CONCLUSION

According to the results obtained from our survey, following findings have emerged in respect of buying trend of Nagpur citizens and about their perception of online grocery shopping.

- 1. Majority of respondents prefer local grocery shopping than online grocery shopping due to various factors such as comparatively low awareness regarding online stores, good rapport with the local trader, trust factor, credit facility from local traders etc.
- 2. It is interesting to note that majority believe that buying from local shop has an advantage of bargaining which is not possible in online shopping.
- 3. It is also in favour of local stores that people have the satisfaction of buying products personally, i.e. "what you see is what you get"
- 4. In respect of online stores, it has emerged that respondents are not comfortable in sharing personal details and confidential bank details which acts as a deterrent in online shopping.
- 5. Many respondents consider that service charges levied by online stores are on a higher side.
- 6. It has also emerged that delivery time for the products bought online is high.

#### **SUGGESTIONS**

Based on the results obtained and findings of the survey, it can be suggested that online stores should work on following areas to attract more customers.

- To win the trust of customers, online grocery shops are advised to provide an accurate description of goods at their portal and avoid any misleading or deceptive information about the product.
- Online stores have to work hard on safety parameters related to online payments as
  majority of the respondents are not comfortable with sharing these confidential
  details. It is advised to deploy the latest technology and methods for safe online
  banking.

Volume 7 issue 2 July 2017 ISSN – 2319-5576

- 3. Online stores must have strict policies in place at their organisation to avoid misuse of personal details of the customers.
- 4. Online stores must be flexible with their return policies and allow customers to return the goods purchased within a reasonable period.
- 5. Online stores must ensure lower delivery charges to attract more customers.
- 6. It would be in the interest of online stores to lower the delivery period of goods for better customer satisfaction.

# Performance Of Andhra Bank In Lending Towards Priority Sector

Mrs. Santha kumari Sukhavasi Dr. Sathish Babu Adipudi

#### **ABSTRACT**

The present paper focuses on performance of Andhra bank in lending towards priority sector, particularly agriculture. Agriculture is the back bone of the Indian economy and it is a major element in priority sector too. Lending to agriculture means supporting the whole Indian economy. Being Andhra bank, it is a lead bank in the study area, i.e., Guntur district in Andhra Pradesh. It has undertaken several schemes and developmental programmes to uplift the low income group people through advancing loans to the priority sector. The required data is collected from annual reports of Andhra bank and other secondary sources. However, the paper concentrated on general lending to the whole sector and particularly to the agriculture sector during the study period i.e., 2006-07 to 2015-16.

Key words: Agriculture, Andhra Bank, Performance, Priority sector,

#### **INTRODUCTION**

Nationalization of major Indian commercial banks was proposed to fetch banking reforms of far-reaching outcome. Since July 1969, it has opened up new horizons, broadened and deepened the foundation of Indian banking. The most momentous reforms since the banks' takeover have taken place in the lending policies and practices, which have been customized to meet needs of the hitherto neglected sectors of the economy. After bank nationalization financing of agriculture, small industries and self-employed persons gathered substantial momentum and a number of special credit schemes have evolved since then for this purpose. The outlook of the bankers in favour of priority and neglected sectors has completely changed after the nationalization of 14 major banks. The bankers today feel steadfast to help the reluctant sectors. This change in their viewpoint and spirit has been a significant attainment.

#### **HISTORY OF ANDHRA BANK**

Dr. Bhogaraju Pattabhi Sitaramayya founded Andhra Bank in 1923 in Machilipatnam, Andhra Pradesh. The bank was registered on 20th November, 1923, and commenced business on 28th November, 1923, with a paid up capital of Rs.1,00,000 (US\$1,700) and an authorized capital of 1 million (US\$17,000). In 1956, linguistic division of States was promulgated and Hyderabad was made the capital of Andhra Pradesh. The registered office of the bank was afterwards shifted to Andhra Bank Buildings, Sultan Bazar, Hyderabad, Telangana. In the second phase of nationalization of commercial banks, which commenced in April 1980, the bank became a wholly owned Government bank. In 1964, the bank was merged with Bharat Lakshmi Bank and further consolidated its place in Andhra Pradesh. 'India First Life Insurance Company' is a life insurance company in India. It is a joint venture between two of India's public sector banks - Bank of Baroda (44%) and Andhra Bank (30%) and UK's financial and investment company Legal & General (26%). It was incorporated in November 2009. It has its headquarters in Mumbai. India First Life made more than 2 billion (US\$33 million) in turnover in just four and half months since the insurance company became operational. India First Life insurance company is headquartered in Mumbai. India First is the first life insurance company to be recommended for ISO certification within 7 months of inception.

#### PERFORMANCE OF ANDHRA BANK

The performance of the Andhra Bank with reference to Priority Sector Lending Practices is discussed below, based on last ten years data from 2006-07 to 2015-16.

#### **Priority Sector Advances**

Andhra Bank maintains certain level of Advances to Priority Sector from Gross Bank Credit from 2006-07 to 2015-16. These Priority Sector Advances supports the society for the people to uplift their financial status. It helps their occupational, professional and carrier developmental aspects and wealth.

