“A STUDY ON PORTFOLIO MANAGEMENT IN ADITYA BIRLA MONEY LIMITED”

Submitted by
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&
Submitted to the
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SRM UNIVERSITY
KATTANKULATHUR

In partial fulfillment of the requirements
for the award of the degree
Of
MASTER OF BUSINESS ADMINISTRATION
BONAFIDE CERTIFICATE

Certified, that this project report titled “A Study on Portfolio Management in Aditya Birla money limited” is the bonafide work of Kiruthika S who carried out the research under my supervision.

Certified further, that to the best of my knowledge the work reported herein does not form part of any other Project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Mr. Arun Kumar.S                      DR. Jayashree Suresh
(Project Guide)                        (Dean SRM School of Management)

Viva Voce held on: ......................

INTERNAL EXAMINER                    EXTERNAL EXAMINER
DECLARATION

I, KIRUTHIKA S (3511010333) the bonafide student of SRM SCHOOL OF MANAGEMENT, hereby declare that the project entitled “A Study on Portfolio Management in Aditya Birla money limited”, submitted in partial fulfilment for the award of MASTER OF BUSINESS ADMINISTRATION is my original work.

Place:                       Kiruthika S

Date:
ACKNOWLEDGEMENT

I express my gratitude to Ms. Jayashree Suresh, Dean, SRM School of Management, for providing an amazing environment for me to complete this project successfully.

At the outset, no words are adequate to express my sincere thanks to my staff Mr. Arun Kumar.S for granting this opportunity to have a wide spread view and experience in the form of project work.

I also express my sincere gratitude to my mentor Mr. Lakshminarayanan (Asst. Manager, Accounts & Finance) of Aditya Birla Money Limited who has enlightened me with the knowledge about portfolio management.
ABSTRACT

Portfolio management can be defined and used in many a ways, because the basic meaning of the word is “combination of the various things keeping intact”. So I considered and evaluated this from the perspective of the investment part in the securities segment.

From the investor point of view this portfolio followed by him is very important since through this way one can manage the risk of investing in securities and thereby managing to get good returns from the investment in diversified securities instead of putting all the money into one basket. Now a day’s investors are very cautious in choosing the right portfolio of securities to avoid the risks from the market forces and economic forces. So this topic is chosen because in portfolio management one has to follow certain steps in choosing the right portfolio in order to get good and effective returns by managing all the risks.

This topic covers how a particular portfolio has to be chosen concerning all the securities individual return and there by arriving at the overall portfolio return. This also covers the various techniques of evaluation of the portfolio with regard to all the uncertainties and gives an edge to select the right one. The purpose of choosing this topic is to know how the portfolio management has to be done in arriving at the effective one and at the same time make aware the investor to choose the securities which they want to put in their portfolio. This also gives an edge in arriving at the right portfolio in consideration to different securities rather than one single security. The project is undertaken for the study of my subject thoroughly while understanding the different case studies for the better understanding of the investor and myself.
<table>
<thead>
<tr>
<th>SI. NO.</th>
<th>TOPICS</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>COMPANY PROFILE</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>ABML INTRODUCTION</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>OBJECTIVE, NEED AND SCOPE OF STUDY</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>OBJECTIVE OF THE STUDY</td>
<td>15</td>
</tr>
<tr>
<td>2.2</td>
<td>SCOPE OF THE STUDY</td>
<td>15</td>
</tr>
<tr>
<td>2.3</td>
<td>LIMITATIONS OF THE STUDY</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>LITERATURE REVIEW</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>INTRODUCTION TO PORTFOLIO MANAGEMENT</td>
<td>16</td>
</tr>
<tr>
<td>3.2</td>
<td>OBJECTIVE OF PORTFOLIO MANAGEMENT</td>
<td>17</td>
</tr>
<tr>
<td>3.3</td>
<td>ELEMENTS OF PORTFOLIO MANAGEMENT</td>
<td>17</td>
</tr>
<tr>
<td>3.4</td>
<td>SCHEMATIC DIAGRAM OF STAGES IN PORTFOLIO MANAGEMENT</td>
<td>18</td>
</tr>
<tr>
<td>3.5</td>
<td>PROCESS OF PORTFOLIO MANAGEMENT</td>
<td>19</td>
</tr>
<tr>
<td>3.6</td>
<td>RISK – RETURN RELATIONSHIP</td>
<td>21</td>
</tr>
<tr>
<td>3.7</td>
<td>THEORETICAL ANALYSIS OF THE STUDY</td>
<td>22</td>
</tr>
<tr>
<td>3.8</td>
<td>PORTFOLIO MANAGEMENT FRAMEWORK</td>
<td>23</td>
</tr>
<tr>
<td>3.9</td>
<td>SEBI NORMS</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>PORTFOLIO MANAGEMENT PROCESS</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>PORTFOLIO MANAGEMENT PROCESS</td>
<td>25</td>
</tr>
<tr>
<td>4.1.1</td>
<td>SECURITY ANALYSIS</td>
<td>25</td>
</tr>
<tr>
<td>4.1.2</td>
<td>PORTFOLIO ANALYSIS</td>
<td>38</td>
</tr>
</tbody>
</table>
4.1.3 SELECTION OF PORTFOLIO 43
4.1.4 PORTFOLIO REVISION 44
4.1.5 PORTFOLIO EVALUATION 45
4.2 HEDGING A PORTFOLIO 47

