Volume 5 Issue 2

| ISSN | 2319-5576

COMPARATIVE ANALYSIS OF EQUITY DIVERSIFIED SCHEMES OF HDFC MUTUAL

FUND AND RELIANCE MUTUAL FUND"

Mrs. MAMTA PAREEK

Abstract

A mutual fund is just the connecting bridge or a financial intermediary that allows a group of

investors to pool their money together with a predetermined investment objective. The mutual

fund will have a fund manager who is responsible for investing the gathered money into specific

securities (stocks or bonds). Performance of the mutual funds depends on their investment

strategies, performance of the stock market and also on the credit market.

The article focuses on the investment strategies of selected equity diversified schemes of selected

mutual fund companies. The objectives of research work are to make empirical analysis of

investment strategies of equity diversified mutual fund schemes and its impact on their

performance. The result of research work concerns among the equity diversified schemes of top

ranked and preferred mutual fund companies, i.e HDFC Mutual Fund and Reliance Mutual fund.

It is relevant to analyse the investment strategies and performance of Indian mutual fund

companies, especially by taking five years data and the research findings are useful to the

investors in terms of understanding the investment strategies and its impact on fund's financial

performance.

Keywords: Mutual Funds, Investment Strategies, Performance, Equity Diversified Schemes.

INTRODUCTION

Over the past decade, mutual funds have become the investor's vehicle of choice for long-term investing. A Mutual Fund pools the savings of a number of investors who share a common financial goal. Mutual Fund is one of the most preferred investment alternatives for the risk avert investors as it offers chance to invest in a diversified, professionally handled portfolio at low cost. With emphasis on increase in domestic savings and increase in investment through capital markets, the need and scope for mutual fund operation increased has tremendously. The performance of the fund depends upon the investment strategies, economic condition of the country and the world as a whole.

The mutual fund industry in the country manages over Rs 8,16,657 crores of assets, a large part of which comes from retail investors. However, this small market is not happy at all at this moment. As large number of mutual fund companies are playing in the market with various schemes.

Therefore it creates difficulty for investors to choose the suitable scheme providing higher earnings. In this context, evaluation of mutual funds has become essential. In these terms it becomes relevant to study the investment strategies and performance of mutual fund industry. The relation between risk-return determines the performance of a mutual fund scheme.

OBJECTIVES OF THE STUDY

The present study is concerned with the following objectives:

- To examine the investment strategies of selected open ended equity diversified Mutual fund in India
- To measure the risk -return relationship of the selected mutual funds
- To examine the performance of selected schemes by using the portfolio performance evaluation models.

REVIEW OF LITERATURE

Various reviews from different studies support the hypothesis that historical performance is one of the major indicators of likely future performance. Review of the literature plays an important role in any research, it is considering the importance of mutual funds and several academicians have tried to study the performance of various mutual funds. Literature on mutual fund performance evaluation is enormous. Herewith some of the research studies that have influenced the preparation of this study substantially are discussed in this section.

Ramesh chander in his book entitled, *Performance Appraisal of Mutual Funds in India*, studied the performance of selected mutual funds in terms of risk and return on the basis of fund characteristics. Besides, the study examined the portfolio construction, portfolio management, portfolio evaluation, disclosure practices and investor services. The researcher concluded that in terms of average returns, majority of the sample mutual fund schemes have recorded superior performance.

D.R Joshi in his book entitled, *Mutual* Funds and Hedge Funds, explained the

concept of Risk management through mutual funds. The author has also made an attempt to explain concept of hedge funds.

A.K Sharma and G.S Batra in their book entitled, *Indian Stock Market*, offers detailed description about financial markets and their structure. The book also attempts to provide information on the regulatory environment and performance of primary and secondary market.

Gomathy Thyagarajan made comparative analysis of the performance of ICICI Prudential, HDFC and Franklin Templeton Mutual funds for the period 2002 to 2007. The study concludes that by using Sharpe's Ratio method of performance evaluation, 20 sample schemes have outperformed their respective benchmark ratios and 4 schemes have shown negative performance.

R. Anitha, et. al, in their research analysed the performance of public-sector and private sector mutual funds for the period from 2005 to 2007. Selected funds were analyzed using Statistical tools like Mean, Standard Deviation and Co-efficient of Variation. The performance of all funds has shown volatility during the period of study making

FUND AND RELIANCE MUTUAL FUND"

it difficult to earmark one particular fund which could outperform the other consistently.

Kalpesh P Prajapati and Mahesh K Patel, evaluated the performance of Indian mutual funds using relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure. The data used is daily closing NAVs from 1st January 2007 to 31st December, 2011 and concluded that most of the mutual funds have given positive return during the period of study.

Shivani Inder and Shikha Vohra, the paper evaluates the long run performance of the selected index fund schemes and make comparative analysis of the performance of these funds on the basis of the risk-return for the period of 6 years (January, 2005 to December, 2011). The results indicate that index funds are just the follower of market. They try to capture market sentiments, good as well as bad, and thus perform as the market performs.

P Alekhya had undertaken a study to evaluate the comparative performance of public and private sector mutual fund schemes. The paper focused on the performance of Mutual fund equity scheme for past 3 years from 2009 to 2011. Funds were ranked according to Sharpes, Treynors and Jensons performance measures.

RESEARCH METHODOLOGY

The Universe: The universe of the study consists of the all the assets management companies (AMC).

Data Type: The Research Study is completely based on Secondary Data. To gain an overview of the performance trends of the Indian mutual fund industry secondary data has been collected from various sources like, the fact sheets, newspapers, journals, books, periodicals, websites, etc.

Data Source: Data has been collected from secondary sources. It's included the mutual fund fact sheet and magazine the —Mutual Fund Insight, in addition to others journals, magazines, articles, books and the publisher and unpublished documents of the mutual funds have been consider in the research.

Sample Period: Sample study was taken from period April 2008 to March 2013.

FUND AND RELIANCE MUTUAL FUND"

Sampling Frame: Various equity based schemes of leading mutual fund companies i.e HDFC Mutual Fund and Reliance Mutual Fund is selected on the basis of availability of data.

Sampling Unit: The sample unit includes schemes of HDFC Mutual Fund and Reliance Mutual Fund.

Sample size: The data has been collected during the period of Financial Year 2010 to 2013. For the purpose of the study the following selective equity mutual fund schemes of HDFC mutual fund and Reliance Mutual Fund were selected.

- 1. HDFC Top 200 fund (Growth)
- 2. HDFC Equity Fund (Growth)
- 3. Reliance Vision Fund (Growth)
- 4. Reliance Top 200 Fund (Growth)

Tools and Techniques used: The following tools and techniques were used to analyze the performance of the mutual fund. These are as follows:

Average:

Average means numbers or names, arrays or references that contained numbers. Other

words average means number representations of numbers.

Correlation:

In statistics, dependence is any statistical relationship between two random variables or two sets of data. Correlation refers to any of a broad class of statistical relationships involving dependence.

INVESTMENT STRATEGIES OF FUNDS

Performance of mutual funds depends on various factors. One of the most important factor is Investment strategies opted by fund managers. Therefore it is important to discuss top holdings of selected mutual schemes.

HDFC Top 200 Fund (g)

HDFC Top 200 is open ended balanced scheme launched in 1996. It can be observed from table 4.9 that it aims to generate long term capital appreciation from a portfolio of equity and equity-linked instruments primarily drawn from the companies in BSE 200 index. It has no lock in period and the net asset value is calculated on daily basis.

FUND AND RELIANCE MUTUAL FUND"

Table 1
Features of HDFC Top 200 Fund

Nature of Scheme	Open-ended Growth Scheme
Investment	To generate long term capital appreciation from a portfolio
Objective	of equity and equity-linked instruments primarily drawn
	from the companies in BSE 200 index.
Fund Manager	Prashant Jain (since Jun 19, 03)
Inception Date	October 11, 1996
Entry / Sales Load	Not Applicable. Upfront commission shall be paid directly
	by the investor to the ARN Holder (AMFI registered
	Distributor) based on the investors' assessment of various
	factors including the service rendered by the ARN Holder.
Exit Load	In respect of each purchase / switch-in of Units, an Exit
	Load of 1% is payable if units are redeemed / switched-out
	within 1 year from the date of allotment. No Exit Load is
	payable if Units are redeemed / switched-out after 1 year
	from the date of allotment.
Investment Plan	HDFC Top 200 Fund,
	HDFC Top 200 Fund - Direct Plan
Investment Options	Under Each Plan: Growth & Dividend. The Dividend
	Option offers Dividend Payout and Reinvestment facility.
Minimum	Purchase: 5,000 and any amount thereafter.
Application	Additional Purchase: 1,000 and any amount thereafter.
Amount (Under	
each Plan)	
Lock-in Period	Nil
Net Asset Value	Every Business Day
Redemption	Normally dispatched within 3-4 Business Days.
Proceeds	

It can be observed from the table 2 that up to 100% of the investment can be made in equity and equity related instruments. Further investment in Securitized debt, if undertaken, would not exceed 20% of the net assets of the scheme in derivatives as a

tool for hedging and portfolio balancing. The Scheme may also invest a part of its corpus, not exceeding 40% of its net assets, in overseas markets in Global Depository Receipts (GDRs), ADRs, overseas equity, bonds and mutual funds and such other

FUND AND RELIANCE MUTUAL FUND"

instruments as may be allowed under the

Regulations from time to time.

Table 2
Asset Allocation Pattern of HDFC Top 200 Fund

Sr.	Asset Type	(% of Portfolio)	Risk Profile
No.			
1	Equity and Equity	Up to 100 % (Including use of	Medium to
	Related	derivatives for hedging and other	High
	Instruments	uses as permitted by prevailing	_
		SEBI Regulations	
2	Debt % Money	Balance in Debt & Money Market	Low to
	Market Instruments	Instruments	Medium

Investment Strategy

The investment strategy is focused on equity investments. Under this category of investment risk has to be minimized and at the same time yield has to be maintained. The table 3 shows top holdings of HDFC Top 200 schemes. It is evident from the table maximum percentage of investment is

made in State bank of India with 8.17% of NAV of the scheme. Further total investment in equity and equity related holdings is 98.03% while the remaining 1.96% is in other current assets. The net asset on March 31, 2013 is Rs. 1,201,685.83 Lakh.

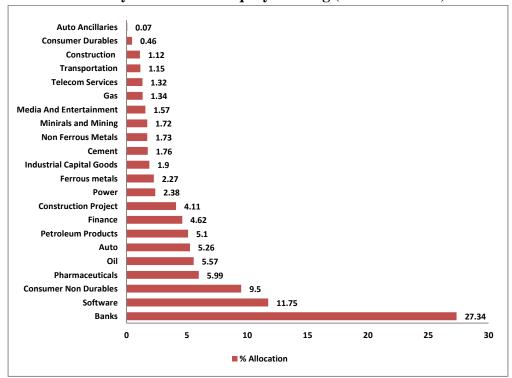
Table 3
Portfolio – Top 10 Holdings of HDFC Top – 200 Scheme (as at March 31, 2013)

Company	Industry	% to NAV
State Bank of India	Banks	8.17
ICICI Bank Ltd	Banks	7.49
Infosys Ltd.	Software	7.14
ITC Ltd.	Consumer Non Durables	5.34
Tata Motors Ltd.	DVR Auto	4.03
Larsen & Toubro Ltd.	Construction Project	3.79
Tata Consultancy Services Ltd.	Software	3.52
HDFC Bank Ltd.	Banks	2.81
Bank of Baroda	Banks	2.62

FUND AND RELIANCE MUTUAL FUND"

Oil & Natural Gas Corporation Ltd.	Oil	2.54
Total of Top Ten Equity & Equity Related Holdings		47.45
Total Equity & Equity Ro	98.03	
Cash margin / Earmarked cash for Futures & Options		0.01
Other Cash, Cash Equivalents and Net Current Assets		1.96
Grand Tota	100.00	
Average AUM for the quarter ended March 31, 2013(In Lakhs)		1,201,685.83

Figure 1
Industry Allocation of Equity Holding (% of Net Asset)



The above strategy shows that the major holdings of the fund are in banking (27.34%), software (11.75%) and consumer non durables (9.50%) sector. The fund has

very less holdings in construction (1.12%), consumer durables (0.46%) and auto ancillaries (0.07%).

FUND AND RELIANCE MUTUAL FUND"

Performance Evaluation of HDFC Top 200 Scheme

The graph below shows the performance of HDFC Top 200 scheme in comparison to the S&P BSE 500 chosen as bench mark for the study. It can be observed from the graph below that the performance of scheme is superior to that of the benchmark index. The average return of the fund is 17.38%

whereas the average return of the market is 11.90%. However the funds return is more than that of benchmark index. In 2008-09 and 2011-12 fund has generated negative returns. In 2009-10 there is sharp rise in the return of scheme due an overall rise in stock prices.

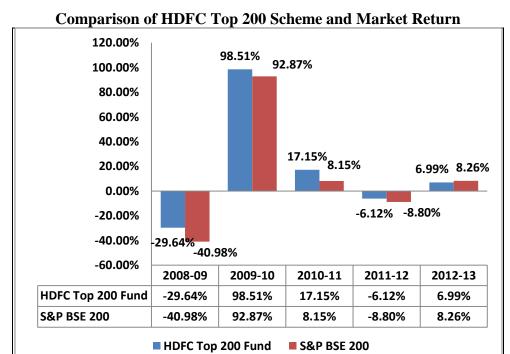


Figure: 2

FUND AND RELIANCE MUTUAL FUND"

HDFC Equity Fund (g)

To achieve long term capital appreciation the scheme invests in growth companies. The companies selected for investment are either medium or large sized company which:

- i) are likely achieve above average growth than the industry
- ii) enjoy distinct competitive advantages, and
- iii) have superior financial strength
- iv) This is done to construct a portfolio representing a cross –

section of strong growth companies in the market. To reduce risk of volatility, the Scheme will diversify across major industries and economic sectors.

Investment Pattern: The investment under the scheme is made primarily in equity and debt money market instruments. The table 4 provides the assets allocation of the schemes portfolio. The asset allocations under the Scheme are as follows:

Table: 4
Asset Allocation Pattern of HDFC Equity Fund

Sr.	Asset Type	(% of	Risk
No.		Portfolio)	Profile
1	Equity and Equity Related	80-100	Medium to
	Instruments		High
2	Debt % Money Market	0-20	Low to
	Instruments		Medium

The Investment of the scheme in Securitised debt should not exceed 20% of the net assets of the schemes. It can also invest up to 25% of the net assets in derivatives such as futures and options or any such derivative instruments launched during the period in order to hedge the fund and maximize return

on investment. All these are however subject to SEBI Mutual Funds Regulation.

Table below represents the portfolio composition of the HDFC Equity Mutual Funds. It can be observed from table that the maximum investment of 8.40% of the HDFC equity scheme is in

SBI Bank Ltd. The total share of equity and equity related holdings is 96.75 percent while investments in other assets are 3.25

percent. The total net asset under the scheme is Rs. 1,150,045.27 lakh (as on 31 March 2013).

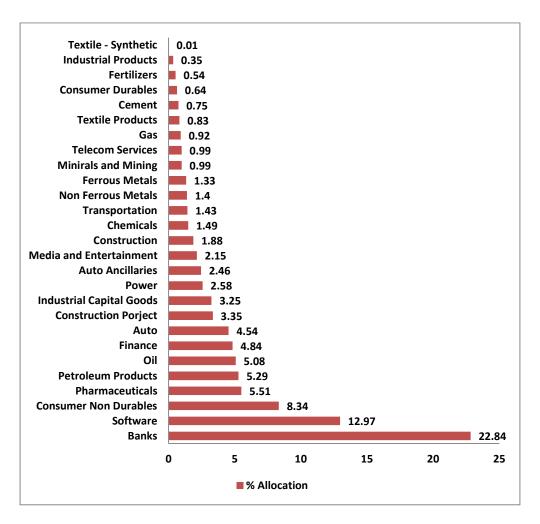
Table 5 Portfolio: Top 10 holdings of HDFC Equity Scheme

Company	Industry	% to NAV	
State Bank of India	Banks	8.40	
ICICI Bank Ltd	Banks	7.48	
Infosys Ltd	Software	7.31	
ITC Ltd	Consumer Non Durables	4.99	
Tata Motors Ltd	DVR Auto	3.71	
Larsen & Toubro Ltd	Construction Project	3.23	
Oil & Natural Gas	Oil	2.66	
Corporation Ltd	Oli	2.00	
Bank of Baroda	Banks	2.49	
Bharat Petroleum	Petroleum Products	2.47	
Corporation Ltd	Petroleum Products	2.47	
CMC Ltd Software		2.43	
Total of Top Ten Equity & Equity Related Holdings		45.17	
Total Equity & Equity Related Holdings		96.75	
Cash, Cash Equivalents and Net Current Assets		3.25	
Grand Total		100.00	
Average AUM for the quarter ended March 31, 2013 (In Lakhs)			
1 150 045 27	1.150.045.27		

| 1,130,043.27

FUND AND RELIANCE MUTUAL FUND"

Figure 3
Industry Allocation of Equity Holding (% of Net Asset)



The above strategy shows that the major holdings of the fund are in banking (22.84%), software (12.97%) and consumer non durables (8.34%) sector. The fund has very less holdings in fertilizers (0.54%),

industrial products (0.35) and textile sector (0.01%).

Performance Evaluation of HDFC Equity Scheme

The graph below shows the performance of HDFC Equity scheme in comparison to the

FUND AND RELIANCE MUTUAL FUND"

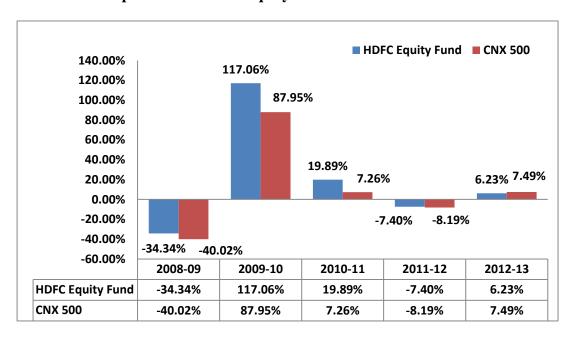
S&P CNX 500 chosen as bench mark for the study. It can be observed from the graph performance of scheme is superior to that of the benchmark index. The average return of the fund is 20.29% whereas the average return of the market is 10.89%. However the funds return is more than that of benchmark

below that the

index. In 2008-09 and 2011-12 fund has generated negative returns. In 2009-10 there is sharp rise in the return of scheme due an overall rise in stock prices.

Figure: 4

Comparison of HDFC Equity Scheme and Market Return



Reliance Vision Fund (g)

The scheme was launched in October 1995. Its objective is to achieve long term growth of capital by investment in equity and equity related securities through a research based investment approach. It can be observed

from table 6 that it is an open ended scheme with no lock in period. Further it is also evident from table that NAV of the scheme is calculated on daily basis.

FUND AND RELIANCE MUTUAL FUND"

Table: 6
Features of Reliance Vision Fund

Nature of Scheme	Open-ended Equity Growth Scheme	
Investment Objective	To achieve long term growth of capital	
Fund Manager	Ashwani Kumar	
Inception Date	October 8, 1995	
Entry / Sales Load	Not Applicable. Upfront commission shall be paid directly by the investor to the ARN Holder (AMFI registered Distributor) based on the investors' assessment of various factors including the service rendered by the ARN Holder.	
Exit Load	In respect of each purchase / switch-in of Units, an Exit Load of 1% is payable if units are redeemed / switched-out within 1 year from the date of allotment. No Exit Load is payable if Units are redeemed / switched-out after 1 year from the date of allotment.	
Investment Plan	Reliance Vision Fund Reliance Vision Fund - Direct Plan	
Investment Options	Under Each Plan: Growth & Dividend. The Dividend Option offers Dividend Payout and Reinvestment facility.	
Minimum Application	Purchase: 5,000 and in multiples of 1	
Amount (Under each Plan)	thereafter.	
Lock-in Period	Nil	
Net Asset Value	Every Business Day	
Redemption Proceeds	Normally dispatched within 3-4 Business Days.	

Investment Pattern: The fund aims to achieve long term capital appreciation through investment in high quality large size capitalization stocks with a small exposure in mid sized capitalization stocks. The

investment under the scheme is made primarily in equity and debt money market instruments. The table 7 provides the assets allocation of the schemes portfolio. The

FUND AND RELIANCE MUTUAL FUND"

asset allocations under the Scheme are as

follows:

Table: 7
Asset Allocation Pattern of Reliance Vision Fund

Sr.	Asset Type	(% of	Risk Profile
No.		Portfolio)	
1	Equity and Equity Related	100-65	Medium to High
	Instruments		
2	Debt % Money Market Instruments	0-35	Low to Medium

Equity & Equity Related Instruments- 65-100%, Debt and Money Market Instruments-0- 35%, the scheme will not invest in securitized debt. The scheme will not invest in securitized debt. If the Fund Manager decides to invest in ADRs / GDRs issued by Indian / foreign companies and in foreign Securities in accordance with **SEBI** Regulations in the Scheme. such investments will not normally exceed 20% of the net assets of the Scheme.

Investment Strategy

From the table 8 it is evident that the maximum investment is made in State Bank of India (6.70%). This is followed by ICICI Bank Ltd. (6.14%). It can also observed from the table that total equity and equity related holdings is 99.89 percent while the remaining share is 0.19 percent is invested in other assets. The net asset under management of growth scheme was Rs. 1,769.25 Crores as on March 31, 2013.