Table No. 1: Gross Bank Credit and Priority Sector Advances from 2006-07 to 2015-16

Year wise	Gross Bank Credit (GBC)	Priority Sector Advances (PSA)	Year wise PSA Growth compared	Priority Sector Advances percentage
	(Rs. in crores)	(Rs. in crores)	with previous year	compared with GBC
2006-07	28233	11427		40.47
2007-08	34556	13297.56	16.37%	38.48
2008-09	44428	14955.42	12.47%	33.66
2009-10	56505	19011.97	27.12%	33.65
2010-11	72154	23082.42	21.41%	31.99
2011-12	84684	27026.96	17.09%	31.91
2012-13	100138	35132.02	29.99%	35.08
2013-14	110649	41919.69	19.32%	37.89
2014-15	129576	45507.52	8.56%	35.12
2015-16	136371	54545.38	19.86%	40.00

Source: Based on data obtained from the annual reports of Andhra bank

Here the above Table No.1 shows that the Gross Bank Credit and Priority Sector Advances are continuously increasing from 2006-07 to 2015-16. At the same time Andhra Bank maintains the consistent percentage to the Priority Sector Advances from Gross Bank Credit and it stood at an average of 36% and varies from 32% to 40%. In the year 2006-07 priority sector advances, as a percentage, compared with gross bank credit was 40.47%, which is highest in this ten years period.

Year wise Priority Sector Advances Growth was registered when compared with previous year Priority Sector Advances; The year wise priority sector advances growth compared with previous year is reduced in 2014-15 to a little extent and increased in the next years. It varies from 8.56% to 29.99%. The graph below clearly shows that the Gross Bank Credit and Priority Sector Advances are positively growing and correlated from the year 2006-07 to 2015-16.

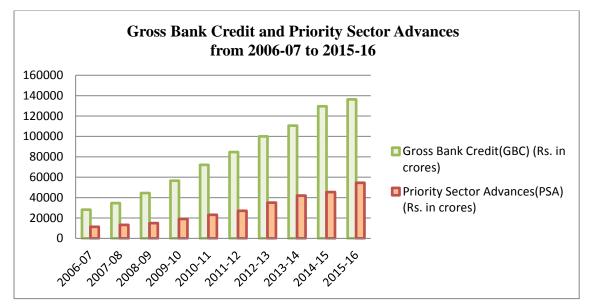


Figure No. 1: Gross Bank Credit and Priority Sector Advances from 2006-07 to 2015-16: frequency wise analysis Agriculture Sector

Agriculture sector is the back bone of Indian economy and supports demography. In India more than 70% of population survives on agriculture and agriculture. In rural areas still many people are below poverty line and the government has to give the required support through banks by way of various programmes and schemes. The commercial banks are advancing loans to the agriculture sector as per Reserve Bank of India guidelines and targets.

#### **Agricultural advances**

Agricultural advances may be for either short duration or long duration. But many banks are suffering with overdues. A loan granted for short duration crops is treated as Non Performing Asset (NPA) if the instalment of principal or interest thereon remains overdue for two crop seasons. A loan granted for long duration crops is treated as NPA, if the instalment of principal or interest thereon remains overdue for one crop season. For the purpose of these guidelines, "long duration" crops are those with crop season longer than one year and crops which are not "long duration" crops are treated as "short duration" crops. The crop season for each crop, which means the period up to harvesting of the crops rose would be as determined by the State Level Bankers' Committee in each State. Depending upon the duration of crops raised by an agriculturist, the above NPA norms are also made applicable to agricultural term loans availed of by him.

Table No. 2: Priority Sector Advances Vs Agriculture Sector Advances from 2006-07 to 2015-16 - analysis

Year wise	Priority Sector Advances(PSA) (Rs. in crores)	Agriculture Sector	Year wise Agriculture Sector growth compared with previous year	Agriculture Sector percentage in PSA
2006-07	11427	5150		45.09
2007-08	13297.56	6156.42	19.54%	46.30
2008-09	14955.42	6833.84	11.00%	45.69
2009-10	19011.97	9173.05	34.23%	48.25
2010-11	23082.42	10369.15	13.04%	44.92
2011-12	27026.96	12458.53	20.15%	46.10
2012-13	35132.02	16450.54	32.04%	46.82
2013-14	41919.69	20893.51	27.00%	49.84
2014-15	45507.52	20432.78	-2.21%	44.90
2015-16	54545.38	24079.91	17.85%	44.15

Source: Based on data obtained from the annual reports of Andhra bank

Here, Table no.2 shows that the Priority Sector Advances are continuously increasing from 2006-07 to 2015-16. At the same time Andhra Bank maintains consistent percentage to the Agriculture Sector Advances from the Priority Sector Advances and it was stood at an average of 46% and it varies from 44% to 50%. In the year 2013-14 it was 49.84% is highest within this ten years period.

Year wise positive Growth, in agriculture sector advances, was registered when compared with previous year agriculture sector advances whereas in the year 2014-15 it registered negative growth at -2.21%. The graph below clearly shows that the priority sector advances and agriculture sector advances are positively growing and correlated from the year 2006-07 to 2015-16.

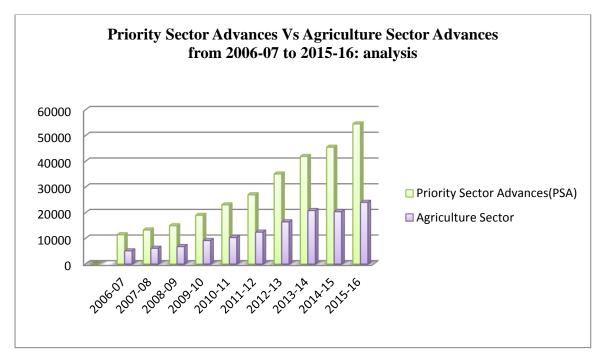


Figure No.2: Priority Sector Advances Vs Agriculture Sector Advances From 2006-07 to 2015-16 - frequency wise analysis

#### **CONCLUSION**

Banks have been nationalized with a view to serve the people and special focus has been given to priority sector. 'India lives in its villages' is the standard adage and the main mode of living to a vast majority of Indians is agriculture. In other words, the culture of India is agriculture. Priority sector lending is an active and essential strategy of bankers and Andhra Bank is extending advances successfully to agricultural sector. The loan recovery is also substantial and if the same trend continues Andhra Bank's performance and profitability towards priority sector will be spectacular in the years to come.

#### REFERENCES

- ➤ P.N. Varshney, (1971). Banking Law and Practice: New Delhi: Sultan Chand & sons.
- http://en.wikipedia.org/wiki/Priority\_sector\_lending
- www.rbi.org
- www.andhrabank.org

# A Study On Work Stress Of Medical Practitioners

Prof. Sandhya Bhagat

#### **ABSTRACT**

Stress has a major influence on emotions, sentiments, sense of well-being, behaviour and health. Acute stress responses are seen in everyone, whether young or old. Stress is seen in every corner of the world and it is experienced by everyone. People use the term 'stress' to describe the feeling they have when it all seems too much, when they are overloaded and don't feel that they are able to meet all the demands placed upon them. This paper proceeds to explain stress, the causes of stress and the coping strategy of stress. Special focus of the paper is on studying the stress level among Medical Practitioners and also to suggest coping strategies. A survey of 100 Doctors in Amravati was carried out. This study also identified some strategies for coping with stress.

Keywords: Stress, Sources of stress, Coping Strategies.

#### INTRODUCTION

#### **STRESS**

Stress is a fact of everyday life. When people reach out for help, they are often dealing with circumstances, situations, and stressors in their lives that leave them feeling emotionally and physically overwhelmed. Many people feel that they have very little resources or skills to deal with high levels of stress that they are experiencing. Modern life also is full of hassles, deadlines, frustrations, and demands. For many people, stress is so commonplace that it has become a way of life. Stress isn't always bad. In small doses, it can help you perform under pressure and motivate you to do your best. But when you're constantly running in emergency mode, your mind and the body pay the price. The information in this manual has been compiled to provide information and education about stress, the effects of stress, and the most popular stress management and relaxation techniques that are being used today. This information could be helpful for people who want to learn how to react to stress in a more constructive and proactive way. The basic premise of this manual is that the benefits of stress

reduction and relaxation techniques can be best noticed after they have been practiced regularly over a period of time.

#### **SOURCES OF STRESSORS:**

We can experience stress from four basic sources:

- **A. The Environment:** The environment can bombard you with intense and competing demands to adjust. Examples of environmental stressors include weather, noise, crowding, pollution, traffic, unsafe and substandard housing, and crime.
- **B. Social Stressors:** We can experience multiple stressors arising from the demands of the different social roles we occupy such as that of a parent, spouse, care giver and employee. Some examples of social stressors include deadlines, financial problems, job interviews, presentations, disagreements, demands for your time and attention, loss of a loved one, divorce, and co-parenting.
- **C. Physiological:** Situations and circumstances affecting our body can be experienced as physiological stressors. Examples of physiological stressors include rapid growth of adolescence, menopause, illness, aging, giving birth, accidents, lack of exercise, poor nutrition, and sleep disturbances.
- **D.Thoughts:** Your brain interprets and perceives situations as stressful, difficult, painful, or pleasant. Some situations in life are stress provoking, but it is our thoughts that determine whether they are a problem for us or not.

#### **WORK STRESS:**

Stress at work is a relatively new phenomenon of modern life style. Work stress is a chronic disease, caused by conditions in the work place that negatively affect an individual's performance and overall well being of his/her body and mind.

#### **Definition:**

"Work stress is the harmful physical and emotional responses that occur when the requirement of a job does not match the capabilities, resources or needs of the workers".

Under this definition it is clear that you can be stressed at work, not because you are not fully able or trained to do a job, but because the nature of the job is such that it does not meet your emotional or psychological needs.

Generally work stress is found or results when the requirement of the job does not match the capabilities, resources or a need of the worker.

#### **EFFECT OF WORK STRESS:**

Stress is difficult for professionals to define because it is a highly subjective phenomenon that differs for each of us. Things that are distressful for some individuals can be pleasurable for others. We also respond to stress differently. Some people blush, some eat more while others grow pale or eat less. Stress management is an essential step for you to take once you have determined you are facing stressful situations in your life, regardless of the cause. While there are helpful types of stress that enable you to cater to added burst of energy into something positive and productive, it is not recommended for your body.

# When affected by work stress people may:

- ✓ Become increasingly distressed and irritable
- ✓ Become unable to relax or concentrate
- ✓ Have difficulty thinking logically and making decisions
- ✓ Enjoy their work less and feel less committed to it
- ✓ Feel tired, depressed & anxious
- ✓ Have difficulty sleeping
- ✓ Experience serious physical problems, such as
  - Heart disease,
  - Disorders of the digestive system,
  - Increase in blood pressure & headaches,
  - Musculoskeletal disorders (such as low back pain and upper limb disorders).

#### The effect of work stress on organizations:

If key staff or a large number of are affected, work stress may challenge the healthiness and performance of the organization. Unhealthy organizations do not get the best from their workers and this may affect not only their performance in the increasingly competitive market but eventually even their survival.