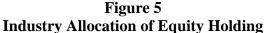
Portfolio: Top holdings of Reliance Vision Scheme (as at March 31, 2013)

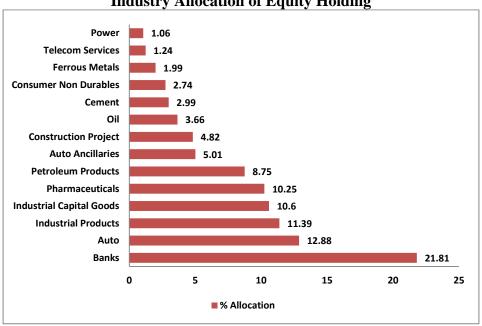
Table 8

Holdings	Weightage
State Bank Of India	6.70
ICICI Bank Ltd	6.14
Divi's Laboratories Ltd	5.67
Maruti Suzuki India Ltd	5.27
Larsen & Toubro Ltd	4.82

FUND AND RELIANCE MUTUAL FUND"

Bharat Forge Ltd	4.67	
Sanofi India Ltd	4.58	
Bharat Petroleum Corporation Ltd	3.79	
Oil & Natural Gas Corporation Ltd	3.66	
Canara Bank	3.61	
Tvs Motor Company Ltd	3.50	
Eicher Motors Ltd	3.31	
Alstom T&D India Ltd	3.23	
Cummins India Ltd	3.23	
Madras Cements Ltd	2.99	
Honeywell Automation India Ltd	2.78	
Hindustan Unilever Ltd	2.74	
Automotive Axles Ltd	2.71	
Hindustan Petroleum Corporation Ltd	2.68	
HDFC Bank Ltd	2.57	
SKF India Ltd	2.47	
Reliance Industries Ltd	2.27	
Jindal Steel & Power Ltd	1.99	
ABB Ltd	1.98	
Schneider Electric Infrastructure Ltd	1.59	
Bank Of Baroda	1.51	
Federal-Mogul Goetze (India) Ltd.	1.37	
Axis Bank Ltd	1.27	
Reliance Communications Ltd	1.24	
Reliance Infrastructure Ltd	1.06	
Mahindra Forgings Ltd	1.02	
Siemens Ltd	1.01	
Equity Less Than 1% Of Corpus	1.73	
Total of Equity & Equity Related Holdings	45.17	
Sub Total of Equities	99.19	
Debt, Cash And Other Receivables	0.81	
Grand Total	100.00	
Average AUM for the quarter ended March 31, 2013 Rs. 1,769.25 Cr		





The above strategy shows that the major holdings of the fund are in banking (21.81%), Auto (12.88%) and consumer non durables (8.34%) sector. The fund has very less holdings in power (1.06%), Telecom Services (1.24%) and Ferrous Metals (1.99%).

Performance Evaluation of Reliance Vision Scheme

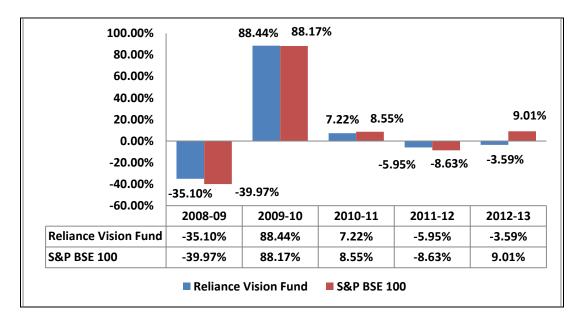
The graph below shows the performance of Reliance Vision scheme in comparison to the S&P BSE 100 chosen as bench mark for

the study. It can be observed from the graph below that the performance of scheme is not as well as average return of benchmark index, which is more than scheme's average returns. The average return of the fund is 10.20% whereas the average return of the market is 11.426%. However, the funds return is not more than that of benchmark index. In 2008-09, 2011-12 and 2012-13 fund has generated negative returns. In 2009-10 there is sharp rise in the return of scheme due an overall rise in stock prices.

FUND AND RELIANCE MUTUAL FUND"

Figure: 6

Comparison of Reliance Vision Scheme and Market Return



Reliance Top 200 Fund (g)

The Scheme was launched in August 2007. The Original inception date of Reliance Equity Advantage Fund was August 9, 2007. Subsequently the key features of the same have been changed with effect from August 26, 2011 and the scheme has been renamed as Reliance Top 200 Fund. The primary investment objective of the scheme is to seek to generate long term capital appreciation by investing in equity and

equity related instruments of companies whose market capitalization is within the range of highest & lowest market capitalization of S&P BSE 200 Index. The secondary objective is to generate consistent returns by investing in debt and money market securities. It can be observed from table 9 that it is an open ended scheme with no lock in period. Further it is also evident from table that NAV of the scheme is calculated on daily basis.

Table: 9
Features of Reliance Top 200 Fund

Nature of Scheme	Open-ended Growth Scheme	
Investment Objective	To achieve capital appreciation in the long term	
Fund Manager	Ashwani Kumar & Sailesh Raj Bhan	
Inception Date	August 9, 2007	
Entry / Sales Load	Not Applicable. Upfront commission shall be paid directly by the investor to the ARN Holder (AMFI registered Distributor) based on the investors' assessment of various factors including the service rendered by the ARN Holder.	
Exit Load	In respect of each purchase / switch-in of Units, an Exit Load of 1% is payable if units are redeemed / switched-out within 1 year from the date of allotment. No Exit Load is payable if Units are redeemed / switched-out after 1 year from the date of allotment.	
Investment Plan	Reliance Top 200 Fund Reliance Top 200 Fund - Direct Plan	
Investment Options	Under Each Plan: Growth & Dividend. The Dividend Option offers Dividend Payout and Reinvestment facility.	
Minimum Application	Purchase: 5,000 and multiples of Re.1 any amount	
Amount (Under each Plan)	thereafter.	
Lock-in Period	Nil	
Net Asset Value	Every Business Day	
Redemption Proceeds	Normally dispatched within 3-4 Business Days.	

Investment Pattern

The investment under the scheme is made primarily in equity and debt money market

instruments. The scheme Invest in companies whose market capitalization is within the range of highest & lowest market

FUND AND RELIANCE MUTUAL FUND"

capitalization of S&P BSE 200 Index. Table 10 provides the assets allocation of the

schemes portfolio. The asset allocations under the Scheme are as follows:

Table: 10
Asset Allocation Pattern of Reliance Top 200 Fund

Sr.	Asset Type	(% of	Risk Profile
No		Portfolio)	
1	Equity and Equity Related	100-65	Medium to
	Instruments		High
2	Debt % Money Market	0-35	Low to
	Instruments		Medium

Gross investments in securities under the Scheme which includes equities, equity related instruments/securities, debt securities, money market instruments and derivatives will not exceed 100% of the net assets of the Scheme.

From the table 11 it is evident that the maximum investment is made in ICICI Bank Ltd. (6.30%) and Divi's Laboratories Ltd

(5.85%). This is followed by Infosys Ltd. (5.43%). It can also observed from the table that total equity and equity related holdings is 95.98 percent while the remaining share is 4.02 percent is invested in other assets. The net asset under management of growth scheme was Rs. 799.25 Crores as on March 31, 2013.

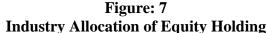
Table 11

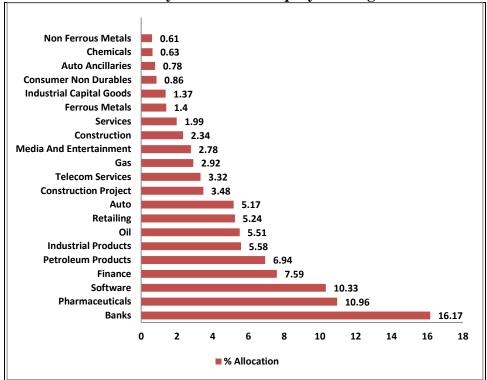
Portfolio: Top holdings of Reliance Top 200 Fund (as at March 31, 2013)

Holdings	Weightage
ICICI Bank Ltd	6.30
Divi's Laboratories Ltd	5.85
Infosys Ltd	5.43
State Bank Of India	4.72
Larsen & Toubro Ltd	3.48
Bharti Airtel Ltd	3.32

Oil India Ltd	3.21
Cummins India Ltd	3.14
Bharat Petroleum Corporation Ltd	3.04
LIC Housing Finance Ltd	3.01
Maruti Suzuki India Ltd	3.01
Hindustan Petroleum Corporation Ltd	2.87
Tata Consultancy Services Ltd	2.85
Hathway Cable & Datacom Ltd	2.78
Housing Development Finance Corporation Ltd	2.77
Axis Bank Ltd	2.62
Bharat Forge Ltd	2.44
Prestige Estates Projects Ltd	2.34
Oil & Natural Gas Corporation Ltd	2.30
Tata Motors Ltd	2.16
Wipro Ltd	2.05
Trent Ltd	2.01
Aditya Birla Nuvo Ltd	1.99
Glaxo smithkline Pharmaceuticals Ltd	1.88
Petronet LNG Ltd	1.84
Max India Ltd	1.80
Oriental Bank Of Commerce	1.69
Jindal Steel & Power Ltd	1.40
Alstom T&D India Ltd	1.28
Gujarat State Petronet Ltd	1.08
Reliance Industries Ltd	1.04
Equity Less Than 1% of Corpus	3.82
Sub Total of Equities	95.98
Debt, Derivatives, Cash and Other Receivables	4.02
Grand Total	100.00

Average AUM for the quarter ended March 31, 2013 Rs.799.25 Cr





The above strategy shows that the major holdings of the fund are in banking (16.17%), pharmaceuticals (10.96%) and software (10.33%) sector. The fund has very less holdings in non-ferrous metals (0.95%), chemicals (0.63%) and auto ancillaries sector (0.78%).

Performance Evaluation of Reliance Top 200 Fund

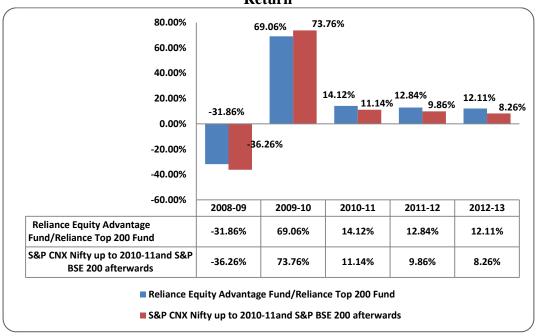
The graph below shows the performance of Reliance Equity Advantage Scheme/Reliance Top 200 Fund in comparison to the S&P CNX Nifty and S&P BSE 200 chosen as bench mark for the study. It can be observed from the graph below that the performance of scheme is superior to that of the benchmark index. The average return of the fund is 15.25 % whereas the average

FUND AND RELIANCE MUTUAL FUND"

return of the market is 13.35%. However the funds return is more than that of benchmark index. In 2008-2009 fund has generated negative returns. In 2010-2011 there is sharp

rise in the return of scheme due an overall rise in stock prices.

Figure: 8
Comparison of Reliance Equity Advantage Fund / Reliance Top 200 Fund and Market
Return



Reliance Equity Advantage Fund was launched on 9th Aug 2007. Subsequently the key features of the Scheme have been changed w.e.f Aug, 26 2011 and the Scheme was renamed as Reliance Top 200 Fund. The above performance is calculated accordingly.

COMPARATIVE ANALYSIS OF SCHEMES OF HDFC MUTUAL FUND AND RELIANCE MUTUAL FUND The performance of selected mutual fund schemes was measured based on various performance metrics:

Comparison on the Basis of Diversification

Equity Diversified Funds features is that 70% to 80% investment on listed scrip under indices. Equity investment highlighting managers investment strategic is based on research and market analysis. The following table shows the investment strategy opted by the fund managers as on March 2013. As the period of 2009 to 2013 was the most crucial period for the equity market.

growth on Net Assets Value of the funds is growth funds. Growth funds have high risk sketch with high offer return. Fund

Table –12
Investment Pattern of Selected Mutual Fund Schemes of HDFC Mutual Fund and Reliance Mutual Fund

S.No.	Name of Scheme	% of Investment in Equities	% of Investment in Debt, Cash and other Instruments	
1	HDFC Equity Fund (Growth)	96.75	3.25	
2	HDFC Top 200 (Growth)	98.03	1.97	
3	Reliance Vision Fund (Growth)	99.19	0.81	
4	Reliance Top 200 (Growth)	95.98	4.02	

From the above table we can analyse that Reliance Vision Fund (99.19%), and HDFC Top 200 Fund (98.03%) has invested higher percentage in equity as compared to other sample schemes. As they have invested more than 98 % in equity. Reliance Top 200

(95.98%) and HDFC Equity Fund (96.75%) have invested comparatively less percentage in equity.

Comparison on the Basis of Fund

Size

FUND AND RELIANCE MUTUAL FUND"

Many of retail investors choose the scheme Table 13 shows the comparison of returns of

for investment on the basis of fund size. the scheme with their AUM.

Table –13
Comparison of Fund Size with Returns

S.No	Name of Scheme	Average AUM for the quarter ended March 31, 2013 (in Crores)	Average Annual Returns (%)
1	HDFC Equity Fund (Growth)	11,500.45	20.29
2	HDFC Top 200 (Growth)	12,016.86	17.38
3	Reliance Vision Fund (Growth)	1769.25	10.204
4	Reliance Top 200 (Growth)	799.25	15.254

 $Table\,-14$ Fund Size of Selected Mutual Fund Schemes of HDFC Mutual Fund and Reliance Mutual Fund

S. N o	Name of Scheme	Average AUM for the quarter ended March 31, 2013 (in Crores)	Rank on the Basis of Avg. AUM	Average Annual Returns (%)	Rank on the Basis of Avg. Annual Returns
1	HDFC Equity Fund(Growth)	11,500.45	2	20.29	1
2	HDFC Top 200 (Growth)	12,016.86	1	17.38	2
3	Reliance Vision Fund (Growth)	1769.25	3	10.204	4
4	Reliance Top 200 (Growth)	799.25	4	15.254	3

The table above shows that HDFC Top 200 Rs.1,769.25 Cr and Reliance Top 200 Rs. has the highest AUM of Rs. 12,016.86 Cr followed by HDFC Equity Fund i.e. Correlation: The correlation between fund

Rs.11,500.45 Cr, Reliance Vision Fund size and fund returns is 0.785226, which

shows low positive correlation. The returns of the schemes are correlated with size of the fund.

fund performance. Up to some extent fund size also effect fund performance due to pressure of meeting expectations of investors on AMC and their fund managers. Thus we can conclude that fund size also effect fund performance but AUM is not always right parameter for predicting or expecting the returns of the scheme.

Thus the above analysis shows that there is positive correlation between fund size and

Comparison of Fund Return and Benchmark Return

The tables 15 present the Comparison of Fund Return and Benchmark Return for the sample funds and for the market portfolio.

Table 15 Comparison of Fund Return and Benchmark Return

Name of the Fund	Average Annual Returns (%)	Benchmark Average Annual Return (%)
HDFC Equity Fund (Growth)	20.29	10.89
HDFC Top 200 fund (Growth)	17.38	11.90
Reliance Vision Fund (Growth)	10.204	11.426
Reliance Top 200 (Growth)	15.254	13.352

Average Annual Returns and Benchmark Average Annual Returns: The average annual return of selected schemes of HDFC Mutual Fund is 18.84% and benchmark average return for the same is 11.39% for the selected period of time. The average annual return of selected schemes of Reliance Mutual Fund is 12.73% and benchmark average return for the same is 12.39% for the selected period of time.

FUND AND RELIANCE MUTUAL FUND"

From the above table we can see that all the selected schemes have generated higher returns than benchmark returns during the

selected period of study except Reliance Vision Fund. It shows really mutual funds are good investment avenue for investors.

Table 16 Comparison of Fund Return and Benchmark Return

Name of the Fund	Average Annual Returns (%)	Benchmark Average Annual Return (%)	Difference
HDFC Equity Fund (Growth)	20.29	10.89	9.40
HDFC Top 200 fund (Growth)	17.38	11.90	5.48
Reliance Vision Fund (Growth)	10.204	11.426	-1.22
Reliance Top 200 (Growth)	15.254	13.352	1.90

Table 19
Ranking on the Basis of Surplus Generated

Name of the Fund	Rank
HDFC Equity Fund (g)	1
HDFC Top 200 fund (g)	2
Reliance Vision Fund (Growth)	3
Reliance Top 200 (Growth)	4

The fund performance has also been measured against the benchmark performance. The analysis shows that the majority of the funds have performed above than market performance. HDFC Equity Fund has generated the highest surplus i.e. 9.40% compared with benchmark followed by, HDFC Top 200 fund i.e. 5.48% and Reliance Top 200 i.e. 1.90%. Reliance Vision Fund i.e. -1.22% have generated negative surplus which means that both the funds have not performed well. This shows that among selected schemes, schemes of HDFC Mutual Fund have performed much better than Reliance Mutual Fund Schemes.

CONCLUSION

The present study is aimed at testing the investment strategies and performance of HDFC mutual funds and Reliance Mutual Fund. The summary of results indicates that majority of schemes which have made high percentage of investment in equity has generated higher returns as compared to other selected schemes which have made comparatively more investment in equity. This shows that higher the risk high is the return.

A snapshot of the results is given above shows that fund size also effect fund performance. The returns of the schemes have positive correlation with size of the fund. Therefore it shows there is relationship between Fund size and Fund's performance.

The analysis also shows that schemes of HDFC Mutual Fund has performed better and have large funds to manage as compared to Reliance Mutual Fund.

The result shows that majority of selected schemes are superior to the relevant benchmark portfolio. Fund managers have been successful in outperforming the relevant benchmark during the study period. Schemes of HDFC Mutual Fund have performed much better.

Thus from the above analysis we can concluded that the period for 2008 to 2013 was very critical phase for mutual fund industry due to volatility of market still majority of the funds showed positive returns. Therefore it's much better to invest in mutual fund rather than investing directly in market. Investors can invest in a mutual fund that matches their investment objective and analyze the fund based on various criteria such as risk prevailing in the market, variations on the return and deviations occur in the returns etc. Risk appetite of an investor plays an important role in the selection of mutual fund.

REFERENCES

- Deepak Agrawal, "Measuring Performance of Indian Mutual Funds" Finance India, June
 Available at SSRN: http://ssrn.com/abstract.
- 2. R. Anitha, C. Radhapriya and T. Devasenathipathi, "A Comparative Analysis of Market Returns and Fund Flows with Reference to Mutual Funds" International Journal Of Research In Commerce, It & Management, Volume no. 1, Issue no. 4, September, 2011.
- 3. Ippolito R A., "Consumer Reaction to Measure of Poor Quality: Evidence from the Mutual Fund Industry", Journal of Law and Economics, Vol. 35, pp. 45-70, 1992.
- 4. P Alekhya, "A Study on Performance Evaluation of Public & Private Sector Mutual Funds in India", Asia Pacific Journal of Marketing & Management Review, Vol.1 No. 2, October 2012, Pp. 147 168.
- 5. Sapar, Narayan Rao and Madava, Ravindran, "Performance Evaluation of Indian Mutual Funds". Available at SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=433100
- 6. Kalpesh P Prajapati and Mahesh K Patel (2012), Comparative Study On Performance Evaluation Of Mutual Fund Schemes Of Indian Companies, Researchers world, Journal of Arts, Science & CommerceVol–III, Issue3(3), July 2012, pp. 47-59
- 7. Pournima S. Shenvi Dhume and Prof. B. Ramesh(2011), "Performance Analysis of Indian Mutual Funds with a Special Reference to Sector Funds", The Indian Journal of Commerce, Vol. 64, No. 9, July- September 2011.

- 8. Sathya Swaroop Debasish "Investigating Performance of Equity-based Mutual Fund Schemes in Indian Scenario", KCA Journal of Business Management. Vol. 2, Issue 2 (2009), pp. 1-15
- 9. Shivani Inder and Shikha Vohra, "Mutual Fund Performance: An Analysis of Index Funds", International Journal of Research In Commerce & Management, volume no. 3 (2012), issue no. 9 (september), pp. 143-146.
- 10. www.moneycontrol.com
- 11. www.valueresearchonline.com
- 12. www.hdfcmutualfund.com
- 13. www.morningstar.in
- 14. www.mutualfundindia.com
- 15. www.reliancemutual.com

Volume | 5 Issue 2

| ISSN | 2319-5576

A STUDY OF SPOUSAL ROLE IN DECISION MAKING IN SELECTED SECTORS WITH REFERENCE TO NAGPUR CITY

*Dr. SAKET N. BANSOD

**Dr. VANDANA RAO

ABSTRACT:

Consumer is the nerve center of contemporary marketing and hence understanding his

behaviour is rather indispensable for efficient and effective marketing management.

Customers may affirm their needs, wants but act differently. It is generally assumed that

decision making in consumer behaviour is individual rather than collective but it is the other

way round. The study intends to check the theory in practicality with reference to decision

making style of married couple. Couples have become a primary decision making unit of

society and have a significant role in purchase decision making processes of individuals. It is

more and more characteristic of spouses make decisions commonly; both party take part in

purchase, which used to be typically the competence of wives or husbands. Over time, close

emotional boundaries are evolved among family members and this influences the decision

making process and its output.

Key Words: Consumer behavior, Decision making, Spousal role.

Introduction:

"Consumer behaviour refers to the actions and decision processes of people who purchase goods and services for personal consumption."

James F. Engel, Roger D. Blackwell and Paul W. Miniard, "Consumer Behaviour" (1990).

Consumer behaviour states the mental and emotional processes and the observable behaviour of consumers during searching for purchasing and post consumption of a product or service. Consumer behaviour was a relatively new field of study during the second half of the 1960s without a history or research of its own.

The discipline of consumer behaviour has borrowed heavily from concepts developed in other disciplines of study such as psychology, sociology, social psychology, cultural anthropology and economics. The one of the major objectives of marketers is the identification of purchase decision makers - those crucial people who say 'yes'

or 'no' to marketers' products or services. It is pertinent to know how the decision about

purchase is formed and who exactly influences it; because this helps to deduce in chalking out their marketing and advertisement actions. But it is observed that a number of purchase related decisions are made by member of the family.

The behaviour of spouse is multidimensional, because it highly depends upon the size of the family unit, age gap between them, social background of the spouse, working designation, the risk associated with the particular decision and above all the mindset of the family towards the traditional role of women. Thus decision making behaviour within a family becomes a complete task for analytical purpose.

The significant changes in family roles in recent decades have led spouses to increase their influence on all decision areas, a fact that reveals the need for firms to rearrange their marketing strategies for some products or services (Belch and Willis, 2002). Indeed, the relevance of the roles that men and

women play as a couple has been the object of study in consumer purchase behavior (Davis and Rigaux; 1974; Martínez, 1996; Berg and Teigen, 2009).

The focus of this research is the role of spouses in decision making when purchase has to be made. Thus the primary concern is to check the say of a particular spouse in this regard. The research has focused on family as a unit as for as decision making is concerned. Thus concentration of the research would be on the role of the husband and wife. Interestingly no endeavor has been made on the above said notion till present.

Literature Review

Emphasizing the importance of survey of related literature, C.V. Good pointed out that the survey of related literature may provide guiding hypotheses, suggestive methods of investigation and comparative data for interpretative purposes. Some time text books and subjective critiques of a problem area provide important insights and hypotheses, which have place in the summary of related literature.

Family behavior is an important issue and socio-cultural factor. The family is considered as a significant decision-making unit due to the large quantity of products and services that are consumed by the household.

Also, when neither husband nor wife belongs to a connected social network they have a greater tendency to engage in joint decision making- (Bott, 1957).

Significant demographic and psychosocial relationships with the family power structure have been found to exist. For example, the degree of joint decision making typically declines over a family's life cycle- (Wolgast, 1958).

The history of 1960's research can be tracked on husbands and wives roles played in family decision making. Several studies, since that time, have scrutinized different components of marital roles and family decision making.

Engel, Kollat, and Blackwell (1968) have indicated that the extent of husband-wife

involvement varies considerably from product to product. These authors report husbands having a greater tendency to be involved in problem.

A study on the relative influence of husbands and wives on the family decisions involves the decision structure in the purchase of automobiles is not related to the decision structure in the purchase of furniture. Within each of these product categories, product selection (model, make, color) and allocation decisions (how much to spend and when to buy) were shown to be the structure of the decision process- (Davis 1970).

According to the researchers, household is considered as the relevant unit of analysis, not the individual consumer (Davis, 1976; Granbois, 1971).

Foa and Foa (1980) suggested that in addition to tangible resources such as money, education and occupation intangible resources such as intelligence, physical attractiveness, likeability, love, and comfort impact family power. Actually, any trait or behavior that is valued by others in the

family can be a resource that is exchanged for influence and power.

SIGNIFICANCE OF THE STUDY

Although households are still treated as single entities in standard economic textbooks, day-to-day experience reveals that household decision-making among couples and families often involves conflict and certainly requires compromises in many cases. In this study, we argue that the role of gender in buying behavior is largely due to the fact that many interesting propositions about individual decision in purchase remain outside the current perspective of the domain.

Most of the researchers in family decisionmaking process deal with the distinction between buying decisions and consumptions. (Alderson 1957; Converse and Crawford 1950; Coulson 1966; Ferber 1954; Foote 1961, Nicosia 1966) pointed out member, particularly homemaker, may be the buyer but products and services may be consumed by all the members. Specifically attention has been paid to role of the homemaker as a purchasing agent and on some decisions

which are truly joint among all the members of family.

Now in the 21st Century, it is difficult to determine who your customer is - man, woman and how? What are the changes in spousal roles in buying behavior process and what causes these changes? There is a thought as to why gender is considered a unit for marketer and how promotion is the important component of the marketing wire. Women are dealing comfortably with the outside world. They seem to enjoy their work and believe that the money is useful for their family. At the same time as manufacturers come under increasing competitive pressure, both from rival brands and retailers, this consumer group offers the opportunity of developing fast growth brands that help to secure brand loyalty early on.

OBJECTIVE OF THE STUDY

The main objective of the study is to know the preference of consumer respondents while purchasing durable. The study also examines the behavior pattern of the spouses and others who have played a major role in determining the particular brand to the purchased.

- To study which family member has a greater say in the purchase decision making process.
- To study the effect of spousal roles in the family purchase behavior among husband and wife
- To identify the change in authoritative positions in the spousal roles with reference to purchase decision in the families.

Research Methodology

Research comprises defining and redefining the problems, formulating hypotheses and suggested solutions, collecting, organizing, and evaluating data, making deductions and reaching conclusions. Research methodology is a way to systematically solve the research problem. Research methodology has many dimensions and research methods form a part of it.

The present study titled, "Spousal Roles in Decision Making Process" has been initiated with the basic objective of looking into the shift in the roles of the Spouse's in the family purchase decision making behavior.

This paper focuses on comparing the couple's role in the purchase of products and services on the basis of questionnaire. The focus was on each spouse's role in the purchase decision making of different products and services.

Research Hypothesis

H0: There is no significant difference in purchase decisions in decision making of married couple over the years of marriage.

H1: There is a significant difference in purchase decisions in decision making of married couple over the years of marriage.

Data Analysis and Graphs

Gender based graph

Respondents	No.	%age
Male	100	50%

H01: There is no significant difference in purchase decisions of married couples with respect to monetary contribution towards household purchases.

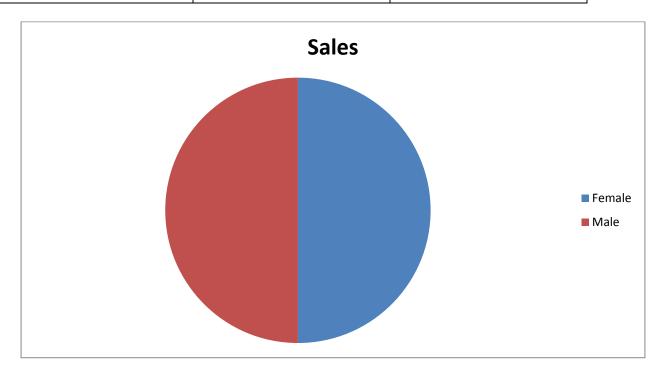
H11: There is a significant difference in purchase decisions of married couples with respect to monetary contribution towards household purchases.

H02: There is no significant influence of other family members on purchase decisions made by the spouses.

H12: There is a significant influence of other family members on purchase decisions made by the spouses.

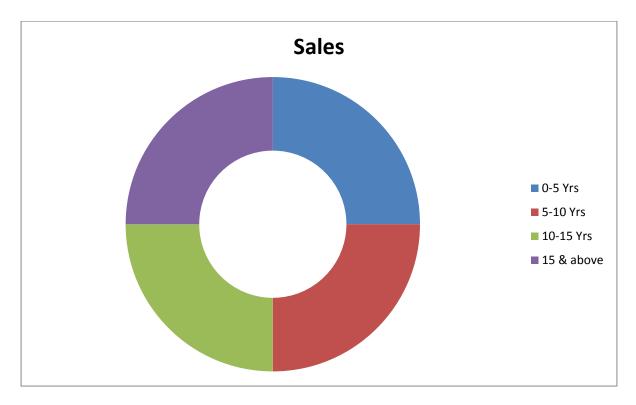
Sample Design: The method used was Non- probabilistic sampling in which the snowball technique was used. The total number of respondents was 100 couples (i.e. 100 husbands and 100 wives).

Female	100	50%



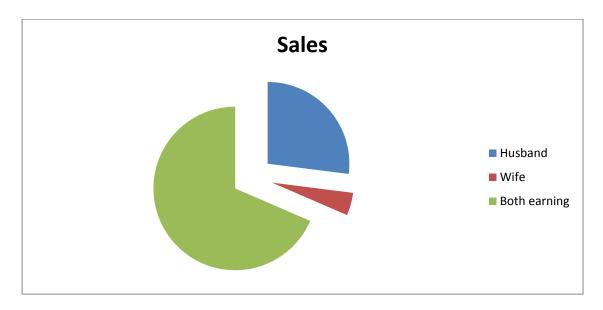
Married graph

Respondents	Total No.	%age
0-5 years	50	25%
5-10 years	50	25%
10-15 years	50	25%
15 yrs & above	50	25%



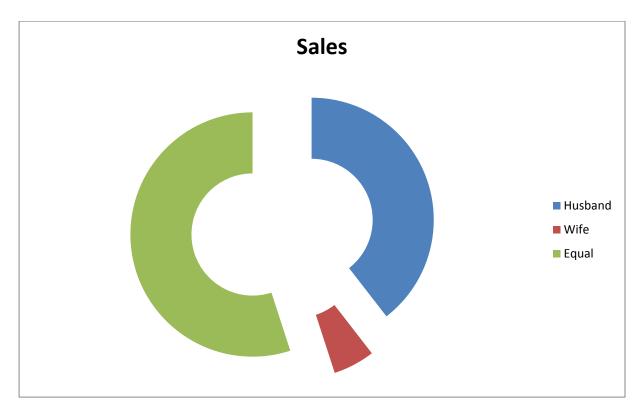
Earning members' graph

Respondents	Total No.	%age
Husband earns	54	27%
Wife earns	9	4.5%
Both are earning	137	68.5%



Contribution role

Respondents	Total No.	%Age
Husband contributes more	79	39.5%
Wife contributes more	11	5.5%
Both Contribute equally	110	55%



Interpretation

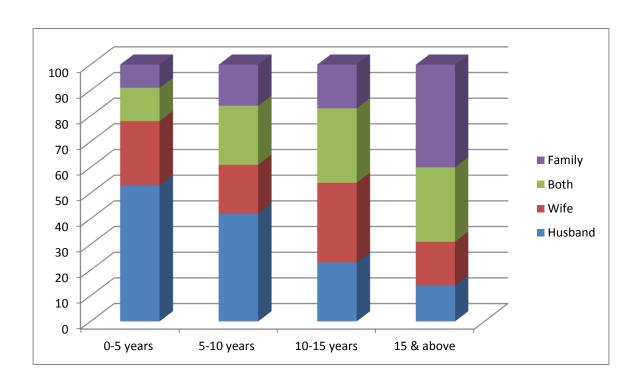
As per the findings in Nagpur city, the graph shows that in majority of cases the couples contribute equally, closely followed by major contribution by the husband. This tendency shows that the husband contribution was on higher side in majority of the cases.

Consumer Durable

a) Leisure items

	Husband	Wife	Both	Family
0-5 years	53	25	13	9
5-10 years	42	19	23	16
10-15 years	23	31	29	17

15 & above	14	17	29	40
------------	----	----	----	----



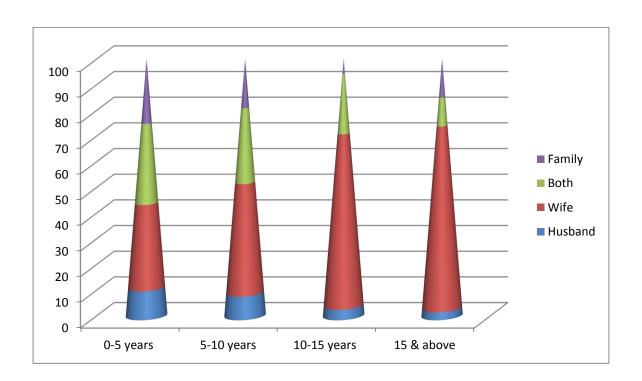
Interpretation

Most of the times during the first five years of marriage husbands play a dominant role as a deciding factor for leisure items; the overall sole decision making by husband decreases over a period of time. As the number of marriage years increase there is a significant rise in joint decision making by the couple. The last column suggests children play a dominant role in purchase of leisure items decision making process.

b) Kitchen appliances

	Husband	Wife	Both	Family
0-5 years	11	33	31	25
5-10 years	9	43	29	19
10-15 years	4	67	23	6

15 & above	3	71	11	15
------------	---	----	----	----



Interpretation

The graph suggests that throughout the married life woman play a decision maker role when it comes to kitchen items. The high percentage of joint decision making in initial married life suggests before getting

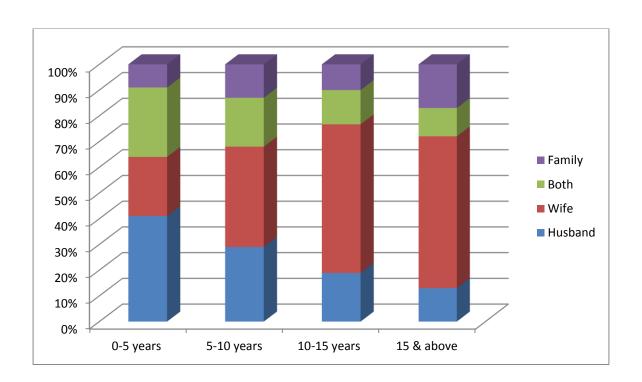
to know each other very well a joint decision is taken while over a period of time wife establishes a firm control over her domain i.e. kitchen appliances.

General Durables

	Husband	Wife	Both	Family
0-5 years	41	23	27	9
5-10 years	29	39	19	13

DAIMSR, Nagpur, <u>saketbansod@gmail.com</u> DAIMSR, Nagpur, vandanarao@gmail.com

10-15 years	17	52	12	9
15 & above	13	59	11	17



Interpretation

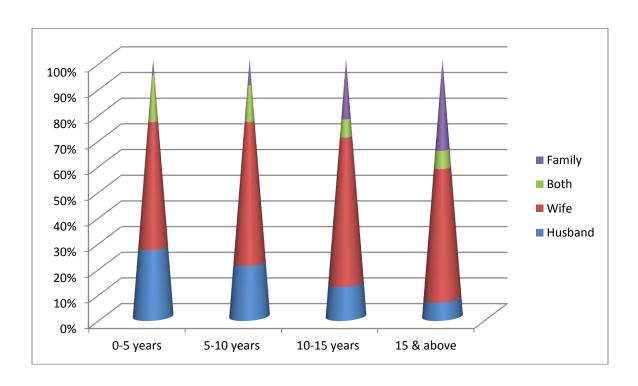
The above graph suggests that many a time general durables like coolers & iron are

already owned by the husband; hence the initial dominance. Over a period of time wife gets to decide what and when to buy.

FMCG

	Husband	Wife	Both	Family
0-5 years	27	49	18	6

5-10 years	21	55	14	10
10-15 years	13	57	7	23
15 & above	7	51	7	35



Interpretation

The above graph suggests that wife is always the initiator and decision maker for

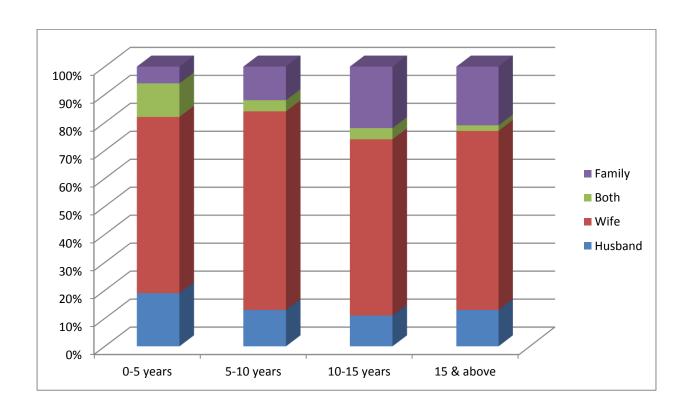
FMCG products. While as the years pass family, that is children, plays a crucial role in purchasing of FMCG products

Groceries & vegetables

	Husband	Wife	Both	Family
0-5 years	19	63	12	6

DAIMSR, Nagpur, saketbansod@gmail.com DAIMSR, Nagpur, vandanarao@gmail.com

5-10 years	13	71	4	12
10-15 years	11	63	4	22
15 & above	13	64	2	21



Interpretation

The graph suggests that throughout the married life women play a decision maker role when it comes to groceries and

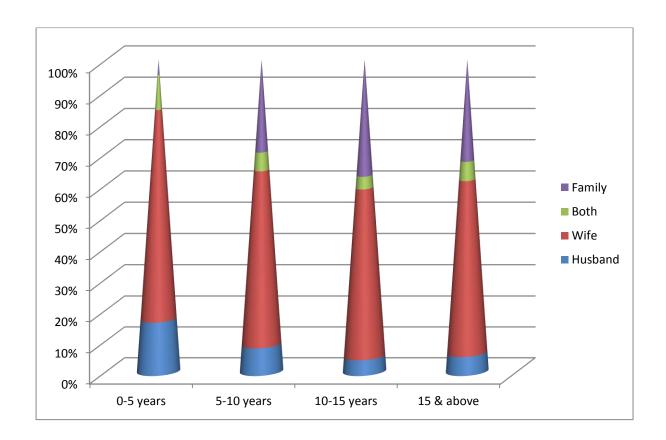
vegetable items. In later years the children also play a decision making role in purchasing vegetables as per their liking.

Confectionaries

	Husband	Wife	Both	Family
0-5 years	17	67	11	5

DAIMSR, Nagpur, <u>saketbansod@gmail.com</u> DAIMSR, Nagpur, vandanarao@gmail.com

5-10 years	9	57	6	30
10-15 years	5	54	4	37
15 & above	6	55	6	32

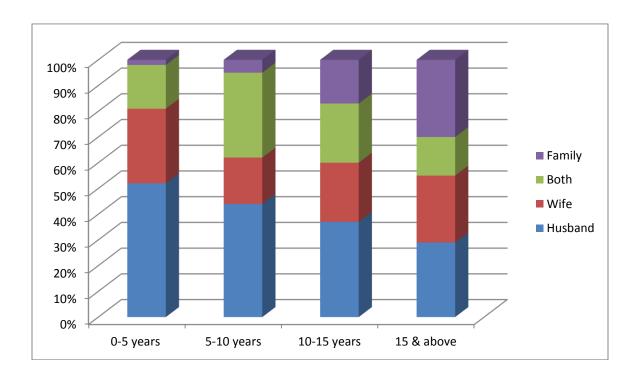


Interpretation

As the graph suggests that the wife playing a dual role of wife and a mother is the decision maker regarding the purchase of confectionaries keeping the requirement as well as liking of the family i.e. children in mind. There is also a steady rise in percentage with respect to family decision making in confectionary items over a period of time as the kids grow older.

2-Wheeler

	Husband	Wife	Both	Family
0-5 years	52	29	17	2
5-10 years	44	18	33	5
10-15 years	37	23	23	17
15 & above	29	26	15	30

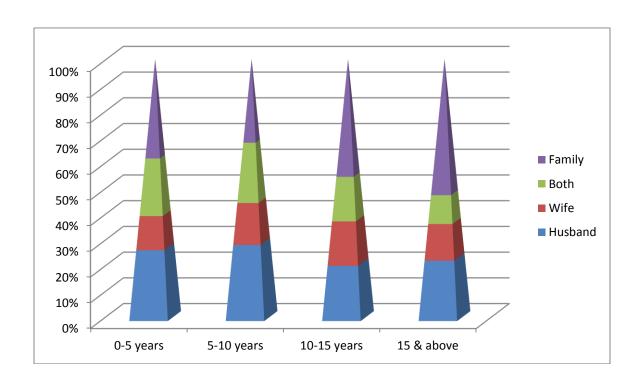


Interpretation

The above graph depicts that in initial years the decision making regarding the purchase of two wheeler lies with the husband. The significant percentage of decision making by the wife suggests that the purchase of two wheeler was for self-use. While at a later stage the children also have a say in purchase of two wheeler, many a times for their own use.

4-Wheeler

	Husband	Wife	Both	Family
0-5 years	27	13	22	38
5-10 years	29	16	23	32
10-15 years	21	17	17	45
15 & above	23	14	11	52



Interpretation

The above graph suggests that buying a four wheeler is a cognitive family decision; hence family always plays a major role in decision making. 'Family' here implies in-

laws and at a later stage children, as having a major say.

Limitations:

- The study was restricted to Nagpur city.
- The sample size was restricted to 200 only.
- As snowball sampling method was used the data collected was of horizontal nature, in terms of society.

Conclusions

Consumer behavior is generally an unpredictable area and joint decision making even more so. The study observes change in buying attitude, change in decision making role and supporting factors for spousal decision making.

Spousal Decision Making has been materialized as an important and major movement in the modern business at the domestic as well as at the global level. It has become a source of the economic as well as social development.

The nature of the present household has been studied in relation to the new redefined role of the spouses that constitute the family in the purchase decision making process.

Spouses are generally making the

consumption decisions collectively. And spouse's decisions differ by type of product or service.

The Spouse's purchase decision making process is having a number of stages and each stage has been influenced by the ideas and thoughts of the spouses' counterparts.

Wife's influence in all the phases of decision-making is significant and cannot be neglected, especially in decisions about consumer durables.

Though, unlike the Tier 1 cities in India, Nagpur still has less number of women who contribute more than their spouses. Hence, the study shows a more joint decision making in high involvement products.

REFERENCES:

- William J Qualls, Changing Sex Roles: Its Impact on Family Decision Making, 2000
- William J Qualls, SEX ROLES, HUSBAND-WIFE INFLUENCE, AND FAMILY DECISIONBEHAVIOR, 2001
- Blood, Robert O., Jr., and Donald M. Wolfe 1960 Husbands and Wives: The Dynamics of Married Living. Glencoe: Free Press. Detroit Area Study 1957
- Cunningham, 1997. Spousal Influence in Consumer Decisions: A Study on Cultural Assimilation.
- Isabella C.M., and Green, Robert T. 1974. Marketing Notes and Communications:Purchasing Roles in the US Family: 1955-73.
- Ganesh, Gopala.

*Dr. Ashish Sharma

**Amit Philora,

Abstract

Customer experience is not a new phenomenon in India. We translate experience as 'anubhav' in Hindi, which describes greater emphasis on its working. In India whenever any middle class is going to buy luxury product they take consultation from family friends and relative. The best known person is most trusted for any middle class customer as he can watch and experience physically before taking a buying decision. The experience has been a key of success or failure, both, if it would not be conceptualized or strategized on time.