# Work stress is thought to affect organizations by:

- ✓ Increasing absenteeism
- ✓ Decreasing commitment to work

- ✓ Increasing staff turnover
- ✓ Impairing performance and productivity
- ✓ Increasing unsafe working practices and accidents rate
- ✓ Increasing complaints from clients and customers
- ✓ Adverse staff recruitment
- ✓ Increasing liability to legal claims and actions by stressed workers

#### WORK STRESS OF MEDICAL PRACTITIONERS:

It is well known that being a Medical Practitioners is stressful. Previous studies have shown a higher level of stress amongst Medical Practitioners when compared with general working population. It is noted that the proportion of Medical Practitioners showing above threshold level of stress is around 23% in cross-sectional and longitudinal studies compared to around 18% in general working population. There is also evidence to show an increased rate of psychological morbidity; for example: depression, anxiety and substance abuse amongst Medical Practitioners.

To reduce the work stress of Medical Practitioners, following are the techniques for managing stress.

#### TOOLS AND TECHNIQUES FOR STRESS MANAGEMENT:

There are several ways of coping with stress. There are many activities and method that can help manage stress. These include:

#### A. Humour:

Many stress management experts recommend keeping a sense of humour during difficult situations. Laughing release muscle tension and helps a person maintain perspective. Activities as simple as watching a funny movie, sharing time with a humorous friend can provide a psychological lift and relieve stress.

#### **B. Hobbies:**

Regular leisure activities are important in reducing stress. Many people benefit from making time for positive leisure pursuits rather than spending time, watching television in the evening (although, that too can be relaxing to some degree).

Relaxing hobbies include gardening, painting, photography and many others. In order to obtain the most relaxation and enjoyment, the satisfaction should come in doing the hobby, not in the result. For example, an individual who pursues gardening for relaxation may not grow prize-winning vegetables, but those that can be eaten.

#### C. Massage Therapy:

Massage is the gentle practice of manipulating the body's tissues in order to soothe and heal. It is one of the most ancient of the healing arts and more people, today, are relying on it for natural, drug-free relief from the effects of busy and overstressed lives. Massage can relax the entire body and provide new energy that lingers long after the massage is over.

#### **D. Meditation:**

Meditation reduces heart rate, blood pressure, adrenaline levels and skin temperature. There are varieties of meditation techniques that share a common goal to achieve relaxation by clearing a mind of stressful outside interferences. Meditation involves achieving a state of consciousness in which the individual focuses on a single thing such as a key word, sound or image.

#### E. Biofeedback:

Biofeedback provides a way for people to learn to control activities over which they normally have no control, such as heart rate and muscles tension. It is considered by many health professionals to be a valuable therapeutic tool for reducing stress. Biofeedback involves no discomfort and no risk.

Biofeedback relies on sensitive electronic equipment. Sensors are placed on the body at various locations to measure skin temperature and muscles activity. The sensors are attached to a monitor that detects fluctuations when a person is anxious and displays signals in the form of beeps or light flashes. By watching the monitor, a person learns to control these stressful responses.

#### RESEARCH METHODOLOGY

#### RESEARCH PROBLEM

The purpose of study was that in the present scenario work stress, especially among Medical Practitioners, is at very high levels compared to general working population/professionals.

Stress affects an individual mentally as well as physically and it can prove to be dangerous to their health. Hence, the researcher was to try to collect authentic data regarding work stress among Medical Practitioners by visiting them. Questionnaire was used for this purpose.

#### The need of research came forward because of following reasons:-

- 1. To study the causes of stress at workplace
- 2. To understand how Medical Practitioners reacts and deal with stress?
- 3. What are the effects of stress?

Hence, the title of this study is "A study of work stress of Medical Practitioners."

#### **RATIONALE OF THE STUDY:**

- ✓ Awareness about effect of work stress to the Medical Practitioners.
- ✓ Help in coping with stress to Medical Practitioners.
- ✓ To summarize stress level of Medical Practitioners at work place.
- ✓ To examine the real factor affecting stress to Medical Practitioners.

#### **RESEARCH OBJECTIVES:**

The research was carried out in accordance with the following objectives.

- ✓ To find out stress level of Medical Practitioners.
- ✓ To find out the effect of stress on performance of Medical Practitioners.
- ✓ To find out factors affecting stress on Medical Practitioners.
- ✓ To give suggestions/recommendation to Medical Practitioners for coping with stress.

#### **RESEARCH DESIGN:**

The study is about the work stress of the Medical Practitioners in hospitals. The study was carried out in Amravati city and the primary and secondary data required for the study includes views of Medical Practitioners also. Appropriate methods of data collection and sampling technique were used by the researcher to collect relevant data. The said research is descriptive in nature, because, research study is concerned with describing the characteristics of particular individual or group. Decision concerning an inquiry or a research study constitutes a research design and the current research was based on descriptive design.

#### **SAMPLING:**

The term sampling means process of obtaining information about an entire population by examining only a part of it. Totality of all members is known as entire population. The selected or chosen part, which is used to determine the features of the entire population, is known as a sample.

#### a) Sampling Universe

The first step in developing any sample design is to clearly define the set of objects, technically called universe. Hence, for the purpose of this study, the universe was the Medical Practitioners in the hospitals. The universe included only Medical Practitioners in Amravati city.

#### b) Sample Size

This refers to the number of items to be selected from the universe to constitute a sample. Total sample size was of 100 respondents. Sample included Medical Practitioners in Amravati city.

#### c) Sampling Technique

Sampling technique used for selection of sample was Convenience Sampling Technique.

#### NATURE AND SCOPE OF THE STUDY:

#### **Nature of study:**

Stress affects the quality of results and gives birth to job dissatisfaction. Work stress is something, which affects the Medical Practitioners or any individual mentally as well as physically.

This study result highlights that there are stressful behaviour of Medical Practitioners while dealing with patients. In case of critical patients, the stress level is much higher in volume and intensity.