The Customer experience can be a provider of economic value as well as managerial learning. The Toyota Company is a fine example of this. The customer not only shares an experience but share learning, personality and attitude in this form.

There can be a role of one model given by PC Verhoef, et al. (2009) that experience will be created by following variables.

- Social Environment
- Service interface
- Retail Atmosphere
- Assessment
- Price

The present paper will examine an application of these variables in buying situations of various luxury products. The preliminary statistical and multivariable analysis tools will be applied in this regard.

Keywords: Learning, Attitude, Retail Atmosphere, Assessment, Price, Social Environment

Introduction

Loyal customers are the best base for survival and grateful in business, the basic understanding can be maintained that satisfaction will automatically lead to the retention and profitability. The competitive differentiation will be main driver of marketing for surviving so the customer experience management will lead us to achieve this goal. Experience can be must for the maintenaince of loyal customers. The customer experience directly affects the cognitive aspect of customer.

Customer experience also work for emotions attached with the brands. The perceptual aspects also plays an important role. Many companies have understood an importance of Customer Experience. Which they present with their service offerings. The popularity of the concept has also compelled

traditional companies to focus on Customer Experience for value addition.

Customer Experience Management (CEM) is now working as marketing strategy for winning success.

The concept has become an important tool understanding the purchaser's behaviour((Addis& Holbrook, 2001). Marketing and consumer behaviour experts have defined it in different perspectives. Consumer behaviour has interpreted it as a stimuli linked with product or service(Holbrook and Marketing experts have Hirschman)). defined it as an interactional situation between service providers and customers 2003). (Caru & Cova, Customer experience has also possessed a dimension called internal and subjective response (Meyer and Schwager).

Components of CUSTOMER
EXPERIENCE

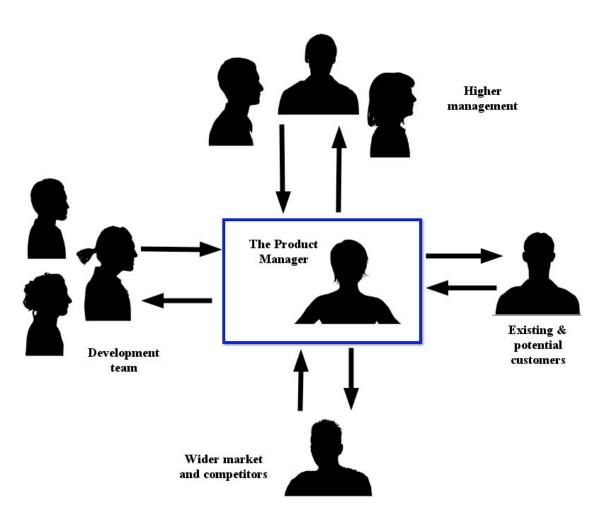
The following are the components of CUSTOMER EXPERIENCE

- People
- Product
- Process
- Policy

The role of people may bring following issues in to consideration

- Strategic insights
- Loyalty drivers
- Location Preferences
- Brand advocacy by Customers and Employees

The role of product can also be very important as per following model



Product Manager sit in the centre of many conversations

Reproduced from www.allankelly.net/static/writing/On**Management**/OnMngm5-**Product** by Allan Kelly

The role of process also plays an important role for generation of customer value.

After the understanding of customer experience the process map preparation is very important (Grant, 2007).

The policies may be the creation of end result of customer experience management.

Conceptual Framework: Verhoef and Leeflang (2009) has proposed following model

Social environment

(a) Reference group

(b) Reviews

(c) Tribes

(d) Codestruction

(e) Service Personnel

Service Interface

(a) Service person

(b) Technology

(c) Customization

Retail Atmosphere

(a) Design

(b) Scents

(c) Temperature

(d) Music

Assortment

(a) Variety

(b) Uniqueness

(c) Quality

Price

(a) Loyalty Programs

(b) Promotions

Situational Moderators

Type of store

Location

Culture

Economic

Climate

Season

Competition/ Entrance

Consumer Moderators

Goals: experiential

Risk orientation

Socio-demographic

Consumer attitude

(price sensitivity, involvement,

innovativeness)

This model will be applied through

appropriate research Process

Review of Literature

Schmitt(2010) has described CEM as visionary approach. Puccinelli, (2009)has proved that CEM can increased retail performance. Meyer and Schwager (2007) has presented the the difference between experience customer and customer relationship. Palmer(2010) has given the description of customer experience as an interpersonal relationship with service and brand and also presented the conceptual validity of customer experience concept. Gentile and Noci(2007) has described the

role of customer experience in successful launching of any offer

The review of literature has given the existence of the paper topic and gaps which can be covered in the proposed paper.

RESEARCH OBJECTIVES-

This paper will be for following objectives

- To apply the factors of PC Verhoef model which are responsible for the customer purchase decision in the category of Luxury products
- To prepare the qualitative profile of these factors as they may be operational for different strata of the society and customer groups

Research Methodology

Research Philosophy

The option for selection research philosophy is an important. Proper research Philosophy works for the whole research work. Research Philosophy is here for identifying inherent features of consumer influence through selected factors.

Research Approach

The approach selected for this research is inductive as it is based on the data collected through customers and based on the response's interpretation emerged factors.

Research Design and Strategy

The research design is the whole structure of the research. It gives the entire path for the conduct of research. Here both qualitative and exploratory research design has been selected. To execute the purpose of exploratory research three stages will be launched as follows

- Factors exploration
- Qualitative research design

Research Method

A research method for exploratory design was focus group and Depth Interview with customers at various Customers buying experiences on buying of Luxury Product. The factor Analysis method was applied at this stage. The researchers were contacted at different malls, cinema houses and other public places of Jabalpur City. Some variable selected for exploratory stage and

some selected for qualitative research stage. The basis of selection was nature of variables in terms of continuous and categorical aspect.

The researcher has worked on 30 customers where the qualitative research

design has applied. Phenomenological and Ethnography Research Design has been applied. The methods which have been employed here are -

- Interactive, interviewing
- Observations

The respondents have been given the list of following variables:

Variables	Interpretation
variables	interpretation

Type of Store Format

Location Convenience

Culture Country & community specific

Economic climate Economic class

Season Opportunity to buy

Competition Brand choices

Goals Experience Clarity on buying

Task orientation Planned or impulse

Socio Demographic Professional status

Consumer Attitude Favorite

The researchers were contacted at different malls, cinema houses and other public places of Jabalpur City.

SAMPLING I STAGE-

Factor Analysis stage

Demographic Profile at a glance(N=250)

|--|

Gender		
Male	150	60
Female	100	40
Age		
21-30	50	20
31-50	100	40
Over 50	100	40
		32
Marital Status		
Single	160	64
Married	90	36
Income(Annual)		
Up to 5Lakh	20	8
5-10Lakh-	30	12
10-15 Lakh	200	80
Students	10	4
Professionals	150	60
Self Employed	90	36

SAMPLING II STAGE

Qualitative research Profile

DEMOGRAPHIC PROFILE AT A GLANCE (N=30)

	Number	Percentage
Gender		
Male	20	66
Female	10	34
Age		
Age 21-30	10	33
31-50	15	50

Over 50		5	40
			17
Marital Status			
Single		12	40
Married		18	60
Income(Annual)			
Up to 5Lakh		20	66
5-10Lakh-		5	17
10-15 Lakh		5	17
Students	Professionals	15	50
Self Employed		10	33
		15	17

Analysis and findings

Factor analysis is applied for the selection of the final responsible factors of purchasing under the influence of store ambience. The variables selected for factor analysis are once again presented here i.e. (A) Reference group Reviews

- (B Display
- (C) Quality
- (D) Service culture

- (E) Service personnel
- (F) Technology Customization
- (G) Design
- (H) Scents
- (I) Temperature
- (J) Music
- (K) Loyalty Programs
- (L) Promotions

The result of factor analysis is as follows:

KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Samp	ling Adequacy.	.570
Bartlett's Test of Sphericity	Approx. Chi-Square	203.605
	df	45
	Sig.	.000

Measure of Sampling Adequacy is .570 and Bartlett's Test of Sphericity is 203.605. These two are the indicators about the strength of Factor analysis. KMO is above 0.5 which is satisfactory in itself

Presentation of Factors - After employing Factor loadings in Varimax method the details are follows:

Factors	Variables Included		Interpretation		
1. Social environment	Reference group		May change with time		
	Reviews				
	Display	Display			
	Quality				
	Service Personnel				
2. Service Interface	Service person		Customer friendly behaviour		
	Technology Customization		required		
3. Retail Atmosphere	Design		Determining factor		
	Scents				
	Temperature				
	Music				
4. Assortment	Variety		Strategic factor		
	Uniqueness				
	Quality				
Price	Loyalty Programs	Economy decide the sensitivity			
	Promotions				

The following data has emerged from respondents -

Type of Store

Important	60%	
Unimportant	40%	

Selection of store plays an important role

Location

Considerable factor	70%
Some time only	20%
Not a factor	10%

Location plays as an important experience factor.

Culture

Important factor	80%		
Unimportant factor	20%		

Majority approves culture as important experience measure.

Economic factor

Important factor	70%
Unimportant factor	30%

The economic aspect plays an important role for experience providence.

Competition

Impact on brand decision	30%
No impact on brand decision	70%

Customer may overlook the brand decision on many occasions.

Goals experiences

Same brand and same store	40%
Same brand and different store	20%
Different brand same store	30%
Different brand and different store	10%

Same brand and same store in majority work as major goal achiever for customer

Task Orientation

Proper analysis of survey	30%
Others suggestion	20%
No decisions	50%

Customer present an experience on the basis of survey which work as touch point for him/her.

Socio-demographic decision

Some times	20%
Nonissue	60%
Always work	20%

This was not a major issue for the people.

Consumer attitude

Previous experience	40%
Ad effect	30%

Always work	30%
-------------	-----

Previous attitude always carry till next purchase.

Source: Field resource

CONCLUSION

- Type of conclusion this an important role.
- Location is also a contributory factor
- Economic limitations is an important factor
- Culture is also an important factor
- Economic climate is still a important issue
- Task orientation is an important role
- Socio demographic factor is not always an important role.

SUGGESTIONS

- 1. Institutional frame work for customer experience data and insight.
- 2. Continuous market research in qualitative manner.
- 3. Customer club concept and loyalty programme should be restructured.
- 4. Cultural input should be assessed.

- 5. The customer meet with brand experience could be organized at retail level.
- 6. Flexibility in product design could be accepted.

Reference

Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghubir, P., & Stewart, D. (2009). Customer experience management in retailing: understanding the buying process. Journal of Retailing, 85(1)

BH Schmitt - 2010 - books.goog

Peter C. Verhoef, Katherine N. Lemon A. Parasuraman c,

Anne Roggeveen , Michael Tsiros , Leonard A. Schlesinger (2009) Customer Experience

Creation: Determinants, Dynamics

and Management Strategies, Journal of Retailing 85 (1) 31-41

A Palmer - Journal of Services Marketing, 2010 - emeraldinsight.com

C Gentile, N Spiller, G Noci(2007) - How to Sustain the Customer Experience:: An Overview of Experience Components that Co-create Value With the Customer European Management Journal, Elsevier Volume 25, Issue 5, Pages 395–410

Addis, M., & Holbrook, M. B. (2001). On the conceptual link between mass customisation and experiential consumption: an explosion of subjectivity. *Journal of Consumer Behaviour*, *1*(1), 50-66.

Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal of consumer research*, 132-140.

Carù, A., & Cova, B. (2006). How to facilitate immersion in a consumption experience: appropriation operations and service elements. *Journal of Consumer Behaviour*, *5*(1), 4-14. www.allankelly.net

Volume | 5 Issue 2

| ISSN | 2319-5576

Impact of Dividend Policy on Shareholder's Wealth Creation

*Dr. Anil Kothari

**Jyoti Suvalka

Abstract

The present paper is aimed at analyzing the impact of dividend policy on shareholders' wealth. Indian Companies which are paying high & consistent dividend have been selected for the time period of 2004 –2014. To measure the impact of dividend policy on shareholders' wealth multiple regression analysis is used by taking DPS (Dividend per Share), RE (Retained Earnings per Share), PER (Price Earning Ratio) and EPS (earning Per share) as independent variable and MPS (Market Price Per Share) as dependent variables. To determine the proportion of explained variation in the dependent variable, the co-efficient of determination (R2) has been tested with the help of F value. The study proves that the wealth of the shareholders is greatly influenced mainly by four variables viz., Dividend per share, Earning per share, retained earnings per share & price earnings ratio.

Keywords: Dividend Paying Companies, DPS-Dividend Per Share, MPS-Market Price Per Share, Earning Per Share, Retained earnings Per share

1. Introduction

Dividend policy has been an issue of interest in financial literature since Joint Stock Companies came into existence. Dividends are commonly defined as the distribution of earnings (past or present) among the shareholders of the firm in proportion to their ownership (Frankfurter et. al. 2003). Dividend policy connects to the payout policy, which managers pursue in deciding the size and pattern of cash distribution to shareholders over Managements' primary goal is shareholders' wealth maximization, which translates into maximizing the value of the company as measured by the price of the company's common stock. This goal can be achieved by giving the shareholders a "fair" payment on their investments. However, the impact of firm's dividend policy on shareholders wealth is still unresolved.

In an ever-increasing Indian economy, globalization, liberalization and privatization together with rapid strides made by information technology, have brought intense competition in every field of activity. So, Indian companies at

present are dazed, confused, and apprehensive. To maintain the competitiveness of, and add value to the companies, today's finance managers have to make critical business and financial decisions which will lead to long-run perspective with the objective of maximizing the shareholders' wealth(Bhalla,1997).

Shareholders' wealth is represented in the market price of the company's common stock which, in turn, is the function of the company's investment, financing and dividend decision. Managements' primary goal is shareholders' wealth maximization, which translates into maximizing the value of the company, as measured by the price of the company's common stock (Khan 1992). Shareholders like cash dividends, but they also like the growth in EPS that results from ploughing earning back into the business. The optimal dividend policy is the one that maximizes the company's stock price which leads to maximization of shareholders' wealth and thereby ensures more rapid economic growth. The present study is intended to study how far the dividend payout

has impact on shareholders' wealth in general; and in particular to study the relationship between the shareholders' wealth and the dividend payout and to analyze whether the level of dividend payout affects the wealth of the shareholders.

2. Statement of the Problems

In India few studies have analyzed the relationship between the shareholders' wealth and dividend payment. Net earnings are divided into two parts - retained earnings and dividends. The retained earnings of the business may be reinvested and treated as a source of long-term funds. The dividend should be distributed to the shareholders in order to maximize their wealth as they have invested their money in the expectation of being made better off financially (Chandra 1997). Therefore, the present study mainly analyses how far the level dividend payout affects the shareholders' wealth in India.

3. Review of Literature

Miller and Modigliani (1961) showed that under certain simplifying assumptions, a firms' dividend policy does not affect its value. The basic premise of their argument is

that firm value is determined by choosing optimal investments. The net payout is the difference between earnings and investments and simply a residual. Because the net payout comprises dividends and share repurchases, a firm can adjust its dividends to any level with an offsetting change in share outstanding. From the perspective of investors, dividends policies are irrelevant because any desired stream of payments can be replicated by appropriate repurchases and sale of equity. Thus, investors will not pay a premium for any particular dividend policy.

Azhagaiah (2008) studied that Shareholders consider dividends as an important factor because dividend has great impact on their wealth maximization. Higher dividend payout ratio creates positive reaction to market price of the share and there is an increase of price of in market. They studied that share shareholders prefer current dividend to future income. So, dividends are considered as an important factor which determines shareholder's wealth.

Asma Tahir (2014) studies the relationship between dividend payout ratio, P/E ratio,

BV/MV ratio and holding period yield within oil and gas industry of Pakistan and how these variables effects shareholders wealth.

4. Objectives of the Study

- To study the dividend policy of Indian Companies.
- To study the relationship between dividend payout and shareholders' wealth.
- To compare the market value and book value of the companies.
- 4. To determine various factors which affect the shareholder's wealth.

5. Methodology

5.1. Sources of Data

The study used only secondary data which are collected from authentic websites of the respective company. Analytical method is used for interpreting the data. The data collected from this source have been compiled and used with due care as per the requirements of the study.

5.2. Sampling Design

The sample for this study has been chosen from the list of companies listed in National Stock Exchange (NSE) & BSE (Bombay Stock Exchange) using Purposive sampling Technique. We have selected the companies which are among the top dividend paying companies for last 10 years (2004 to 2014) .The sample units have been chosen for the study based on following criteria - Paying highest and regular dividends and the availability of required financial data like share price, DPS etc.

6. Tools used for Analysis of Data

The equations and variables used for the study are given below:

$$MPS = a + b DPS + c EPS + dRE + ePER$$

Where,

MPS Market price per share

DPS Dividend per share

RE Retained Earnings per share

PER Price Earnings Ratio

EPS Earnings per share

Market price per share is the average of highest and lowest prices for the year. To

analyze the data, the statistical tools that have been used are Mean, Standard Deviation, Multiple Regression Technique and stepwise regression method to ascertain best fitted model for predicting the dividend policy on impact on shareholder's wealth. The significance of various explanatory variables has been tested by computing t-values. To determine the proportion of explained variation

in the dependent variable, the coefficient of determination (R2) has been worked out. The significance of R2 has also been tested with the help of F-Value.

7. Period of the Study

The data used for the analysis are relating to the selected Indian Companies for the period of Ten years (2004-2014).

8. Analysis and Results

8.1 Year-wise Comparison of Market Value to Book Value of Equity

2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
6.7	6.6	6.6	6.4	5.0	4.5	6.7	5.6	4.2	3.4

Mean of all the years:-5.6

An examination of the results of year-wise comparison of market value of equity to its book value of companies paying highest and regular dividend in India shows that the mean market value of equity relative to book value is well above 3 for all the years under study as

well as for pooled years. It has been ranging from minimum of 3.4 in 2004 to 6.7 in 2013 & 2007 with overall mean of 5.6 for all the years. This shows that the market value is well above the book value for the companies which pay regular dividend.

8.2. Relationship between Dividend Policy and Shareholders' Wealth:-

Dependent variable:-Market value of Share

Independent Variables	Regression Model			
	1	2	3	4
Intercept	3.9	3.25	2.17	0.91
Dividend per share(DPS)	0.9	0.51	-0.04	0.24
Earnings per Share (EPS)		0.44	2.13	1.37
Retained Earnings (RE)			-1.16	-0.61
Price Earnings Ratio (PER)				0.53
R Square	0.5	0.57	0.6	0.7
Adjusted R Square	0.49	0.55	0.57	0.67
F Value	43.59	27.46	20.43	23.06
Degrees Of Freedom	1,42	2,41	3,40	4,39

The impact of dividend policy on shareholders' wealth of Indian companies with adoption of dividend policy has been elicited using multiple regression analysis. The Dividend per share (DPS) has been used as proxy for measuring the dividend policy of the companies and Market value (MV) of equity of the companies under study is considered as proxy for measuring the shareholders' wealth and used as dependent Table shows the regression results for all selected companies in India with regard to impact of initiating dividend payout on

variable. Apart from DPS, Retained earnings (RE), Price-Earnings Ratio (PER) and Earnings per Share (EPS) are also used as explanatory variables in order to know whether dividend policy of companies are dominated by these factors in influencing the creation of shareholders' wealth.

shareholders' wealth. Perusal of the results indicates that the fit of all four models is

significant at 5 per cent level (F = 43.59, p < 0.05 for model 1, F =27.46,

p < 0.05 for model 2, F = 20.43, p < 0.05 for model 3 and F = 23.06, p < 0.05 for model 4). Among the four models, F value for model 1 is very high. Further, the coefficients of DPS in all four models are highly significant at 5 per cent level and positive in sign except for model 3 where coefficient of DPS is negative.

Regression results clearly shows that retained earnings have negative relationship with wealth creation. There are two more variables which plays crucial role in wealth creation; they are price earnings ratio & earning per share.

Also, from the perusal of adjusted R2 values, it is clear that the explanatory variables in the model 4 could together explain 67 per cent of the variance in market value, whereas explanatory variables in model 1, 2 and 3 could, together, explain 49 per cent, 55 per cent and 57 per cent respectively of the variance in dependent variable. Interestingly, the coefficient of DPS in model 4, though statistically significant, has declined considerably in the presence of RE, EPS & PER.

In Model 1 in absence of other variables DPS is alone explaining 50 percent of variation with Coefficient of .9. But as we keep on adding other variables coefficient of DPS has declined drastically and even it become negative in model 3 in presence of Retained earnings & earning per share.

So, from above discussion we can say that DPS affects the wealth creation of share holders but it is not the only variable which decides the wealth creation. Apart from DPS there are some other variables such as retained earnings, Earning per share & price earnings ratio.

9. Summary and Concluding Remarks

This study attempts to answer the question: Is there any Impact of Dividend Policy on Shareholders' Wealth? The main purpose of the study is to shed some light on the above association. To test the relationship between the dividend policy and the shareholders' wealth, first the average wealth of investors (shareholders) is compared between book value and market value of share.

The highest dividend paying company which regularly paid dividend for seven years or >7 years during the study period (2004 –2014) is

treated as regular dividend paying company and it is found that there is significant high market value of the shares as compared to their book value.

The dependent variable i.e. Market price of share (MV) is considered as proxy for measuring the shareholders' wealth and an independent variable, Dividend per share (DPS) has been used as proxy for measuring the dividend policy of the firm. Apart from that Retained Earnings (RE),

Price-earning ratio (PER) and Earning per share are also used as explanatory variables. The Multiple regression technique and stepwise regression methods have been used to ascertain the best fitted model for predicting the dividend policy and shareholders' wealth. Generally, higher dividend increases the market value of the share and vice versa. Shareholders prefer current dividend to future income. So, dividend is considered as an important factor which determines the shareholders' wealth. This is normally true in case of salaried individuals, retired pensioners and others with limited incomes. Dividend has information content and the payment of dividend indicates that the company has a good earning capacity.