#### **Scope of study:**

Scope of the study includes making Medical Practitioners aware about the effect of work stress. This study contributes toward acquiring information about the stress level of Medical Practitioners. Also, this will be helpful to Medical Practitioners to minimize the work stress and understand how to cope with it.

# **LIMITATIONS:**

- ✓ Research study was limited to Amravati city only.
- ✓ The conclusion and suggestions drawn from the research on the basis of respondent may be unreliable.
- ✓ Some respondents may have provided incorrect or misleading information.

# **DATA ANALYSIS & INTREPRETATION**

Table No 1: Response regarding feeling of stress

S.No.	Particulars	Respondents	Percentage
1	Mostly	18	18%
2	Sometimes	57	57%
3	Rarely	24	24%
4	Not at all	1	1%
5	Total	100	100%

(Source: Primary data)

Table No 2: Response regarding behavior in stress

S.No.	Particulars	Respondents	Percentage
1	Anxious	27	27%
2	Panic	34	34%
3	Angered	13	13%
4	Irritable	26	26%
5	Total	100	100%

Table No 3: Response regarding feeling of high level of stress

S.No.	Particulars	Respondents	Percentage
1	Operation	17	17%
2	Discuss with new patient	22	22%
3	Handling critical cases	43	43%
4	Deal with chronic cases	18	18%
5	Total	100	100%

(Source: Primary data)

# Table No 4: Response regarding stress level at work

S.No.	Particulars	Respondents	Percentage
1	Fair	49	49%
2	Good	38	38%
3	Poor	13	13%
4	Total	100	100%

(Source: Primary data)

Table No 5: Response regarding feeling of stressful situation in the hospital

S.No.	Particulars	Respondents	Percentage
1	Mostly	21	21%
2	Sometimes	46	46%
3	Rarely	32	32%
4	Not at all	1	1
5	Total	100	100%

(Source: Primary data)

Table No 6: Response regarding technique for coping with stress

S.No.	Particulars	Respondents	Percentage
1	Meditation	27	27%
2	Listening to music	21	21%
3	Dance	4	4%
4	Entertainment	31	31%
5	Long tour	8	8%
6	Sports	9	9%
7	Total	100	100%

(Source: Primary data)

Table No 7: Response regarding Stress releasing programmes

S.No.	Particulars	Respondents	Percentage
1	Yes	58	58%
2	No	42	42%
3	Total	100	100%

# Table No 8: Opinion regarding work under stress

S.No.	Particulars	Respondents	Percentage
1	Yes	85	85%
2	No	15	15%
3	Total	100	100%

(Source: Primary data)

Table No 9: Response regarding stress related to ...

S.No.	Particular	S	Respondents	Percentage
1	Work and	work	53	53%
2	Personal Con	flicts	24	24%
3	Social Injust	tice	15	15%
4	Professional Co	onflicts 8	3	8%
5	Total		100	100%

(Source: Primary data)

Table No 10: Response regarding control of stress

S.No.	Particulars	Respondents	Percentage
1	If tension is extreme	25	25%
2	Repeatedly thinking on same	35	35%
3	When you felt guilt	13	13%
4	When things are not according to	27	27%
5	Total	100	100%

Table No 11: Response regarding effect of stress on general health

S.No.	Particulars	Respondents	Percentage
1	Yes	81	81%
2	No	19	19%
3	Total	100	100%

(Source: Primary data)

Table No 12: Opinion regarding worry about poor performance

S.No.	Particulars	Respondents	Percentage
1	Mostly	9	9%
2	Sometimes	44	44%
3	Rarely	32	32%
4	Not at all	15	15%
5	Total	100	100%

(Source: Primary data)

Table No 13: Response regarding interference of stressful emotions with their personal relationship

S.No.	Particulars		Respondents	Percentage
1	Agree		33	33%
2	Highly agree		22	22%
3	Disagree		30	30%
4	Highly disagree	3		3%
5	Not sure		12	12%
6	Total		100	100%

(Source: Primary data)

Table No 14: Test regarding stress identification

S.No.	Particulars	Not a	t Sometime s	Most of the time	Total
1	Feel insecure in	63	35	2	139
	working environment				
2	Work on overtime &	21	55	24	203
	holidays				
3	Importance of income to run family	26	45	29	203
4	Ability to maintain family after working	8	39	53	245
5	Good sleep at night without worrying about	5	53	42	237

# **Weighted Score:**

# (Most of the time) x 3, (Sometimes) x 2, (Not at all) x 1 = Weighted Score

1) Feel insecure in working environment  $= 63 \times 1 + 35 \times 2 + 2 \times 3 = 139$ 

2) Work on overtime & holidays  $= 21 \times 1 + 55 \times 2 + 24 \times 3 = 203$ 

3) Importance of income to run family  $= 26 \times 1 + 45 \times 2 + 29 \times 3 = 203$ 

4) Ability to maintain family after working  $= 8 \times 1 + 39 \times 2 + 53 \times 3 = 245$ 

5) Good sleep at night without worrying about work =  $5 \times 1 + 53 \times 2 + 42 \times 3 = 237$ 

# **CONCLUSIONS AND SUGGESTIONS**

#### **CONCLUSIONS:**

Following are the conclusions drawn from the available data:

- 1) 99% of the Medical Practitioners feels that they are suffering from stress.
- 2) When the Medical Practitioners are in stress, they feel panic.
- 3) Most of the medical practitioners, i.e. 44%, feel high level of stress while handling any critical cases.
- 4) Majority of the Medical Practitioners are fairly describing their stress level at work place; it means stress doesn't affect their work.
- 5) 46% of medical practitioners face stressful situation in their hospital and particularly while handling any critical cases or during operation.
- 6) Most of the Medical Practitioners use entertainment technique to cope up with stress or to reduce stress level.
- 7) Medical Practitioners need stress releasing programmes for reducing work stress.
- 8) Although Medical Practitioners feel high level of stress, 85% of them are really able to work under stress. This means stress doesn't affect their work performance.
- 9) Work and only work environment is one of the important factors affecting stress to 53% of Medical Practitioners. This means that for majority of Medical Practitioners stress is related to work and its environment.
- 10) When the Medical Practitioners repeatedly think of the same things, that time majority of them are not controlling their stress levels.

- 11) Majority of Medical Practitioners, i.e. 81%, accept that stress affects their general health.
- 12) Majority of Medical Practitioners are worried about their work performance while they are in stress.
- 13) 55% of the Medical Practitioners feels that their stress is affecting or interfering in their personal relationships.
- 14) Work for long hours, working overtime and even on holidays are the causes of stress among Medical Practitioners.
- 15) Medical Practitioners are more dependent on their income.
- 16) Most of the Medical Practitioners are sometimes getting good sleep at night and sometimes they're worried about their performance for this reason they are not getting good sleep at night.

#### **SUGGESTIONS:**

Suggestion is the opinion of the researcher after studying finding, observation and conclusion, which is the result of various activities by the researcher. Different suggestions are given by different researcher depending upon seriousness of the problem.

#### Some suggestions are given considering seriousness of the problem:

- 1) Majority of Medical Practitioners want some stress releasing program. hence a stress releasing program is suggested.
- 2) Majority of Medical Practitioner are suffering from stress; so, for reducing this stress, followings are some suggested techniques for coping up with stress:
  - ✓ Exercise regularly
  - ✓ Eat a healthy diet
  - ✓ Get enough sleep
  - ✓ Reduce caffeine and sugar
  - ✓ Go for walk
  - ✓ Call a good friend
  - ✓ Watch a comedy
  - ✓ Curl up with a good book
  - ✓ Take a long bath
- 3) Another well recognized proactive method of combating stress is to maintain a strong mental state: intellectually, emotionally and spiritually

- ✓ Stay intellectually stimulated (mental exercise)
- ✓ Gain stability from relationships (family or friends)
- ✓ Practice relaxation / meditation.
- ✓ Escape through hobbies, interests and passions.
- ✓ Provide for self renewal.
- ✓ Participate in religion.
- ✓ Put things into perspective.
- 4) Attention should be paid towards working environment because sometimes working environment seems insecure.
- 5) Following are some therapies for reducing stress:
  - ✓ **Art therapy.** Creating something allows free expression and results in feelings of achievement and mood change.
  - ✓ **Autogenic training therapy.** A form of deep meditation or self-hypnosis.
  - ✓ **Autosuggestion therapy.** A form of verbal therapy involving repetition of a positive idea.
  - ✓ Bioenergetics. A practice that encourages sudden release of tensions by crying or kicking.
  - ✓ **Dance movement therapy** Freedom of expression through movement.
  - ✓ **Music therapy**. Playing or listening to music to create an emotional reaction.
  - ✓ **Psychotherapy.** A talking-based therapy with a mental health professional to get at the root of a conflict, modify behaviour and disruptive negative thought patterns.

#### REFERENCES

http://www.brookes.ac.uk/student/services/health/stress.html#manage•

http://www.samaritans.org/your\_emotional\_health/managing\_stress/what\_is\_stres s.aspx•

http://stresscourse.tripod.com/id14.html•

http://managing-stress-strain.blogspot.com/•

http://controlling-anger.blogspot.com.

http://www.citehr.com/143077-stress-mgmt.html•

http://www.coolavenues.com/forums/search.php?do=process•

Volume 7 issue 2 July 2017 ISSN – 2319-5576

 $http://www.managementparadise.com/forums/achive/index.php/t-10490.html \\ \bullet$ 

http://www.ivf.com/stress.html•

Aswathappa, Human Resource Management-Text and Cases, Third edition, pg 496-503

# Impact of Investment Scandals on Investment behaviour of Nagpur's investors

Dr. Yogesh Gharpure

**Prof. Abhishek Shahu** 

#### **ABSTRACT:**

Investing is a way to provide for future financial needs, both foreseen and unforeseen, of an individual or a family. People generally invest what is surplus with them, although, investment experts suggest that invest first (as per a proper plan) and then spend what is available. With investment awareness among people generally increasing, there are huge outflows of funds toward various investment avenues. These being the reality, investment sharks have started prowling and at times it becomes hard to tell them apart from genuine investment opportunities.

Investment scams usually involve getting people to put money for a questionable investment; or one that doesn't exist at all. In most cases, people loose some or all of their money. There have been many investment scams in the past decade in Nagpur city. This has resulted in loss of earnings to various innocent citizens to various degree of their invested money. People have lost their hard earned money by investing in various investment schemes that promise high returns in short period. This should make people sit up and take cognizance of this reality and also various reports concerning financial scams in Nagpur. Time and again people have been victims of Ponzi schemes, raising questions on the awareness level of city residents. Investors need to be extremely careful while trusting investment agencies with their hard earned money and investment advice.

Our study aims to find out the impact of such investment scams on the mindset of investors of the city, to understand the outlook of investors related to an investment decisions and to find the existing level of awareness of Nagpur citizens in respect of genuine & regulated investment schemes in the country. Finally, the study has potential to sensitize people and enable them to make informed investment decisions.