The wealth of the shareholders is greatly influenced by other variables also, viz. Growth in Sales, Improvement of Profit Margin, Capital Investment Decisions (both working capital and fixed capital), Capital Structure Decisions, Cost of Capital (Dividend on Equity, Interest on Debt) etc.

As far as the dividend paying companies are concerned, there is an impact of dividend policy on shareholders' wealth but there are some other variables which affect shareholder's wealth.

References

Bhalla.V.K, 1997. Financial Management and Policy

Khan M.Y and Jain.P.K, 1992. Financial Management: Text and Problems

Prasanna Chandra, 1997, Financial Management: Theory & Practice

Frankfurter, M, Georgeand Wood Bob, G(2003), "Dividend Policy Theory and Practice", Academic Press.

Tahir A., S. R. Sarfarz Raja N., (2014), Impact of Dividend Policy on Shareholder Wealth, IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 1. Ver. V (Feb. 2014), PP 24-33.

Azhagaiah, R., Priya, S., (2008). "The Impact of Dividend Policy on Shareholders' Wealth". International Research Journal of Finance and Economics. ISSN 1450-2887 Issue 20.

Miller, M.H. and Modigliani, F. (1961), "Dividend policy, growth, and the valuation of shares", Journal of Business, Vol. 34, pp. 411-33

*P. PRAVEEN KUMAR **DR. R. KASILINGAM

Abstract

The most important strategy used by the corporate firms is mergers. There are many types of mergers from the perspective of business structure. This study concentrates on the most popular types of mergers such as horizontal mergers, conglomerate mergers, vertical mergers, reverse mergers, downstream mergers and upstream mergers. This study analyses the investors' preference towards different types of mergers. The present study is based on primary data. The statistical tools of simple mean, cluster analysis, discriminant analysis, chi-square test, correspondence analysis, ANOVA, post-hoc analysis and canonical correlation have been used in this study. This study finds that the investors prefer to purchase shares of that company, which is merging with a company in different industry group. This study also finds that the profile characteristics of education, family members, savings and period of investments are casting the maximum influence on investors' preference towards type of merger.

Keywords: Horizontal mergers, conglomerate mergers, vertical mergers, reverse mergers, downstream mergers, upstream mergers.

Introduction

Business entities may formulate attacking and defensive strategies to tide over their competitors and shine distinctly in the market. Entities are in need of effective strategies to solve their immediate and routine problems and challenges. The most important attacking and defensive strategy used by the business entities is mergers. Mergers may be of various kinds such as horizontal. vertical. conglomerate, downstream, upstream and reverse mergers. Merger deal between two or more entities engaged in similar business is termed as "Horizontal Mergers". Companies engaged in same business may feel it effective to join together to avoid competition among themselves and strike a horizontal merger deal. Merger deals effected between companies which are complementary to each other is referred to as "Vertical Merger". A company may engage in merger deal with those companies which are a stakeholder in its supply chain to minimise cost of its final product.

Merger deals effected between two or more corporate entities which are totally unrelated is referred to as "Conglomerate Mergers". This type of merger may be used by companies aspiring to venture into a market which is totally new and unrelated. This merger deal will have no impact on competition element prevalent in the market in which the companies to the merger deal are operating. In downstream merger process, the holding company merges into its subsidiary companies. In case of upstream mergers, a subsidiary company merges into its parent company. Merger deal struck between companies with strong and weak financial position is termed as "Reverse Mergers". Since this merger deal involves sick units, regulations of BIFR have to be complied with by companies engaging in this sort of merger deals. Investors preference towards these mergers have been analysed in this study.

Review of Literature

Weber & Tarba (2011) have studied the case of acquisition deal struck between FAST, a German company, and Aladdin, an Israeli firm using qualitative research technique. The study elaborates the influence of process on M&A performance.

O'Regan & Ghobadian (2010) conducted an interview with Paul Walsh, CEO of Diageo plc to explore strategic issues which influences competitiveness of the organization. The study has thrown light on key attributes relating to the success of mergers.

Kumar (2009)examined the performance operating of acquiring companies during three years before and after the striking of domestic merger deals by 30 private sector undertakings during 1999-2002. The study used the variables of ROCE, assets turnover ratio and debt-equity ratio. The study revealed that mergers have not cast any influence on operating performance of the companies.

Tse & Soufani (2001) have studied the effect of M&A on wealth of shareholders of UK by analyzing 123 deals which were struck during 1990 to 1996. The

study adopted event study methodology and event window period considered was 12 days before and 3 days after deal announcements (-12 and +3 days).

The study found that there is a significant relationship between shareholders wealth and prevailing economic conditions.

Corhay & Rad (2000) have studied the impact of international acquisitions on wealth of shareholders by comparing acquisition deals by Dutch firms in the US, Western and Eastern Europe, struck during 1/1/1990 to 31/12/1996. The study applied market model and used 240 and 41 days before the date of announcement (-240 and -41) as the estimation period. Furthermore, the study endeavoured to regress CAR against the variables of foreign, industry and size. This study has found weak evidence to the point that international acquisition deals create wealth for shareholders.

Research Methodology

This study tries to find out the investors preference towards different types of mergers. Hence, this study is descriptive

in nature. This study is based on primary data. Primary data has been collected from 513 equity investors in Puducherry and Chennai by administering a well-structured interview schedule. The sampling procedure

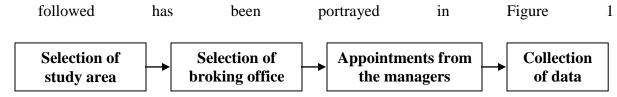


Fig. 1: Sampling Process

The statistical tools of simple mean, cluster analysis, discriminant analysis, chi-square test, correspondence analysis, ANOVA, post-hoc analysis and canonical correlation have been used in this study. The statistical software and packages such as Microsoft Excel, SPSS 19 and STATA 10 have been utilised to perform the statistical analysis.

Investors Preference towards Types of Merger

Investors' preference towards different types of mergers have been obtained on Likert's five-point scale and the results have been displayed in Table 1

Table 1: Mean Analysis and Rank Scores

S. No.	Types of Mergers	Mean	Rank
1.	I will purchase the shares of the company which is merging with another company in the same industry group (Horizontal merger)	3.24	2
2.	I will purchase the shares of the company which is merging with a company in different industry group (Conglomerate merger)	3.39	1
3.	I will prefer to purchase the shares of the company which is merging with the supplier company (Vertical merger)	3.2	4
4.	I will prefer to purchase the shares of the company which amalgamates with the financially weak company (Reverse merger)	2.87	6

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014., ppkmessages@gmail.com

5.	I am interested to purchase the shares when the parent company merges into its subsidiary company (Downstream merger)	3.24	3
6.	I am interested to purchase the shares when the subsidiary company merges into its parent company (Upstream merger)	3.2	4

It can be inferred from Table 1 that investors attach paramount preference to conglomerate merger (mean of 3.39) followed by horizontal merger (3.24), downstream merger (3.24), vertical merger (3.2), upstream merger (3.2) and reverse merger (2.87). Hence, it can be said that investors are interested to invest in companies which are striking merger deals with companies of totally unrelated industry while they are least interested on companies acquiring financially weaker companies.

Segmentation of Investors

Preference towards different types of mergers will vary among investors. Some investors will prefer conglomerate mergers while some others may not prefer such type of mergers. It is necessary to group investors based on their preference towards types of mergers. K-means cluster analysis has been conducted to classify investors according to the type of merger preferred by them and the results have been portrayed in Table 2.

Table 2: Final Cluster Centers and ANOVA

	Final	Final Cluster Centers			VA
	1	1 2 3		F	Sig.
Horizontal merger	4	4	2	127.546	0.000
Conglomerate merger	2	4	4	748.113	0.000
Vertical merger	3	2	4	239.862	0.000
Reverse merger	3	3	2	22.498	0.000
Downstream merger	3	3	4	18.757	0.000
Upstream merger	3	3	3	7.929	0.000
Cases	195	139	179		

It can be inferred from Table 2 that the investors have been grouped into three clusters. The first group has been designated as "Horizontal merger" because the mean in respect of horizontal merger for this cluster is four. This cluster encompasses 195 investors. The second group has been branded as "Conglomerate merger" because

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

the mean in respect of conglomerate merger for this cluster is four. This cluster engulfs 139 investors. The third group has been labeled as "Vertical and downstream

The value in respect conglomerate merger is the highest (748.113), followed by vertical merger (239.862), horizontal merger (127.546), (22.498),merger downstream reverse merger (18.757) and upstream merger (7.929). All these F values are significant at one percent level. Hence, all the factors contribute to the process of segmentation of the investors.

merger" because the mean in respect of vertical and downstream merger for this cluster is four. This cluster contains 179 investors.

Reliability of Segmentation

Discriminant analysis has been utilized to verify the consistency of segmentation. The factors of horizontal merger, conglomerate merger, vertical merger, reverse merger, downstream merger and upstream merger have been considered as independent variables while cluster membership scores of investors preference towards type of mergers has been considered as grouping variable and the results have been portrayed in Table 3.

Table 3: Eigen Values and Wilks' Lambda

Function	Function Eigenvalue		Wilks' Lambda	Chi- square	Sig.
1	3.695	Correlation 0.887	0.074	1323.945	0.000
2	1.893	0.809	0.346	539.101	0.000

Discriminant analysis explores two functions. Function one has highest Eigen value of 3.695 and it conveys maximum spread of group means while function two has Eigen value of 1.893. Both the Eigen values are in excess of one. Canonical

correlation value of function one is 0.887 and that of function two is 0.809. Hence, it can be said that higher degree of relationship exist between items related to types of mergers and the two functions. Both the functions are having two different Wilks'

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014., ppkmessages@gmail.com

Associate Professor, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014, kasimeena@gmail.com Page 10

lambda values. This implies that the two functions differ from each other. The values are significant at one percent level. Hence, it is confirmed that the segmentation process has been done with good degree of reliability.

	Fun	ction
	1	2
Conglomerate merger	0.887^{*}	0.116
Downstream merger	0.141^{*}	0.004
Upstream merger	0.079^{*}	-0.066
Vertical merger	0.011	-0.705*

-0.272

-0.070

0.346

 0.192°

Table 4: Structure Matrix

Table 4 displays standardized beta values of each item. Beta value explains characteristics of population. The two functions formed are

Horizontal merger

Reverse merger

Z1 = 0.887 * Conglomerate merger + 0.141 * Downstream merger + 0.079 * Upstream merger Z2 = -0.705 * Vertical merger + 0.346 * Horizontal merger + 0.192 * Reverse merger

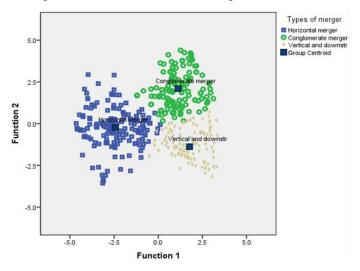


Fig. 2: Group Centroids

Figure 2 displays group centroids of "vertical and downstream merger", "horizontal merger" and "conglomerate merger". It may be observed that the three

group centroids are located at different places, certifying that the investors have been correctly aligned in the groups.

Table 5: Extent of Correct Classification

		Pred	Predicted Group Membership				
	Preference towards Types of Merger	Horizontal merger	Conglomerate merger Vertical and downstream merger		Total		
	Horizontal merger	191	1	3	195		
Count	Conglomerate merger	3	135	1	139		
Count	Vertical and downstream merger	1	1	177	179		
	Horizontal merger	97.9	0.5	1.5	100.0		
0/2	Conglomerate merger	2.2	97.1	0.7	100.0		
%	Vertical and downstream merger	0.6	0.6	98.9	100.0		

Table 5 displays that 177 investors out of 179 investors i.e., 98.9 percent are correctly grouped under "vertical and downstream merger" while 97.9 percent of the investors have been correctly classified under "horizontal merger" and 97.1 percent

of the investors have been properly classified under "conglomerate merger". Hence, the degree of classification has been executed with excellent degree of precision.

Relationship between Profile of Investors and Preference towards Types of Merger

Relationship between profile of investors and their preference towards different types of merger has been analysed

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

using chi-square test, ANOVA and independent samples t-test. Table 6 displays

results of chi-square analysis.

Table 6: Association between Personal Profile and Preference towards Types of Merger

	Preference towards		
	Types of Merger		
	Value	Sig.	
Gender	.028	0.986	
Age	2.011	0.919	
Educational qualification	7.836	0.450	
Occupation	15.669	0.334	
Monthly income	15.620	0.048	
Family members	23.234	0.003	
Dependents	17.866	0.057	
Income earning members	6.386	0.381	
Family members in share market	7.332	0.291	
Savings	18.756	0.016	

Table 6 shows that the value of significance in respect of three personal profile variables of monthly income, number of family members and savings are less than

the threshold limit of 0.05, implying that majority of the profile variables lack significant association with the investors' preference to different types of mergers.

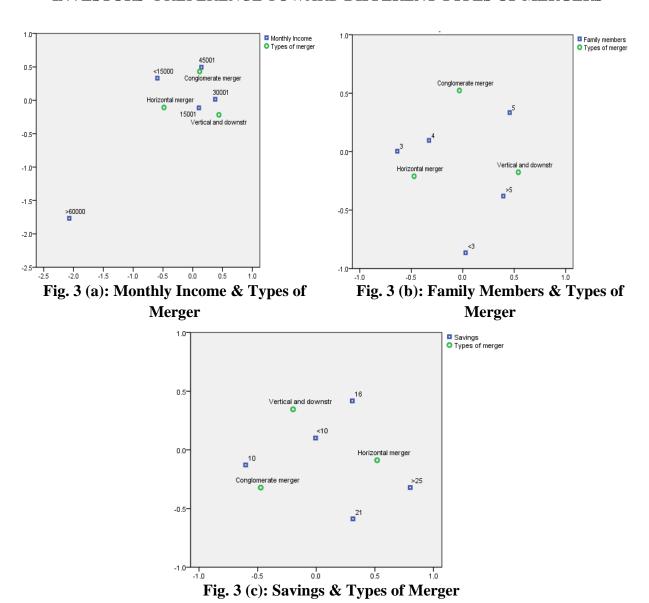


Fig. 3: Association between Personal Profile and Preference towards Types of Merger

Figure 3 displays that investors with savings of 10-15 percent and those with income of Rs. 45,001-60,000 prefer

conglomerate mergers, while those with income of Rs. 30,001-45,000 and those having more than five family members

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

prefer vertical and downstream merger. Hence, income of investors is largely

associated with their preference to the different types of mergers.

Those profile variables with insignificant values have been tested with ANOVA to explore their relationship with the type of merger preferred by investors and the results have been portrayed in Table 7.

Table 7: Relationship between Personal Profile and Preference towards Types of Merger

	1 F (Sig.)	2 F (Sig.)	3 F (Sig.)	4 F (Sig.)	5 F (Sig.)	6 F (Sig.)
Gender	-0.497	0.944	-0.955	-1.196	-2.555	-0.315
	(0.622)#	(0.352)#	(0.346)#	(0.232)#	(0.015)#	(0.755)#
Age	3.405	0.148	1.397	4.892	4.79	1.366
rige	(0.018)	(0.931)	(0.243)	(0.002)	(0.003)	(0.252)
Educational	2.468	0.255	0.473	2.033	0.46	1.431
qualification	(0.044)	(0.907)	(0.756)	(0.089)	(0.765)	(0.223)
Occupation	0.285	1.093	0.82	1.61	1.665	0.342
Occupation	(0.96)	(0.366)	(0.571)	(0.13)	(0.115)	(0.934)
Dependents	0.207	1.794	2.196	0.457	0.368	0.838
Dependents	(0.96)	(0.112)	(0.053)	(0.808)	(0.87)	(0.523)
Income earning	4.669	0.759	0.365	4.981	1.886	0.748
members	(0.003)	(0.518)	(0.778)	(0.002)	(0.131)	(0.524)
Family members	1.687	0.695	0.104	0.153	0.267	0.667
in share market	(0.169)	(0.555)	(0.958)	(0.928)	(0.849)	(0.573)

indicates t value and its significant level.

1- Horizontal Merger; 2- Conglomerate Merger; 3- Vertical Merger; 4- Reverse Merger

It can be observed from Table 7 that gender, age, educational qualification, number of dependents and number of income earning members in family has significant relationship with the type of mergers preferred by investors. Gender influences investors' preference towards downstream merger while age influences

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

^{; 5-} Downstream Merger; 6- Upstream Merger;

their preference towards horizontal, reverse and downstream merger, educational qualification influences preference towards horizontal merger, number of dependents influences their preference towards vertical merger and the number of income earning members influences their preference of horizontal and reverse merger. Post hoc analysis has been conducted to explore the extent of this influence.

Table 8: Post Hoc Analysis

Educational	Horizont	al Merger	Income Earning	Horizontal Merger	
Qualification	1	2	Members	1	2
8th STD or less	2.25		3	3.02	
SSLC	2.75	2.75	2	3.07	3.07
HSC	3.08	3.08	1	3.49	3.49
Graduate	3.23	3.23	>3		3.73
Professional		3.48			

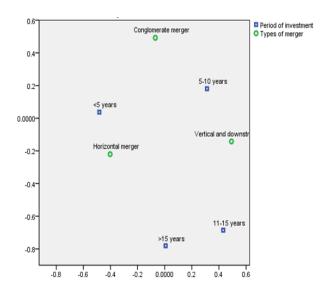
Table 8 shows that investors with educational qualification of less than or equal to 8th standard are not preferring

horizontal mergers while those with families of more than three income earning members prefer horizontal merger.

Table 9: Association between Investment-Related Factors and Preference towards Types of Merger

	Preference towards			
	Types of Merger			
	Value Sig.			
Investment avenues	7.996	0.092		
Period of investments	15.418	0.017		
Equity investment avenues	26.729	0.001		
Money in equity	13.173	0.106		

It is observed from Table 9 that the two items of period of investments and equity investment avenues have significance values of less than the threshold limit of 0.05. Hence, there is a weak association between the investment-related factors and investors preference towards types of merger.



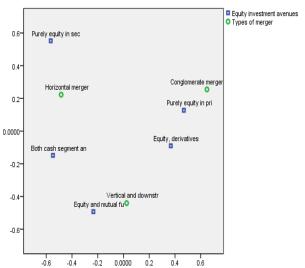


Fig. 4 (a): Period of Investment & Types of Merger

Fig. 4 (b): Equity Investment Avenues & Types of Merger

Fig. 4: Association between Investment-Related Factors and Preference towards Types of Merger

Figure 4 reveals that investors who have invested in equity and mutual funds prefer vertical and downstream merger while investors who have invested in primary and secondary market prefer conglomerate merger.

Table 10: Relationship between Investment-Related Factors and Preference towards Types of Merger

	1	2	3	4	5	6
	F (Sig.)					
Investment	5.43	1.013	0.689	7.53	2.388	1.534
avenues	(0.005)	(0.364)	(0.502)	(0.001)	(0.093)	(0.217)
Money in	0.275	1.526	1.144	1.305	1.471	2.721

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014., ppkmessages@gmail.com

equity	(0.894)	(0.193)	(0.335)	(0.267)	(0.21)	(0.029)
-1	(0.00)	(0,-)	()	(/	()	(0.0-2)

1- Horizontal Merger; 2- Conglomerate Merger; 3- Vertical Merger; 4- Reverse Merger; 5- Downstream Merger; 6- Upstream Merger;

Table 10 displays the investment avenue preferred and proportion of money invested in equity have significance value of less than 0.05. This implies that investment avenue preferred influences investors'

preference towards horizontal merger and reverse merger while proportion of money invested in equity influences investors preference towards upstream merger.

Table 11: Post Hoc Analysis

Investment Avenues	Horiz Mer		Reverse Merger	
	1	2	1	2
Medium financial maturity	3.07		2.69	
High financial maturity	3.08		2.69	
Low financial maturity		3.47		3.11

It can be observed from Table 11 that investors with low financial maturity have high level of preference towards horizontal merger and reverse merger.

Influence of Profile of Investors on Preference towards Types of Mergers

Chi-square test, ANOVA and independent samples t-test have revealed the prevalence of significant relationship between investors preference towards type of mergers and 12 profile related variables such as gender, age, education, monthly income, number of family members, number of dependents, number of income earning members, savings, investment avenues,

period of investments, equity investment avenues and proportion of money invested in equity. Canonical correlation has been applied to explore the most influencing profile variable on the investors preference towards type of mergers. Canonical correlation measures relationship between two sets. Cluster score has been taken as set one while the 12 profile variables have been taken as set two.

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

Table 12: Canonical Correlation

		Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
u1	types	1.170817	.1917023	6.11	0.000	.7941973	1.547437
		21270027					
v1							
	gen	.4832821	.7423476	0.65	0.515	97514	1.941704
	age	4186414	.2861477	-1.46	0.144	9808095	.1435267
	eduq	5609457	.2231382	-2.51	0.012	9993248	1225666
	monin	.4149577	.2478392	1.67	0.095	0719492	.9018647
	fm	.4275295	.1943145	2.20	0.028	.0457777	.8092814
	dep	.0011421	.1692465	0.01	0.995	3313609	.3336451
	incmem	2349804	.2723851	-0.86	0.389	7701103	.3001495
	sav	3383937	.1309128	-2.58	0.010	595586	0812014
	inav	.2516357	.2494021	1.01	0.313	2383417	.741613
	per	.6079345	.2375071	2.56	0.011	.1413261	1.074543
	equin	.1342413	.1287536	1.04	0.298	1187091	.3871917
	mone	3676994	.2550413	-1.44	0.150	8687556	.1333569

Canonical correlations: 0.2608

(Standard errors estimated conditionally)

Tests of significance of all canonical correlations

reses or organization	a ca				
Wilks' lambda Pillai's trace Lawley-Hotelling trace Roy's largest root	Statistic .931969 .0680306 .0729966 .0729966	df1 12 12 12 12	df2 500 500 500 500	3.0415 3.0415 3.0415 3.0415 3.0415	Prob>F 0.0004 e 0.0004 e 0.0004 e 0.0004 e

e = exact, a = approximate, u = upper bound on F

Table 12 shows canonical correlation value of 26 percent. Canonical correlation is significant at one percent level. Hence, significant relationship exists between the two sets. It can be further inferred from the table that education, family members, savings and period of investments influences investors preference towards the type of

mergers as the significance values in respect of all these variables is less than the 0.05

mark. Furthermore, it can be observed that both the personal and investment-related variables influence investors' preference towards the type of mergers.