A survey of 220 investors, who represented all strata of the society, was made using structured questionnaire. The data collected was statistically analysed to draw conclusions and make suggestions.

Volume 7 issue 2 July 2017 ISSN – 2319-5576

**Keywords:** Investment, Scam, Awareness, Investor, Scheme.

INTRODUCTION

Investment scams can look and sound believable, with smooth-talking salespeople, slick websites or sophisticated brochures and prospectuses. This can make it hard to tell them apart

from genuine investment opportunities.

It might be an opportunity to invest in shares, property or rare goods, with the promise that

the returns will be high and the risks to your money are low or non-existent. But generally

speaking; the bigger the proposed return, the greater the risk

Investment scams usually involve getting you to put up money for a questionable investment;

or one that doesn't exist at all. In most cases, you'll lose some or all of your money.

There have been many investment scams in the past decade in Nagpur city which has resulted

in loss of earnings for various innocent citizens. People have lost their hard earned money by

investing in various investment schemes that promise high returns in short period.

Our study aims to find out the impact of such investment scams on the mindset of investors

of the city.

RATIONALE OF THE STUDY

Various investment schemes have rocked the city of Nagpur in past, resulting in loss of

money, frustration & anguish for various vulnerable citizens. It is important to understand

that despite numerous scandals, a large section of the society easily falls prey to deceptive

tactics adopted by the promoters of investment scams.

Under this backdrop, it is important to ascertain the factors which entangle a common person

to part with their money and invest in unrealistic & unregulated investment proposals. Time

and again people have been victims of Ponzi schemes, which raises questions on the

awareness level of city residents.

Rationale behind the study is to understand the outlook of investors having regard to various

factors related to an investment decision. Study also aims to find out existing awareness level

of citizens in respect of genuine & regulated investment schemes in the country. The study

has potential to sensitize people and enable them to make informed investment decisions.

72

#### **OBJECTIVES**

- 1. To understand the perception of citizens in respect of various investment options
- 2. To know the awareness level of citizens required for making an investment decision
- 3. To know the impact of investment scandals on behaviour of Nagpur Investors
- 4. To know the influence of various factors concerning an investment decision

#### **Basis of Sampling**

The sample has been selected so as to cover all strata of people from all areas in Nagpur city. The total sample size for the survey was 220 out of which 08 responses were invalid for the study. For maintaining authenticity of study, 212 responses are taken under consideration for drawing meaningful interpretations & conclusions.

#### SURVEY METHOD

The first phase of survey included developing a formal concept and questionnaire designing for the survey. In this phase objectives of survey, design of questionnaire, sampling plan, data collection & compilation and research tools for the survey were decided.

In the second phase of survey the team prepared a questionnaire and got it filled by the respondents.

The data collected in second phase was complied and analysed in the third phase.

The final report of the survey was prepared for publication under the fourth phase.

#### **QUESTIONNAIRE**

The questionnaire consisted of questions wherein opinion of respondents was sought on various statements concerning online stores. Respondents were asked to reply on various statements on a scale of 1 to 5 where 1 meant lowest and 5 meant highest. Rating from 1 to 5 helped us to ascertain the degree of influence each factor had on decision making of a respondent. Interpretation of responses was done as under:

1 to 2- was considered "Less agreed"

3-was considered as "Agreed"

# 4, 5- was considered as "Most agreed"

In our study, we have considered that responses of 3, 4 & 5 indicate respondents' agreement with the respective statement of the questionnaire. Accordingly, the data analysis has been done and conclusions drawn.

#### Limitations

Even though huge efforts have been put in for an elaborate report there have been some constrains and limitations for the same, which are as follows:

- Perception / Opinion of the respondent may not be based on his/ her own experience, but may be influenced by external factors like media and opinion of other people.
- Some respondent were reluctant in answering some questions and thus a few blanks appear for some responses.
- Oral feedback given by the respondents could not be compiled in the report.

#### **DATA ANALYSIS & INTERPRETATION**

Respondents were classified in four categories on the basis of their annual investment. First category was of those who invested less than Rs. 1,15,000/-, Second category belonged to those who invested above Rs. 1,15,000/- but below Rs. 3,00,000/- and under third category there were investors who invested more than Rs. 3,00,000/- but less than Rs. 5,00,000/-. Fourth and final category was for those who invested more than Rs. 5,00,000/-. Replies for various questions were obtained & analysed as under:

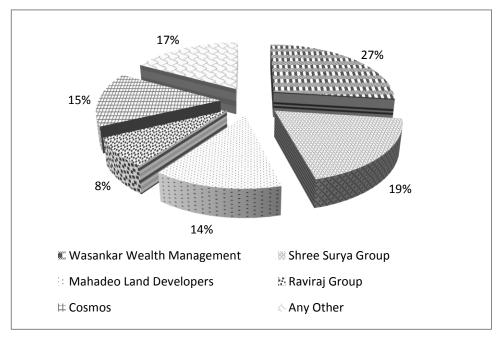


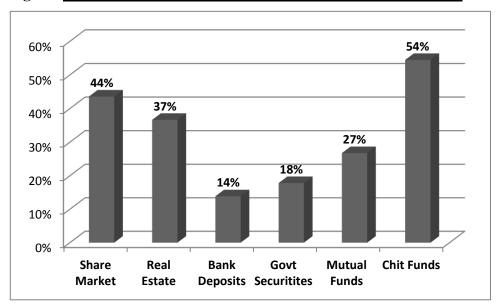
Fig.1 Awareness of Investment Scams in Nagpur City

The above graph shows the awareness level of Nagpur residents regarding various investment scams. It is evident that awareness level of respondents is very poor in respect of various investment scams of the city. The awareness of respondents for different scams is as under:

1. Wasankar wealth management scam (27%),

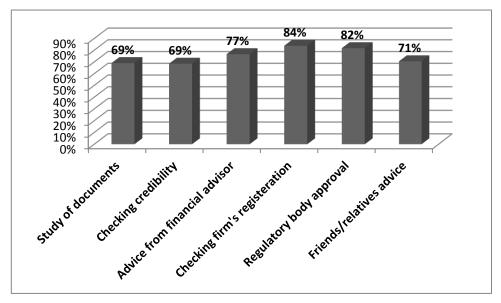
- 2. Shreesurya group scam (19%)
- 3. Mahadeo land developers (14%)
- 4. Raviraj group scam (8%)
- 5. Cosmos (15%),
- 6. Other scams (17%).

Fig.2 Investment options which are less safe for investing money



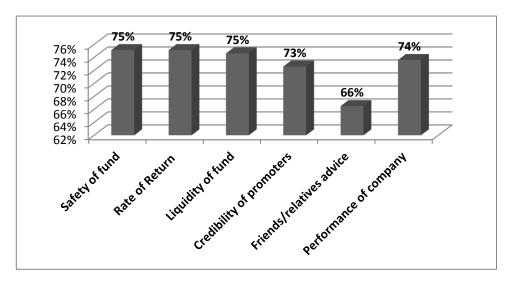
The above graph depicts the comfort level of investors for investing money in different areas of investments. They were asked which investment option is least safe regarding investments. Majority of the respondents believed that Chit fund (54%) is the most risky option for investment. And the next option that respondents hesitate in investing money in is share market (44%). Some respondents also find Real Estate (37%) as less safe option for investment, and the next less preferred option for investment is Mutual funds (27%). Interestingly, bank deposits (14%) are considered the least risky option for investment. It appears that respondents are very much comfortable in investing money in bank deposits, reason being safety and assurance.

Fig.3 Significant precautions before making an Investment decisions



This part of the survey was concerned with knowing various precautions adopted by the respondents before making the investment decision. Majority of respondents said they ensure that investment firm is duly registered with appropriate authorities (84%) and also ensure that proposed scheme is duly approved by the appropriate regulatory authority (82%) before investing money. Respondents also said that they go through the proposal/offer document thoroughly (69%) and that they also check the credibility of Promoters of the scheme (69%). There were 77% respondents who seek an opinion of financial advisor before investing. And 71% of the respondents take advice from friends/ relatives before investing.

Fig.4 Factors considered regarding investment proposals



The above graph shows various factors that the respondents feel are significant for investment decisions. Majority of respondents feel that safety of investment proposal (75%), rate of return on investment (75%), liquidity aspect of investment (75%) are the most important factors for any investment option. Respondents also believed that reviewing past performance of the company & investment scheme (74%) is significant before investing. Credibility of promoters of the scheme (73%) and recommendation of friends/relatives (66%) encompass a major role in investment decision.

#### **CONCLUSION**

First part of the study was concerned with finding awareness of citizens regarding various investment scandals that have taken place in the city. Results are surprising as majority of the respondents are unaware of various investment scams. Awareness about recently exposed Wasankar and Shree Surya scam is also low at 27% and 19% respectively. Such low awareness is very alarming and a root cause of various investment scandals. It implies that there is ample scope for citizens to educate themselves about news related investment.

Second part of the study was concerned with knowing the perception of investors on the parameter of safety with respect to various investment options. Majority of respondents were of view that investment in bank deposit is the safest option followed by government securities. On the contrary, investment in Chit Fund emerged as the least safe option followed by share market, real estate and mutual funds. Results obtained were on expected lines implying above par general knowledge of the respondents.

Under third part of the study, we asked respondents to provide inputs on precautions or preliminary actions taken by them before an investment. More than 80% of the respondents replied that they do preliminary checks like registration of firm and ensure approval of regulatory body. Further, 77% of respondents consult their financial advisor before making an investment decision, while 71% of respondents also consult their friends & relatives.

However, percentage dipped to 69% when we asked about study of documents/prospectus and checking credibility of promoters. This implies than more than 30% of respondents do not conduct an exercise of checking the credibility of promoters and understanding the terms conditions mentioned in prospectus or offer letter.

Lastly, we asked respondents to rate on the importance of various factors concerning an investment decision. Safety, Liquidity and Rate of Return were accorded equal importance by respondents at 75%. This was followed by performance of the company, credibility of promoters and 74% and 73% respectively. Advice of friends/relatives was least important at 66%.

It seems that various investment scams have brought certain level of awareness to investors as majority of respondents are rightly taking necessary precautions before investing money. Moreover majority respondents understand the importance of key factors of investment.

#### **SUGGESTIONS**

It is revealed in this study that general awareness about investment scams and scandals is very low. Since this is the root cause of investment in bogus schemes, steps must be taken at various levels by municipal corporations, social organisations, NGOs, media houses and concerned government agencies to spread awareness among general public.

Further, investors must ensure thorough check-up of promoters' credibility before making any investment. Evaluation of promoters' capability goes beyond his/her financial capability or general conduct. Steps must be taken by investors to ensure that there are no court cases pending against any of the promoters.

It is of utmost important to read the contents of offer letter/prospectus and understand the terms and conditions of the same. In case of listed investments, rating accorded by external credit rating agencies must be checked with proper interpretation of the rating. It is also advisable to consult a good financial advisor if one is unable to understand an investment proposal.

Volume 7 issue 2 July 2017 ISSN – 2319-5576