Conclusion

Ph.D. Research Scholar, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014. , ppkmessages@gmail.com

Investors prefer to invest in shares of companies striking merger deals with companies in unrelated industry while they accord least preference to merger deals with target companies which have weak financial position. Based on their preference, the investors have been grouped into three groups of horizontal merger, conglomerate merger and vertical and downstream merger.

Existence of significant relationship between investors preference towards type of mergers and their profile characteristics of gender, age, education, monthly income, number of family members, number of dependents, number of income earning members, savings, investment avenues, period of investments, equity investment avenues and proportion of money invested in equity has been established. Education, family members, savings and period of investments are the profile characteristics which cast the maximum influence on investors' preference towards type of merger

.

References

- 1. Aziz, N. A. A. (2013). Managing corporate risk and achieving internal control through statutory compliance. *Journal of Financial Crime*, 20(1), 25–38.
- 2. Bae, A. K., Kang, J., & Kim, J. (2002). Tunneling or Value Added? Evidence from Mergers by Korean Business Groups, *The Journal of Finance*, *57*(6), 2695–2740.
- 3. Brady, J. (1996). The future of marketing: old age or second adolescence? *Journal of Marketing Practice: Applied Marketing Science*, 2(4), 7–10.
- 4. Braun, M., & Latham, S. (2012). Pulling off the comeback: shrink, expand, neither, both? *Journal of Business Strategy*, *33*(3), 13–21.
- 5. Corhay, A., & Rad, A. T. (2000). International acquisitions and shareholder wealth Evidence from the Netherlands. *International Review of Financial Analysis*, 9(2), 163–174.
- 6. Cosco, J. (1995). Down to the sea in ships. *Journal of Business Strategy*, 16(6), 48–50.
- 7. Kumar, R. (2009). Post-merger corporate performance: an Indian perspective. *Management Research News*, 32(2), 145–157.
- 8. O'Regan, N., & Ghobadian, A. (2010). Creating a world class business through a merger of two equals: An interview with Paul Walsh, Chief Executive Officer of Diageo plc. *Journal of Strategy and Management*, 3(3), 285–298.
- 9. Tse, T., & Soufani, K. (2001). Wealth Effects of Takeovers in Merger Activity Eras: Empirical Evidence from the UK. *International Journal of the Economics of Business*, 8(3), 365–377.
- 10. Weber, Y., & Tarba, S. (2011). Exploring integration approach in related mergers: Post-merger integration in the high-tech industry. *International Journal of Organizational Analysis*, 19(3), 202–221.

DR. ARUN KANT GAUTAM

ABSTRACT

A disaster is a natural or man-made hazard that has come to fruition, resulting in an event of substantial extent causing significant physical damage or destruction, loss of life, or drastic change to the environment. Disaster can be classified as natural disaster and man-made disaster. The objective of management of 'management' was to acquire the new comers to the then establishing industrial life. The term management is as old as human civilization. The stone-age man managed many things like kindling of fire from flint stone, obtaining his prey with collective efforts etc. Thus, we can say that, the systematic approach for the study of the subject 'management' came very late but the concept was there since the history of life. In Bharat (India) the concept of management persists since Vedic period. Life cycle of crisis management can be broadly divided in three phases – pre crisis, during crisis and post- crisis. Sustainable development preparedness can reduce hazard. There is need to link disaster management and development plans. In ancient times the world disasters were considered as the result of astrological or supernatural forces. Eight types of natural calamities are mentioned as fire (agni), flood (udaka), epidemics (vyadhi), famine (durbhiksa), rats (musaka), beasts (vyala), snakes (sarpa) and demons (raksamsi). There is no control over the natural (Daivam) disasters. Apart from war and the agitations no man made (manusam vyasana) disasters exist. In present time India is highly prone to natural disasters, and the country has experienced very severe natural disasters at regular intervals. Among the various types of natural and man made disasters affecting different parts of the country, floods, cyclones, earthquakes, droughts and climate change, accidents, terrorism etc. cause maximum damage to life and property at regular intervals. At central level, an administrative ministry has been identified as nodal agency for each disaster to coordinate the activities of disaster management operations at different levels. A typical Disaster Management continuum comprises six elements; the pre-

disaster phase includes prevention, mitigation and preparedness, while the post disaster phase includes response, rehabilitation, reconstruction and recovery.

INTRODUCTION

The word disaster of any kind causes fear, anxiety, nervousness in the minds of the people and hence it is essential to understand the disaster and its underlying causes as well as how to deal with it. Disaster whether natural or man-made are causing a great loss sorts of life-Human beings, animals, plants, and resourcesbuildings, infrastructure and above all cause psychologycal problems. Disasters are increasing with the material civilization, move to urbanization, industrilization greed. With this new cult, even natural disasters are occuring because of disturbances in natural disasters are occuring by the greed and lust of human beings to exploit natural resources to get rich quickly. Disaster is defined as: "A serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of the

affected society to cope using its own resources."

The United Nations defines disaster as "The occurrence of a sudden or major misfortune which disrupts the basic fabric and normal functioning of a society (or community)."

Disaster is sometimes also used to describe a "catastrophic situation in which the normal patterns of life (or eco-systems) have been disrupted and extraordinary emergency interventions are required to save and preserve human lives and/or the environment."

"Disasters of all types e.g. earthquakes, floods, accidents, cloud bursts, cyclones, etc. have been occuring since time immemorial. However, their frequency, magnitude and area have been increased many times in all pasts of the world, in recent times. While natural disaster cannot be controlled with the available advanced knowledge of

science and technology, many other disaster are the result of wrong developments or planning in all spheres, be it constructionof dams, buildings, factories roads, industries. We are in a great hurry to accelerate the process development. But with what result and at what cost? We must also be aware of the of the greater disaster series awaiting us like AIDS, Accidents. Violence. corruption, fruads, cheating,etc what has been the result of all these disasters? These have resulted in loss of life, half dead living persons, hunger, poverty, unemployment, disease, etc. These are the scares on the face of humanity in this age of nuclear science and information technology. India. a country with diverse hypsographic and climatological conditions, 70 per cent of the cultivable land is prone to drought, 60 per cent of land area is prone to Earthquake, 12 per cent to Floods, 8 per cent to Cyclones, 85 per cent of the land area is vulnerable to number

of natural hazards and 22 States are categorized as multi hazards States.

Natural Disaster

A natural disaster is a consequence when a natural hazard (e.g., volcanic eruption or earthquake) affects humans and/or the built environment. Human vulnerability, and often a appropriate emergency management, leads to financial, environmental, or human impact. The resulting loss depends on the capacity of the population to support or resist the disaster: their resilence. This understanding is concentrated in formulation: "disaster occur when hazards meet vulnerability." A natural hazard will hence never result in a natural disaster in areas without vulnerability, strong e.g., earthquakes in uninhabited areas.

Man- Made Disaster

Various disasters like earthquakes, landslides, volcanic eruptions, floods and cyclones are natural hazards that kill thousands of people and destroy billions of dollars of habitat aqud property each year. The rapid growth of the the world's population and its

increased concentration often in hazardous environment has escalated both the frequency and severity of natural disasters. While the tropical make the disaster-prone areas more vulnerable, tardy communication, poor or no budgetary allocation for disaster prevention, developing countries suffer more less or chronically due to natural disaster.

Disasters and their management generally get discussed in their prolonged life-threatening for environment a community. Disaster Management requires multidisciplinary and pro-active approach. Besides various measures for putting in place institutional and policy framework, disaster prevention, mitigation and preparedness measures enunciated in this paper and initiatives being taken by the Central and State Governments, the community, civil society organizations and media also have a key role to play in achieving our goal of moving together, towards a safer India. The message being put across

climate and unstable land forms. coupled with defrestration. unplanned growth proliferation nonengineered constructions which aftermath but practically it should result in planning and preparing the strategy to tackle and mitigate disasters in a responsible and effective manner. Disasters, both natural and unnatural, are macro level events or processes, which induce disturbances and turmoil for a is that in order to move towards safer and sustainable national development, development projects should be sensitive towards disaster mitigation.

India is highly prone to natural disasters. and the country experienced very severe natural disasters at regular intervals. Among the various types of natural disasters affecting different parts of the country, floods, cyclones, earthquakes and droughts cause maximum damage to life and property at regular intervals. The Latur earthquakes of 1993, the Orissa

super cyclone of 1999, the Bhuj earthquake of 2001, and the Tsunami of December 2004, Kashmir Earthquake of 2005, Mumbai Floods of 2005, Uttarakhand Cloud Burst 2013 are some of the most severe natural disasters that have struck the country in the recent past.

For this reason, community should be more conscious about prevention culture mitigation. They should be involved in post disaster recovery and reconstruction process for facing the future disasters and mitigate.

Disaster Management Act 2005 defines Disaster management as: "Disaster" means a catastrophe, mishap, calamity or grave occurance in any area, arising from natural or man-made causes, or by accident or negligence which results substantial loss of life or human suffering damage or to, destruction of, property, or damage to, or magnitude as to be beyond the coping capacity of the community of "disaster the affected area: management" means a continuous and integrated process of planning,

organising, coordinating and implementing measures which are necessary or expedient for-

- 1. Prevention of danger or threat of any disaster;
- 2. Mitigation or reducing of risk of any disaster or its severity or consequences;
- 3. Capacity-building;
- 4. Preparedness to deal with any disaster;
- 5. Prompt response to any threatening disaster situation or disaster;
- 6. Assessing the severity or magnitude of effects of any disaster;
- 7. Evacuation, rescue and relief; and
- 8. Rehabilitation and reconstruction.

OBJECTIVES OF THE STUDY:

The Objectives of the present study are:-

- 1. To know the disasters in India
- 2. To know the types of disasters and its management in India in the ancient time.

- 3. To know the types of disasters and its management in India in present time.
- 4. To analyse the study of disaster management in India from ancient to present.

METHODOLOGY: The study intended to critically analyse the disaster management in India from Ancient to Present time based on secondary data. The data has been collected from manual on natural disaster management in India, and other related research papers, books and published work.

DISASTERS AND ITS MANAGENENT IN INDIA IN ANCIENT TIME

We have seen that in modern times disasters are divided into two - natural and unnatural. Kautilya calls them vyasana. In Sanskrit, the words nipata, pidana, apatti/vipatti and vyasana are used for calamity. Yet, the word vyasana means something which is caused by ill fate. One can correlate this with hazards or natural

calamities. This paper mainly deals with the natural calamities and will conclude with a cursory glance over manmade or unnatural calamities. Following categorized the vyasana, i.e. calamities, into two types

- 1. Daivam i.e. natural disaster
- 2. Manusam i.e. man-made disaster Daivam is indeed a very apt word used by Kautilya long ago. Daivam means that which is divine. Even the western scholars consider it as the act of god. We have already seen the etymology of disaster. Thus, it shows that all over the world disasters were considered as the result ofastrological or supernatural forces. Eight types of daivam or natural calamities are mentioned. They are fire (agni), flood (udaka), epidemics (vyadhi), famine (durbhiksa), rats (musaka), beasts (vyala), snakes (sarpa) and demons (raksamsi).

There is no control over the daivam or natural vyasana. But for manusam vyasana, though misfortune is responsible for them, he equally blames human beings. Thus the calamities fall either by misfortune

or by wrong policies. Let us understand the views of regarding the management of hazard.

FIRE

It is considered as hazard which is caused by meteorological, geological, biological or extraterrestrial condition and believes on the idea, 'prevention is better than cure', thus preventive methods are discussed in the chapter 'rules of the city'.

Preventive Measures

In summer cooking should be done outside homes or under supervision of ten families collectively or being protected by ten fire fighting implements.

- The roofs which are made up of grass or mats should be removed.
- Those who make use of fire in their profession should stay at one place.
- House owners should live near the front doors of their own houses, without gathering at one place.

Collection of water jars should be placed in thousands on roads and at crossroads, gatesand in royal offices.

In society, very few people are concerned with the calamities that fall on the nation. It is a general tendency to avoid one's own responsibility as a citizen; hence punishments for not serving in such conditions are imposed in the Arthasastra.

Punishments

- ❖ For the owner, not running to save the house on fire, the fine is twelve panas (it's a silver coin with ¼ part copper in it) and six panas for the tenant.
- In case fire is caused by negligence, the fine is fifty-four panas and the incendiary should be put to death by fire.
- ❖ In case of fire, if aid in the form of five jars or one big jar of water, a trough (drona), a ladder, an axe, a winnowingbasket, a hook, a hair-seizer and a skin bag (pakhal), these

things are not provided then the punishment is one quarter of a pana.

The incendiary should be put to death by fire.

WATER

In all the calamities tried to establish the comparative importance of the calamities based on the loss caused by them. In both the calamities, i.e. fire and water, water is the worst because fire may destroys half or one village, while flood affects many villages.

Preventive Measures

- In rainy season, Villagers situated near water should live away from the level of the floods.
- They should keep a collection of wooden planks, bamboos and boats.
- They should rescue a person being carried away by the flood by means of gourds, skin-bags, canoes, tree-stems and rope braids.

Punishment

Those who do not go to the rescue, the fine is twelve panas, except in case of those without canoes.

DISEASE

Preventive Measures

- Magicians and others should counteract with secret means
- Physicians with medicines and holy ascetics with pacificatory and expiatory rites.
- The rite called as Nirajana is to be performed of shades and the belongings of animals.
- Particular deities are to be worshiped.

Nirajana is a religious ceremony where light is waved around the deity. In modern period it is famous as Arti. It is also considered as the lustration of arms. It is performed by a king or general in the month of Asvina. But etymologically the word Nirajana is - Nira means 'water' and Ajana means 'touch'. Thus, it must

have been the actual purification or cleansing of the place, person or object etc. but afterwards its religious side that is mainly waving the lamp must have become important.

FAMINE

Between famine and disease, Kautilya opines that disease affects only one region and remedies can be found for it, while famine afflicts the whole country and leads to absence of livelihood for living beings which creates loss of the entire society.

Preventive Measures

- should make a store of seeds and food stuff and show favour to the subjects, institute the building of forts or water works such as constructing dams etc. with the grant of food, he should share his provisions with subjects or entrust the country to another king.
- Should seek shelter with allies or cause migration of people in that region where crops have

- grown, or settle along the sea, lakes or tanks.
- King should start sowings of grains, vegetables, roots and fruits along the water works or hunt deer, beast, birds, wild animals and fish.

RATS

Managing rats or mice may appear strange. From ancient period, Bharata predominantly was anagricultural country. Naturally, rats or mice were considered as the greatest enemies. Mice were not only enemies in ancient time but also in modern period. Mice are really very serious problem faced by many countries even today. They decimate food on a large scale and are also responsible for diseases like plague, leptospirosis etc. We can see one terrified example of condition created by rat.

On 23 June 2010, China faced a problem of rats. The river Yangtze got flooded on that day. The water level rose in Dangling Lake. The flood flushed out rat holes around the lake triggering a literal rat race. Tan

Lulu, one of the employees of National Geographic News from WWF reported, "There are so many rats that you can kill three of them with one (strike). The report also mentioned the destruction caused by rats. According to that, rats have ravaged at least four million acres (1.6 million hectare) of farmland by eating roots and steams of trees.

Preventive Measures

- Cats and mongoose should be let loose.
- For catching or killing them, fine is twelve panas, also for not restraining dogs, except in case of foresters.
- Grains should be strewed smeared with the mild of snuhiplants or mixed with secret mixture.
- Tax should be instituted on rats.
- Same measures are suggested for locusts, insects and birds etc.

WILD ANIMALS

Preventive Measures

- Carcasses of cattle mixed with a stupefying liquid or intestines of cattle filled with madankodrava (stupefying medicine).
- Fowlers or hunters should dig pits and place cages.
- Armoured men, with weapons in hands should kill wild animals.
- Incentive is suggested for those who will kill wild animals.

Punishment

For one not going forth to help, the fine shall be twelve panas. The same shall be the reward for the one slaying a wild animal.

SNAKES

Preventive measures

- Experts in poison cure should act with charms and medicines.
- Persons coming together should kill snakes.

EVIL SPIRITS

Experts in Atharvaveda or in practices of magic should perform rites for destroying evil spirits.

MAN MADE (MANUSAMA) DISASTER

In ancient period apart from war and the agitation of subjects, other human disasters did not exist. In Vyasanadhikarikam, the topic which deals with calamities, that has broadly divided human calamities into two catagories

- 1. Internal agitation
- 2. External agitation

Preventive measures

To prevent this, king should use force against the citizens.

DISASTERS AND ITS MANAGEMENT IN INDIA IN PRESENT TIME

The Indian subcontinent is among the world's most disaster prone areas. Almost 85% of India's area is vulnerable to one or multiple hazard.

Of the 28 states and 7 union territories, 22 are disaster-prone.

It is vulnerable to wind storms spawned in the Bay of Bengal and the Arabian Sea, earthquakes caused by active crustal movement in the Himalayan mountains, floods brought by monsoons, and droughts in the country's arid and semi-arid areas. Almost 57% of the land is vulnerable to earthquake (high seismic zones Ill-V), 68% to drought, 8% to cyclones and 12% to floods. India has also become much more vulnerable to tsunamis since the 2004 Indian Ocean tsunami.

EARTHQUAKES:

Of the earthquake-prone areas, 12% is prone to very severe earthquakes, 18% to severe earthquakes and 25% to damageable earthquakes. The biggest quakes occur in the Andaman and Nicobar Islands, Kutch, Himachal and the North-East. The Himalayan regions are particularly prone to earthquakes.

The last two major earthquakes shook Gujarat in January 2001 and Jammu and Kashmir in October

Page 32

2005. Many smaller-scale quakes occurred in other parts of India in 2006. All 7 North East states of India Arunachal Assam, Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya; Andaman & Nicobar Islands; and parts of 6 other in the North/North-West (Jammu and Kashmir, Uttaranchal, and Bihar) and West (Gujarat), are in Seismic Zone V.

FLOODS:

About 30 million people are affected annually. Floods in the Indo-Gangetic-Brahmaputra plains are an annual feature. On an average, a few hundred lives are lost, millions are rendered homeless and several hectares of crops are damaged every year.

Nearly 75% of the total rainfall occurs over a short monsoon season (June – September). 40 million hectares, or 12% of Indian land, is considered prone to floods. Floods are a perennial phenomenon in at least 5 states – Assam, Bihar, Orissa, Uttar Pradesh and West Bengal.

On account of climate change, floods have also occurred in recent years in areas that are normally not flood prone. In 2006, drought prone parts of Rajasthan experienced floods.

DROUGHTS:

About 50 million people are affected annually by drought. Of approximately 90 million hectares of rain-fed areas, about 40 million hectares are prone to scanty or no rain. Rainfall is poor in nine meteorological subdivisions out of 36 subdivision (each meteorological sub division covers a geographic area of more than ten revenue districts in India).

In India annually 33% area receive rainfall less than 750 mm (low rainfall area) and 35% area receive between 750 to 1125 mm rainfall Medium rainfall) and only 32 percent falls in the high rainfall (>1126 mm) zone.

CYCLONES:

About 8% of the land is vulnerable to cyclones of which coastal areas

Page 33

experience two or three tropical cyclones of varying intensity each year. Cyclonic activities on the east coast are more severe than on the west coast.

The Indian continent is considered to be the worst cyclone-affected part of the world, as a result of low-depth ocean bed topography and coastal configuration. The principal threats from a cyclone are in the form of gales and strong winds; torrential rain and high tidal waves/storm surges.

Most casualties are caused due to coastal inundation by tidal waves and storm surges. Cyclones typically strike the East Coast of India, along the Bay of Bengal, i.e. the states of West Bengal, Orissa, Andhra Pradesh and Tamil Nadu, but also parts of Maharashtra and Gujarat at the Arabian Sea West Coast.

LANDSLIDES:

Landslides occur in the hilly regions

such as the Himalayas, North-East

India, the Nilgiris, and Eastern and Western Ghats. Landslides in India are another recurrent phenomenon. Landslide-prone areas largely correspond to earthquake-prone areas, i.e. North-west and North-East, where the incidence of landslides is the highest.

COLD WAVES:

Cold waves are recurrent in North India. phenomenon Hundreds if not thousands of people die of cold and related diseases every year, most of them from poor urban areas in northern parts of the country. According to India's Tenth Five Year Plan, natural disasters have affected nearly 6% of the population and 24% of deaths in Asia caused by disasters have occurred in India.

Between 1996 and 2001, 2% of national GDP was lost because of natural disasters, and nearly 12% of Government revenue was spent on relief, rehabilitation and reconstruction during the same period. As per a World Bank study in 2003, natural disasters pose a major

impediment on the path of economic development in India

CLASSIFICATION OF DISASTERS:

The classification of disaster differs as per the criterion of classification. For example, on the basis of their origin, they are classified as natural and

manmade. If we take into account their severity, they may be classified as manor and minor disasters.

However, a high powered committee constituted in Aug. 1999 by the Government of India, under the Chairmanship of J.C. Pant adopted origin as the criterion for the classification of disaster.

fundamental The task of the committee was prepare to comprehensive model plans for disaster management at district, state and national level. The committee has identified 30 disasters and categories them in the following five groups.

1. WATER AND CLIMATE DISASTER:

Such as flood, cyclones, hailstorms,

cloudburst, heat and cold waves, snow avalanches, droughts, sea erosion, thunder and lightning.

2. GEOLOGICAL DISASTER:

Such as landslides and mud flows, earthquakes, mine fires, dam failures and general fires.

3. BIOLOGICAL DISASTER:

Such as epidemics, pest attacks, cattle epidemic and food poisoning.

4. NUCLEAR AND INDUSTRIAL DISASTER:

Such as chemical and industrial disasters and nuclear accidents.

5. ACCIDENTAL DISASTER:

Such as urban and forest fires, oil spill, mine flooding incidents, collapse of huge building structures, bomb blasts, air, road and rail mishaps, boat capsizing and stampede during congregations.

At central level, an administrative ministry has been identified as nodal agency for each disaster to coordinate the activities of disaster management operations at different levels.

A typical Disaster Manangement continuum comprises six elements; pre-disaster the phase includes prevention, mitigation preparedness, while the post disaster phase includes response, rehabilitation, reconstruction and recovery.

NATIONAL DISASTER MANAGEMENT ACT 2005:

National Disaster Management Act, 2005 defines events that cause substantial less of life, prosperity and environment. It read, "Disaster means catastrophe, mishap, calamity occurrence or grave in any area, arising from nature or manmade causes, or by accident or negligence which result in substantial loss of life, of human suffering or damage to, and destruction of property, or damage degradation of environment, and is of such nature or magnitude as to be beyond the coping capacity of the community of affected areas."

About 60 percent of landmass in India is prone to earthquakes of

various intensities, over – 40 million hectares is prone to floods, about 8 percent of the total area is prone to cyclones and 68 percent of area is susceptible to drought.

Disaster management Act, 2005 defines Disaster Management as, a continuous cycle and integrated process of planning, organizing, coordinating and implementing, coordinating and implementing measures which are necessary or expedient for-

- (i) Prevention of danger or threat of any disaster;
- (ii) Mitigation or reduction of risk of any disaster or its severity or consequences;
- (iii) Capacity-building;
- (iv) Preparedness to deal with any disaster;
- (v) Prompt response to any threatening disaster situation or disaster;
- (vi) Assessing the severity or magnitude of effects of any disaster;
- (vii) Evacuation, rescue and relief;

(viii) Rehabilitation and Reconstruction. Disaster Management Amendment Bill, 2006 aims at broadening the meaning of Disaster in Disaster Management Act.

MAIN PROVISIONS OF NATIONAL DISASTER MANAGEMENT ACT, 2005:

The Act provides for three tier mechanism for Disaster Management that includes National Disaster Management Authority, State Disaster Management Authority and District Disaster Management Authority.

National Disaster Management Authority:

Its chairperson is the Prime Minister. Not more than nine other members can be there. Vice Chairpersons is appointed from amongst members by the Chairperson. Executive Committee is chaired by the Secretary of the Ministry entrusted with the work of the Disaster Management.

State Disaster Management Authority:

Its Chairperson is the Chief Minister concerned State Other ofthe members not exceeding eight are there. And in addition, Chairperson of the State Executive Committee (who is Chief Secretary) is also included. Vice Chairperson appointed by Chair persons from amongst members. Chairperson of the State Executive Committee is the Chief Executive Officer. Executive Committee is chaired by the State Chief Secretary.

NATIONAL DISASTER RESPONSE FUND:

To be constituted by the Central Government for emergency response, relief and rehabilitation.

National Disaster Management Fund:

To be constituted by the Central Government for the projects exclusively of mitigation.

Under Constitutional Position, Union List includes:

Atomic Energy, Railways etc. State

List includes – Public Order, Public

Health, Agriculture, Water etc.

Concurrent List includes –

Environment, Social Security, prevention of the extension from one State to another of infectious or contagious diseases, etc.

Through State Legislative Enactments some function has been given to local government also, more so after 73rd and 74th Constitutional Amendment Act.

Union Government:

Supportive role is there in matters of research and development, finances, etc. There is Cabined Committee on Management Act, 2005 provides for the National Disaster Management Authority under Prime Minister's already functional. A committee of Union government looks after issue of financial support from National Calamity contingency Fund.

There is Central Relief Fund.

Biological and Chemical

Emergencies are coordinated by

Cabinet committee on security.

National Crisis Management by

Cabinet Committee on Security.

National Crisis Management committee (NCMC) is headed by the Cabinet Secretary. Union Ministries

looking after disasters are: Ministry of Home Affairs - natural and manmade Disasters: Ministry of Agriculture - Drought, Ministry of Civil Aviation - Air Accidents; Ministry of Railways – Railway Accidents; Ministry of Environment - Chemical Disaster; Ministry of Health _ Biological Disasters; Department of Atomic Energy -Accidents: Nuclear etc. Crisis Management Group (CMG) chaired by Central Relief Commissioner in the Ministry of Home Affairs.

State Government:

Primary responsibility of relief operations is of the States. National Disaster Management Act, 2005 provides for the state Disaster Management Authority under the Chief Minister. At top political level, there is, normally Cabinet Committee on Natural Calamities under the Chief Minister.

There are Crisis Management Committees chaired by the Chief Secretaries. Relief commissioners – functionaries of State Revenue

Page 38

Department are used. They look after issues of Natural Disasters.

They work under Crisis Management committee headed by the Chief Secretary. State Revenue Secretaries also have some responsibilities. Overall responsibility at the District Level, rests with the District Collector/ District magistrate.

District Collector / District Magistrates:

National Disaster Management Act, 2005 provides for the district Disaster Management Authority under his/her chairpersonships (cochairpersons is elected member of local authority). Overall coordination between various departments at district level is achieved.

Under General Financial Rules/Revenue Codes, there are powers to draw money. If there are armed forces units available locally, their assistance can be requested. Coordination with civil society is achieved.

Institutions:

The Disaster Management Act 2005 the has provided legal and institutional framework for disaster management in India at the national, state and district levels. In the federal polity of India the primary responsibility of disaster management vests with the State Governments.

NATIONAL POLICY ON DISASTER MANAGEMENT 2009:

(a) The National Policy on Disaster Management was approved by the Government in November 2009. This comprehensive policy document lays down policies on every aspect of holistic management of disasters in the country.

Salient Features of India's National Policy on Disaster Management: India's National Policy on Disaster Management was approved by the Union Cabinet of India on 22nd October, 2009 with the aim to minimize the losses to lives, livelihoods and property, caused by natural or manmade disasters with a vision to build a safe & Disaster

resilient India by developing a holistic, proactive, integrated, Multi-disaster oriented and technology driven strategy.

With this national Policy in place in India, a holistic and integrated approach will be evolved towards disaster management with emphasis on building strategic partnerships at various levels.

The themes underpinning the policy include Community based Disaster Management, Capacity development in all spheres, Consolidation of past initiatives and best practices and Cooperation with agencies at National and International levels with multi-sectoral synergy.

(b) The Policy is also intended to promote a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education. It encourages mitigation measures based environmental on sustainability.

It seeks to mainstream disaster management into the developmental

planning process and provides for Institutional and Financial arrangements at national, State, and District-levels for Disaster Prevention, Mitigation, Preparedness and Response as it ensures adequate budgeting for disaster mitigation activities in all Ministries and Departments.

- (c) State Policies on Disaster Management % The States of Madhya Pradesh, Gujarat, Kerala have formulated State Disaster Management Policies. Tamil Nadu, Chattisgarh, Uttranchal, Meghalaya, Bihar, Rajasthan, Delhi, Orissa and West Bengal have prepared draft policies.
- (d) State Relief Codes/ DM Codes: Many States have manuals and codes for management of drought, floods etc. Now many states are in the process of changing their State Relief codes into Disaster Management Manuals.

ANALYSIS OF THE STUDY

After analysing the disater management in India fron ancient to present time we found that:

- In the ancient time fire was the first calamity for disaster management, they believe the idea, 'prevention is better than cure' and for preventive measures they follow the rules and if any fails to follow the rules, he/she were
- ♣ punished by imposing fine on him/her in the case of fire incidents but in the present time due to beeter communication system and fire station facility in the country, the fire disaster can be mitigated.
- In the ancient time water was the worst calamity because fire may destroys half or one village, while flood affects many villages. In this case also they take many preventive measures by following the rules and in this case aslo if any person

fails to follow the rules he/ she were punished by imposing fine on him/her but in the present time government has established better communicatiocation system , early warning system and also by awaring the people this disaster can also be mitigated.

- ♣ In the ancient time disease was the disaster but now a
- day due to advancement in the medical science disease is not a disaster.
- ♣ In the ancient time in the case of drought the king take many preventive measures like keeping seeds and food stuff in the store but in the present time government gives the relief in the payment of loan to the farmers in this case.
- ♣ In the ancient time rats, wild animals, snakes and evil spirits were disaster but now a days these are not disaster.

♣ In the present time many other disaster like terrorist attack, e-waste, acciendts, global warming etc. are existing which were not earlier.

SUGGESTIONS

Suggestions for the future directions of the study are:-

- ✓ Encourage and consolidate knowledge network.
- ✓ Mobilize and train disaster volunteers for more effective preparedness, mitigation and response (NSS, NCC, Scouts and Guides, NYK, Civil Defence, Homeguards)
- Increase capacity building leads to faster vulnerability reduction.
- ✓ Learn from best practices in disaster preparedness, mitigation and disaster response.
- ✓ Mobilizing stakeholder participation of Self Help Groups, Women's Groups,

- Youth Groups, Panchayati Raj Institutions.
- ✓ Anticipatory Governance:
 Simulation exercises, Mock
 drill and Scenario Analysis.
- ✓ Indigenous knowledge system and coping practices.
- ✓ Living with Risk: Community

 Based Disaster Risk

 Management.
- ✓ Inclusive, participatory, gender sensitive, child friendly, eco
 - friendly and disabled friendly disaster management.
- ✓ Technology driven but people owned.
- ✓ Knowledge Management:

 Documentation and dissemination of good practices

 Public Private Partnership.

CONCLUSION

Disasters and their management generally get discussed in their aftermath but practically it should result in planning and preparing the strategy to tackle and mitigate disasters in a responsible and

effective manner. Disasters, both natural and unnatural, are macro level events or processes, which induce disturbances and turmoil for a prolonged life-threatening environment for a community. Disaster Management requires multidisciplinary and pro-active approach. Besides various measures for putting in place institutional and policy framework. disaster prevention, mitigation and preparedness measures enunciated in this paper and initiatives being taken by the Central and State Governments, the civil community, society organizations and media also have a key role to play in achieving our goal of moving together, towards a safer India. The message being put across is that in order to move towards safer sustainable and national development, development projects should be sensitive towards disaster mitigation. We have seen that at personal level, disaster is caused when the earning member suddenly dies. In such condition, support should be given to that suffering

family. There is a mention of such support in Arthasastra on both the levels, viz. personal and national. Kautilya has clearly stressed that if someone dies on duty, the sons and wife should get food and wages and their minor children, old and sick persons should be supported. King should grant them money. Thus on both the levels, viz. personal and national has thought of resilience. In many instance lack of preparedness is converting hazards into disasters. Flaws in intelligence are causing disasters, terrorism, some say, strikes, social tensions, etc.Public Health infrastructure is inadequate but health hazards increase. As normal procedures are difficult to follow, due to urgency corruption problems are there. Ineffectiveness in water management Policies creates problems in drought management and flood relief. Study and Research in Disaster Management is still deficient. In fact, there is need to introduce the Disaster management and Public Administration. Much gap exists between disaster research

and community capacity building. There are instances of policy makers lacking the Disaster Management experience. Potential of servicemen available in between country is not used well. International or bilateral cooperation in Disaster management is not up to the mark Life cycle of crisis management can be broadly divided in three phases - pre crisis, during crisis and post- crisis. Sustainable Development preparedness can reduce hazard. There is need to link disaster management and development plans. Planned improvement in legal framework in needed.Meaning of Disaster in National Disaster Management Act, 2005 is narrow it should be broadened. Capacity building in local government is needed. In Japan local governments have a role to play in such matters.

REFERENCES

- 1. Encyclopedia of Disaster Management, Introduction to Disaster Management, 2007.
- 2. Souvenir on Rashtra Raksha, 2010.
- 3. www.en.wikipedia.org/wiki/Disaster
- 4. Kautiliya Arthasesstra Translated by Kangle, R. P, 2nd Edi, University of Mumbai, 1972.
- 5. Encyclopedia of Disaster Management, Introduction to Disaster Management, Board of Editors Prof. Priyaranjan Trivedi, Jnanda Prakashan (P&D) in association with Indian Institute of Disaster Management, New Delhi- 110 002, 2007.
- 6. Encyclopedia of Disaster Management, M. H. Syed, Himalaya Book Pvt. Ltd, "Ramdoot" Dr. Bhalerao Marg, Girgaon, Mumbai 400 004, 1st Edi, 2008.
- 7. Modh Satish, Citizens Guide to Disaster Management, Macmillan India Ltd, 1st published, 2006.
- 8. Murthy Raman K, Disaster Management, Dominant Publishers & Distributors, New Delhi 110002, Revised 1st Edi, 2004.
- 9. Reddy Ravindra K, Ramaniah Y. V. Kumari Krishna A, Subbiah S., Natural Hazards and Disasters Essays on Impacts and Management (International Conference Vol. I), Department of Geography, Shri. Krishnadevrai University, Anantpur, Andhra Pradesh, India, February 2009.
- A manual on 'National Disaster Management in India' Published by National Centre for Disaster Management and Indian Institute of Public Administration, Indraprasth Estate, Ring Road, New Delhi-02 in March, 2001.
- 11. Disaster Administration, Theory and Practice, Dr. S.L. Goel, Deep & Deep Publications Pvt. Ltd. F-159, Rajori Garden, New Delhi.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Volume | 5 Issue 2

| ISSN | 2319-5576

"A STUDY ON THE BANKERS PERCEPTION OF REASONS FOR FAILURE OF REPAYMENT OF EDUCATIONAL LOAN"

*N. PANJALI

**DR. R. KASILINGAM

ABSTRACT

This paper deals with the defaults of repayment of educational loan. The aim of the study is identify the borrowers' ability in respect of the repayment of educational loan. A well- structured Questionnaire is used to collect the data. Several statistical tests such as factor analysis, cluster analysis, discriminate analysis and correspondent analysis are used to explain the findings of this study. The study finds that the level of defaulting of education loan are- quantum of loan, time taken to sanction and disbursement of loan, lack of transparency and disclosure, change in the maximum loan and collateral securities and the adherence of bankers right act. Further, the study also demonstrates that lack of employment opportunities, low income earned and interest in further/higher studies as other reasons that forced the loan availed from not repaying their educational loans. The implications of the findings are discussed.

Keywords: Education loan, students, non-repayment of loans, borrower's capability, loan processing.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

INTRODUCTION

Education is a process that makes a man economically a contributing member of the society. However, in today's liberalized economy, education has become an expensive proposition for individuals to acquire and actualize one's own potential to engage in income generating activity and in turn lead a good quality of life. The demand for higher education has been rising over the years from all sections of the society and hence the Union government has taken several steps to improve the situation of higher education in India. Since 1950s higher education has been financed mainly by the central and state governments. After the inauguration of new economic policy 1991 there is a major change in financial commitment of the government, which has been gradually reducing, thereby the greater burden now has to be borne by the general public.

Today, the cost of higher education is so high that people cannot find adequate funds to join the courses that are established with the government fixed fee structures. As a result, most of the students are hesitant to continue their education and enhance their employability or the ability to contribute to their family and society by and large. In light of this situation, the Union government has taken a series of measures to promote the availability of funds in the form of educational loan to the general public and students. The role of the nationalized and the private sector banks in ensuring the availability of educational loan is immense. However, these loans are sanctioned with some conditions.

Most of the students just enter into the field of education from which they can gain more knowledge. Some more students discontinue their education because of lack of finance to meet the cost of education. The problem of the finance, which prevails among the students, is solved by the nationalized and private sector banks coming forward to grant educational loans to the needy, subject to some condition. It means that there is a wide

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 47

^{**}Associate Professor, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014, kasimeena@gmail.com

difference between the demand and supply of the educational loan; hence are there some users not availing the opportunity of banks providing educational loan? Do students' face any problem in sanction of educational loan? Do various banks follow any different procedures in sanctioning the education loans? Educational loans are offered by 4000 branches of the bank, available across the country including the personal banking branches. Anyone can take a loan for pursuing studies in recognized schools/colleges/institutions etc., through the banks which are ready to grant loan to a maximum possible extent.

STATEMENT OF THE PROBLEM

Education has become very expensive proposition now a days. There are different fee structures followed by different institutions. The Government fixes fee structures for the unaided self-finance engineering colleges, aided colleges and government colleges; in addition to that self-finance colleges fee structure creates a need for funds to meet the cost of education to the

students. The advent of privatization in education has further increased the burden on the general public and students to fund their educational goals. To say so, to join an elite institution and get quality education the cost to be borne by the students has increased by leaps and bounds. Equally, governments have taken several policy initiatives to support funding to education on a large scale. Nevertheless, to date, we observe a huge gap between the demand and the supply of the educational loan in India.

Over the years, the existence of such a gap has been analyzed by the researchers, public policy executives and other stakeholders from both the banker's and borrower's perception. Most importantly, several of the studies undertaken earlier have attempted to answer certain questions such as why are the bankers are not showing interest in granting education loan and why a significant proportion of the borrowers are not repaying the educational loans. This

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 48

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

study assumes that the lack of interest among the bank authorities may be due to the poor repayment levels of educational loan by borrowers, which in turn may lead to the increasing of NPA (Non-performing Assets), a challenge that constrains the bank's performance considerably. Further, the study also assumes the reasons for nonrepayment of educational loans as due to the non- availability of expected jobs, low income earned and borrower's preference further/higher for studies. propositions are therefore examined using the data collected from a well-structured questionnaire.

REVIEW OF LITERATURE

Shatrugna Committee (2004) examination of the pattern of utilization of the educational grants to the higher education sector suggested that the UGC may institute newer mechanisms of providing grants, perhaps in the form of a matching grant to motivate universities to generate its own resources. The committee

recommendations are more or less the same in regard to the aided deemed universities.

Tilak (2005) analyzed the need for the continuation and the crucial role of the state in funding higher education. The author observed that the costs of higher education can be categorized into three components such as, academic costs, academic support cost, and student welfare costs. The author also highlighted the readiness of the industrial sector to make huge investment in the higher education and research development and hence recommended that efforts should be taken to raise funds from non-governmental sources. Further, the author posited the dominant role played by the state and the union government in financing higher education. UGC also should institute mechanism to monitor and govern the growth universities and the institutes of higher education. Finally, the author concluded that all forms of financial assistance or grants provided to the higher education from

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 49

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

internal and external sources should be completely transparent.

Saritha Sinha (2005) analyzed the importance of women development through education and the importance of financial support in this relationship. To the author, educational development and the acquisition of vital skills are necessary for women to improve their income generation ability, which is critical for women as well as the economic development of a nation, by and large. The study also highlighted the increasing motivation among women to adopt career on their own.

Hua Shen & Adrian Ziderman (2009) international study on student loans repayment and recovery demonstrated that student loan schemes are implemented in more than seventy countries around the world. Most of these schemes benefit from the sizeable built-in government subsidies and in addition, are subject to the repayment default and administrative costs that are not passed on to student borrowers. The study

probed about how much of the original loan is an individual student required to repay (known as the repayment ratio) and what percentage of the total costs of loans schemes can the lending body expect to receive back in repayments (known as the recovery ratio). The study found considerable variation in the size of the repayment and recovery ratios across schemes. Moreover, many loans schemes exhibit sizeable built-in subsidies accruing to student borrowers-in over 40 percent of the schemes examined and the repayment ratio was at 40 percent or less overall loans.

R. J. Kamath (2000) model of educational loan scheme outlined the importance of banking institutions in providing financial support to deserving / meritorious students for pursuing higher education in India and abroad. To Kamath, every meritorious student irrespective of their economic status should be provided with an opportunity to pursue education in the form of financial supports from the

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 50

banking system with an affordable terms and conditions.

R. Srinivasan (2003) analyzed the process of selecting a beneficiary for educational loans to pursue higher education in New Delhi. The study used the probity model for statistical analysis and probed issues such as the problems faced by the applicants, background of the problematic borrowers and steps taken to overcome the problems in getting loans. The study demonstrated that a student pursuing postgraduate professional courses is more likely to get education loan than a student pursuing undergraduate course. Similarly, banks prefer giving loans to students seeking admission in government owned/approved institution. However, there does not seem to be any discrimination between students with or without prior work experience, for getting education loan. The study also demonstrated the reluctance of private sector banks to provide educational loans.

OBJECTIVES OF THE STUDY

The objective is to investigate opinion of bankers about the reasons for the default of repayment of educational loan in the UT of Pondicherry.

METHODOLOGY

For the purpose of this study primary data is collected using a well-structured questionnaire comprising of statements using a five point Likert scale wherein 1- Strongly Disagree to 5=Strongly Agree. The questionnaire was administered to 55 bank branches are selected at random. Several statistical techniques such as the factor analysis, analysis, correspondent discriminate analysis, ANOVA, chi-square and canonical correlation is used to augment the banker's response on the reasons for the nonrepayment of educational loan.

Reasons for Poor Repayment of Educational Loan

Literal reveals that there are many internal and external factors that influence

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 51

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

borrowers in defaults of repayment of the educational loans. Given the importance of repayment this research has examined the reasons for the failure of repayment educational loans. The study enlisted 12

significant reasons for the non-repayment of educational loans, augmented feedback from the bankers and examined the trends that have extracted from the data.

Table 1: Reasons for Failure of Repayment

S. No	Reasons	Mean	S.D	Rank
1	Unemployment of the candidate	3.75	1.075	V
2	Inadequate income	3.93	.836	1
3	Candidate has continued further studies	3.91	1.005	II
4	Shifting of the family to other places	3.76	.981	IV
5	Inadequate family income	3.85	.911	III
6	Bank not serving adequate remainder	2.38	1.163	XII
7	Lack of seriousness of the bank about recovery	3.25	1.109	IX
8	Bank employees' loan need not be repaid	2.65	1.518	XI
9	security collected is not good enough	3.31	1.245	VIII
10	Borrowers perception that education loans need not to be repaid	3.69	.960	VI
11	Government give impression that the loan need not be repaid	3.53	1.168	VII
12	Politician are giving impression that education loan is free	3.24	1.347	Х

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 52

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Table 1 shows the reasons behind the poor repayment of the educational loans: Parents inadequate income (3.93), students are continuing their further studies (3.91), inadequate family income (3.85) are the three most important reasons for failure of repayment of educational loans. Others reasons include, shifting family to other place,

unemployment of students after studies, general perception that educational loans need not be paid, government impressions that loan need not be paid, etc. It is therefore concluded that the primary reason for the failure of repayment among borrowers is the inadequate income of the parents of the borrowers.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.746
Bartlett's Test of Sphericity	Approx. Chi-Square	272.428
Spriencity	Df	66
	Sig.	.000

Table 2 shows the KMO test results. The KMO value is 0.746, which means the data is adequate to perform factor analysis. The

Bartlett's Test of Sphericity score is 272.428, which is significant at 1 percent level of significance

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Table 3: Variance Explained by Factors

Component	Eigen values	% of Variance	Cumulative %
1	4.395	28.227	28.227
2	1.705	19.478	47.704
3	1.564	16.167	63.871

Table 3 shows the total variance extracted by the factor analysis from the 12 statements with the satisfactory Eigen value score more than one. Among the three factors, the first factor alone explains around 28 percent of the total variance. The second factor

contributes about 19 percent of the total variance and third factor contributes for 16 percent of the total variance extracted. Overall, the three factors extracted have explained 63 percent of the total variance, which is sufficient to explain the construct under investigation.

Table 4: Rotated Component Matrix – Reasons for Failure of Repayment

	Co	omponent	
Reasons for Failure of Repayment	1	2	3
Bank not serving adequate reminder	0.806		
The action of Government gives impression that the loan need not be repaid	0.784		
Bank employees' gesture giving an impression that the loan need not be repaid	0.770		

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 54

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Lack of seriousness of the bank about recovery	0.735		
Politician are giving impression that education loan is free	0.670		
Candidate has continued further studies		0.789	
Unemployment of the candidate		0.716	
Shifting of the family to other places		0.684	
The security collected is not good enough		0.599	
Inadequate family income			0.690
Inadequate income to the candidate			0.637
Borrowers perception that education loans need not to be repaid			0.534

Table 4 shows the factor loadings of the variables used in this study. The first factor comprises of 5 sub-factors, which include bank not serving adequate remainder (0.806), the action of Government gives impression that the loan need not be repaid (0.784), bank employees' gesture giving an impression that the loan need not be repaid (0.770), lack of seriousness of the bank about recovery (0.735) and politician are giving impression that education loan free (0.670). The first factor is named as 'Attitude'. The second factor

comprises of four variables such as candidate has continued further studies (0.789),unemployment of the candidate (0.716), shifting of the family to other places (0.684) and the security collected is not good enough (0.599). Hence, the second factor is named "Occupation". The last factor comprises of three variables such as inadequate family income (0.690), inadequate income to the candidate (0.637) and Perception that education loans need not to be repaid (0.534). Third factor is named as 'Income'. It is therefore concluded

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 55

that attitude, occupation and income are three factors that determine the success or failure of the repayment of educational loans

Segmentation of Bankers

The banker's perception may not have 12 major reasons for making borrowers not repaying the loans. The banker's perception of reasons for making failure of repayment of educational loan may differ from borrowers to borrowers. Hence there is necessity to segment the bankers perception based on the reasons for non-repayment of educational loan. Based on the three factors the respondents can be segmented. K-means cluster analysis is used to categorize student's educational loan into three clusters based on the banker's perception reasons for borrowers making failure of repayment of students' educational loan.

Table 5: Final Cluster Centers and ANOVA - Failure of Repayment

	Clusters	Clusters			ANOVA	
	1	2	3	F	Sig	
Attitude	3.77 (I)	2.34 (II)	1.27 (III)	88.459	.000	
Occupation	4.05 (I)	3.50 (II)	1.67 (III)	65.260	.000	
Income	4.04 (1)	3.82 (II)	1.89 (III)	28.291	.000	
Average	3.95	3.22	1.61			
No. of cases	28	24	3			
Percentage	51	44	5			

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 56

Table 5 shows the results of cluster analysis. The first cluster, which account for more than half of the sampled bankers is found with high mean score on all the three factors. Hence, the cluster group is named as 'High Risk'. The second cluster accounts for less than half of the respondents is found with moderate mean score and hence it is named as 'Moderate Risk'. The third cluster is named as 'Low Risk'. Observation of F value reveals that attitude

factor is the most significant determinant of failure of repayment followed by occupational factors and income factors. However, it is important to note that all three reasons are found to be statistically significant at 0.000. This means that all the three factors extracted significantly contribute to the segmentation of borrowers into three clusters.

Reliability of Segmentation

Discriminant analysis is used to check the reliability of cluster segmentation.

Table 6: Eigen values and Wilks' Lambda - Failure of Repayment

Function	Eigen value	Canonical Correlation	Wilks' Lambda	Chi-square	Df	Sig.
1	5.893	.925	.084	126.297	6	.000
2	1.726	.649	.579	027.839	2	.000

Table 6 illustrates the extraction of two discriminant functions from the three clusters. From the two function extracted, two functions

has Eigenvalue more than one, which represents the maximum spread of the groups' means. This implies that there is a good

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 57

^{**}Associate Professor, Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014, kasimeena@gmail.com

difference between the clusters. The canonical correlation which helps to measure the association between functions and factors also reveals function one with a high canonical

correlation. Wilks' lambda for the first function is at 0.066 and for the second function is 0.579, which also indicated that the group means are different for both the functions.

Table 7: Structure Matrix – Failure of Repayment

Failure of Repayment	Function	
randre of Repayment	1	2
Attitude	.722*	675
Occupation	.639*	.376
Income	.380	.574*

Table 7 presents the structure matrices. It can be inferred that two functions are formed from the three clusters. These two domain function can be used separately, to describe the characteristics of population. The two domain functions can therefore be written as;

Z1 = 0.722* Bankers attitude + 0.526*

No Income

Z2= 0.574* Inadequate income

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 58

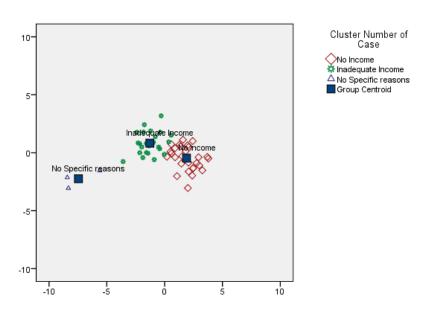


Figure 1: Group Centroids - Failure of Repayment

Figure 1 show that all the three clusters are significantly different clusters having different group centroids and different mean values. The cluster members are located

separately from group members. This shows that there is no error in the classification. This indicates that there exists a good variation among the three discriminant groups.

Table 8: Classification Results – Failure of Repayment

	Cluster Number of		Predicted Group Membership		
	. Case	High Risk	Moderate Risk	Low Risk	
Count	High Risk	28	0	0	28
	Moderate Risk	0	24	0	24

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 59

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

	Low Risk	0	0	3	3
%	High Risk	100.0	.0	.0	100.0
	Moderate Risk	.0	100.0	.0	100.0
	Low Risk	.0	.0	100.0	100.0

^{*100.0%} of original grouped cases correctly classified

Table 8 shows the correctness of cluster classification. As evident, all three cluster extracted are correctly classified with bankers

belonging to the same group and the cluster classification is correct by 100%.

Relationship between Bank Profile Variables and Failure of Repayment

For this purpose; chi-square, independent sample t-test and analysis of variance are used.

Table 9: Bank Profile Variable and Failure of Repayment

	Particulars	Chi-Square Value	df	Sig
1	Name of Banks	17.365	18	.498
2	Bank branches	7.854	6	.249
3	Duration of loan period	1.026	4	.906
4	Disbursement of target	2.746	2	.253
5	Receiving of Application Periods	21.233	4	.000*
6	Sanctioning loan time	28.254	4	.000*
7	Disbursement time	15.807	4	.003*

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 60

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

8	Do you give uneducated parents	5.304	2	.071
11	Collateral security	23.154	2	.000*
12	Maximum amount	17.539	8	.025*
13	Any specific course	2.123	2	.346
14	Enough application	4.762	4	.313
15	No.of application current year	8.784	4	.067
16	Perception of repayment	22.635	8	.004*
17	Loan collection periods	11.849	4	.059

Table 10 shows the chi-square results. As observed, majority of the bank profile variable are not associated with failure of repayment. However, variables such as the receiving of application periods, sanctioning

loan time, disbarment time, collateral security, maximum amount, bankers overall perception of repayment and loan collection periods are associated with the failure of repayment of educational loans.

Figure 2: Correspondence Analysis - Receiving of Application Periods and Failure of Repayment

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 61

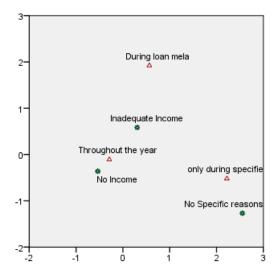


Figure 2 explains the association between reasons for failure of loan repayment and educational loan application receiving time. As observed, bankers who receive loan applications throughout the years are grouped into high risk group. On the other hand, bankers who receive loan applications during specific period are grouped into low risk group. It is therefore concluded that when bankers process loan application during a specific period, they are more likely to select right candidates and therefore less repayment problems or no failure

Figure 3: Correspondence Analysis - Sanctioning time and Failure of Repayment

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 62

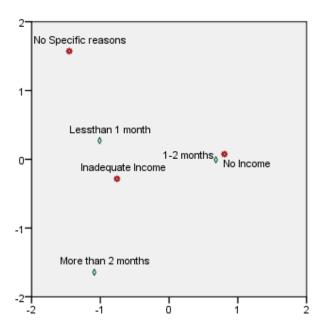


Figure 3 explains the association between loan sanctioning time and reasons for failure of repayment of educational loan.

Bankers who take 1-2 months for processing

education loans are grouped into high risk and those who take less than a month are grouped into low risk.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 63

Figure 4: Correspondence Analysis - Maximum loan amount and Failure of Repayment

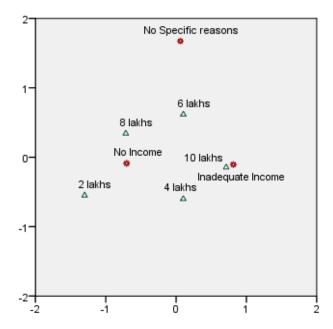


Figure 4 explains the association between maximum loan amount and failure of loan repayment. Bankers who give loan to the amount of 4 lakhs to 10 lakhs are closely associated with moderate risk. Respondents from 2 lakhs to 8 lakhs are associated with high risk cluster

Figure 5: Correspondence Analysis - Overall Bankers Perception and Failure of Repayment

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 64

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , $\frac{\text{kasimeena@gmail.com}}{\text{kasimeena@gmail.com}}$

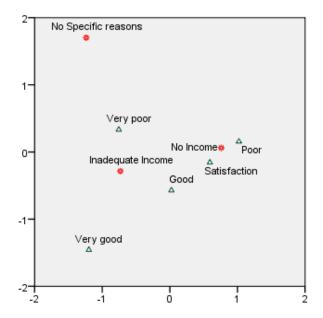


Figure 5 explains that bankers who perceive poor, very poor are grouped into high risk and moderate risk cluster groups respectively.

Table 11: Relationship between Bank Profile Variables and Failure of Repayment

S.NO	Particulars	Attitude	Occupation	Income
1	Name of Banks	0.772 (.642)	0.628 (.767)	0.333 (.959)
2	Branches	1.893 (.142)	2.720 (.067)	0.880 (.458)
3	Duration of loan	0.508 (.604)	0.388 (.680)	0.742 (.481)
4	Application receiving Periods	2.249 (.116)	15.882 (.000)*	12.248(.000)*
5	Sanctioning loan time	32.315(.000)*	15.501 (.000)*	3.094 (.054)

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 65

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

6	Disbursement time	13.474(.000)*	8.074 (.001)*	0.263 (.770)
7	Maximum loan	5.404 (.001)*	1.669 (.172)	0.864 (.492)
8	Enough application	0.456 (.637)	0.109 (.897)	107 (.899)
9	No.of application current year	2.179 (.123)	0.088 (.916)	1.197 (.310)
10	Perception of repayment satisfaction	9.021 (.000)*	6.028 (.000)*	2.064 (100)
11	Loan collection period	10.102(.000)*	9.268 (.000)*	.619 (.543)

Table 11 shows the results of ANOVA test done to examine the relationship demographic variable and the banker's perception of reasons for failure of repayment educational loan. Among the 12 variables, only 7 variables such as bank branches, loan

application periods, loan sanctioning time, disbursement time, maximum loan limit, banker's repayment satisfaction and loan collection periods are significantly related with the failure of repayment of educational loans at 5 percent level of the significance.

Table 12: Duncan Analysis for Receiving Application periods

Receiving application Period	High Risk (Mean)	Receiving application Period	Low Risk (Mean)	
Only during specified period of the year	1.6800 (I)	Throughout the year	2.4500 (I)	
During loan mela	2.0500 (I)	During loan mela	3.4375(II)	
Throughout the year	3.2391 (II)	Only during specified period of the year	3.8370 (II)	

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 66

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Table 12 shows the results of Duncan post-hoc analyses examining the relationship between loan application receiving periods and reasons for failure of repayment loan. As evident, bankers

belonging to high cluster group receive loan applications throughout the year and bankers belonging to low risk receive application only during specific period.

Table 13: Duncan Analysis for Loan Disbursement time

Disburse time	Attitude (Mean)	Disburse time	Occupation
			(Mean)
1-2 Months	1.9600 (I)	1-2 Months	3.0250 (I)
More than 2 moths	2.5000 (I)	More than 2 moths	3.5625 (II)
less than 1 month	3.3171 (II)	less than 1 month	3.8537 (II)

Table 13 shows the post-hoc Duncan analysis results examining the relationship between loan disbursement time and bankers perception of reasons for failure of repayment of educational loan. As evident,

bankers who report attitude problem and occupation-related problem for the failure of repayment are those who disburse loan less than a month.

Table 14: Duncan Analysis for Loan Collection Period

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 67

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Loan collection period	Attitude (Mean)	Loan collection period	Occupation	
			(Mean)	
Weekly	1.9111(I)	Weekly	2.9722 (I)	
Fortnightly	3.2108 (II)	Fortnightly	3.7568 (II)	
Monthly	3.2889 (II)	Monthly	4.0833 (II)	

Table 14 shows the post-hoc Duncan analysis results examining the relationship between loan collection periods for the failure of repayment of educational loans. From the results it is observed that bankers

who report attitude problem and occupationrelated problems for the failure of repayment of educational loans follow a monthly loan collection schedule.

Table 15: Relationship between Demographic Variables and Delay or Non-Repayment of Loans

S.No	Particulars	Attitude	Occupation	Income
1	Disbursement of target	1.737 (.088)	1.541 (,129)	.996 (.324)
2	Do you give uneducated parents	2.509 (.015)*	2.694 (.009)*	1.831 (.073)
3	Collateral	4.981 (.000*)	8.640 (.000*)	2.799 (.007*)
4	Specific course	1.177 (.245)	1.584 (.119)	1.476 (.146)

Table 15 shows the results of independent sample t-test. As observed, only two variables such as uneducated borrowers parents and collateral security are significantly

associated with the reasons for failure of repayment of educational loan at 5 percent significance.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 68

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

Table 16: Canonical Correlation for Reasons for Failure of repayment of educational loan

Linear combinations for canonical correlations Number of obs = 55						
	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
u1 Bankersatt~e Noincome Inadequate~e	.3345461 1.217726 1505178	.1346196 .2156326 .1585669	2.49 5.65 -0.95	0.016 0.000 0.347	.06465 .7854092 4684253	.6044422 1.650044 .1673897
V1 Bankbranches Applicatio~d Sanctionin~e Disburseme~e Collateral Maximumamo~t OverallPer~n Loancollec~s	0266551 330158 .1943947 2542665 2.016288 2441221 0260744 0760821	.0902003 .2154197 .2082063 .1756073 .422076 .071411 .0929132 .2332727	-0.30 -1.53 0.93 -1.45 4.78 -3.42 -0.28 -0.33	0.769 0.131 0.355 0.153 0.000 0.001 0.780 0.746	2074958 7620485 2230338 606338 1.170076 3872925 2123542 5437656	.1541855 .1017324 .6118233 .097805 2.862499 1009517 .1602054 .3916014
u2 Bankersatt~e Noincome Inadequate~e	-1.370729 2.188983 9880253	.4264149 .6830278 .5022693	-3.21 3.20 -1.97	0.002 0.002 0.054	-2.22564 .8195948 -1.995015	5158187 3.558372 .018964
V2 Bankbranches Applicatio~d Sanctionin~e Disburseme~e Collateral Maximumamo~t OverallPer~n Loancollec~s	.1274982 .5093531 .8647271 1.15856 .6248519 .4872742 3850285 1.137869	.2857142 .6823535 .6559048 .5562458 1.336949 .2261982 .2943077 .7389038	0.45 0.75 1.31 2.07 0.47 2.15 -1.31	0.657 0.459 0.195 0.043 0.642 0.036 0.196 0.129	4453243 8586834 4575005 .03765 -2.055569 .0337742 9750799 3435443	.7003208 1.87739 2.186955 2.268061 3.305273 .9407742 .205023 2.619281
u3 Bankersatt~e Noincome Inadequate~e	6758229 .0726512 1.548206	.6724609 1.077142 .792084	-1.00 0.07 1.95	0.319 0.946 0.056	-2.024026 -2.086889 0398266	.6723801 2.232191 3.136239
v3 Bankbranches Applicatio~d Sanctionin~e Disburseme~e Collateral Maximumamo~t Overallper~n Loancollec~s	0199844 .3795182 2413846 .7377492 1.925821 221805 .6184782 -1.389523	.4505744 1.076079 1.040046 .8772055 2.108382 .3567169 .4641264 1.165259	-0.04 0.35 -0.23 0.84 0.91 -0.62 1.33 -1.19	0.965 0.726 0.817 0.404 0.365 0.537 0.188 0.238	9233317 -1.77789 -2.326552 -1.020942 -2.301231 9369794 3120392 -3.725727	.8833629 2.536926 1.843782 2.49644 6.152873 .4933693 1.548996 .9466808
Canonical correlations: 0.8520 0.4570 0.3098						
Tests of significance of all canonical correlations						
	' lambda 's trace ng trace	atistic .196063 1.03066 3.01823 2.64817	df1 24 1 24 24 8	df2 28.215 138 128 46	4.0269 3.0093 5.3657 15.2270	Prob>F 0.0000 a 0.0000 a 0.0000 a 0.0000 u

Table 16 shows the results of canonical correlation. The first segmentation of canonical correlation results reveals that the bankers perceive attitude, occupation and income

related problems for the failure of repayment of educational loans. This difference in perception is found to be significantly related to collateral

e = exact, a = approximate, u = upper bound on F

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

Page 69

^{**}Associate Professor , Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 , kasimeena@gmail.com

securities, maximum loan required and loan disbursement time.

CONCLUSION

Based on the statistical analysis, it is found that more than 75 percent of the bankers saying borrowers do not make the full repayment in educational loans. Further, the reason for failure of borrowers to repay educational loan is identified based on the three types of reasons for failure repayment. The profile variables such as collateral securities and maximum loan are associated with the failure of repayment of educational loans.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com

REFERENCES

- 1. Hector,G. (1991). Issues and Perspectives for Higher Education in Argentina in the Higher Education. *Kluwer Academic publishers*, 21, (1) 63-81.
- 2. Hua Shen & Adrian Ziderman, (2009). Student Loans Repayment and Recovery: International Comparisons. *IZA Discussion Paper No. 3588*, 5(1) 39-55
- 3. Justin R.La Mort (2010) .Generation Debt and the American Dream: The Need Student Loan Reform, *Baker Final 3866380*, 7 (2), 110-122
- 4. Kamath, R.J. (2000). Educational loans to the needy students. The Economic Times
- 5. Sinha, S. (2005). Women's Education in India: The myth and reality, analysis shaping the woman resources of economic development. *CWDS Library Resource Series; XI*, 4(2), 101-112.
- 6. Narayana, M.R (2005) Student Loan by Commercial Banks: A Way to Reduce State Government Financial Support to Higher Education. *The Journal of Developing Areas*, 38, (2) 171-187.
- 7. Shatrugna (2004). Financing higher education, analysis the review and restructure of the norms for financing the education sector, *Hindutv The Great Nationalist Ideology, 3*(4), 1-24.
- 8. Srinivasan, R. (2003) Analysis of Education Loan: A Case Study of National Capital Territory of Delhi. *International Journal of Management and Strategy*, 2 (3)1-14
- **9.** Tilak, (2005), is funding higher education in India". Analysis the need for continuation of the crucial role of the state in funding higher education, *National University of educational planning and Administration*, 16 (4), 551-165.
- **10.** Walter, M. (1988).Potential Resource Recovery in Higher Education in the Developing Countries and the Parents' Expected Contribution. *Economics of Education Review*, **1**(1) 135-152.

^{*}Research Scholar Department of Management Studies, Pondicherry University, Kalapet, Pondicherry-605 014 fathimanatraj@gmail.com