5 DATA ANALYSIS AND INTERPRETATION
5.1 INDIVIDUAL STOCK’S FUNDAMENTAL ANALYSIS 48
5.2 INDIVIDUAL EQUITY STOCK’S FMP CALCULATION 49
5.3 EVA ANALYSIS 51
5.4 TECHNICAL ANALYSIS OF THE SELECTED STOCKS 52
5.4.1 INDIVIDUAL STOCK MOVEMENT PATTERNS 52
5.4.2 BOLLINGER BAND ANALYSIS 57
5.4.3 MACD ANALYSIS 62
5.5 PORTFOLIO CONSTRUCTION 63
5.5.1 PORTFOLIO I 63
5.5.2 PORTFOLIO II 64
5.5.3 PORTFOLIO III 65
5.6 PORTFOLIO EVALUATION 66
5.6.1 FINDING VARIOUS STATISTICAL DATA- FOR THE INDIVIDUAL STOCKS 67
5.6.2 SHARPE,JENSEN&TREYNOR MODEL 68
5.6.2a PORTFOLIO I - EVALUATING PORTFOLIO 68
5.6.2b PORTFOLIO II - EVALUATING PORTFOLIO 70
5.6.2c PORTFOLIO III - EVALUATING PORTFOLIO 72
5.6.2.1 CHOOSING THE BEST PORTFOLIO 74
<table>
<thead>
<tr>
<th>FINDINGS, SUGGESTIONS AND CONCLUSION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 FINDINGS OF THE STUDY</td>
<td>75</td>
</tr>
<tr>
<td>6.2 SUGGESTIONS AND RECOMMENDATIONS</td>
<td>76</td>
</tr>
<tr>
<td>6.3 CONCLUSION</td>
<td>77</td>
</tr>
</tbody>
</table>

<p>| 7 BIBLIOGRAPHY                      | 78 |</p>
<table>
<thead>
<tr>
<th>SI. NO.</th>
<th>TITLE</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>INDIVIDUAL STOCK’S FUNDAMENTAL ANALYSIS</td>
<td>48</td>
</tr>
<tr>
<td>5.2</td>
<td>INDIVIDUAL EQUITY STOCK’S FMP CALCULATION</td>
<td>49</td>
</tr>
<tr>
<td>5.3</td>
<td>EVA ANALYSIS</td>
<td>51</td>
</tr>
<tr>
<td>5.4.1</td>
<td>INDIVIDUAL STOCK MOVEMENT PATTERNS</td>
<td>53</td>
</tr>
<tr>
<td>5.4.2</td>
<td>BOLLINGER BAND ANALYSIS</td>
<td>57</td>
</tr>
<tr>
<td>5.4.3</td>
<td>MACD ANALYSIS</td>
<td>62</td>
</tr>
<tr>
<td>5.5.1</td>
<td>PORTFOLIO I</td>
<td>63</td>
</tr>
<tr>
<td>5.5.2</td>
<td>PORTFOLIO II</td>
<td>64</td>
</tr>
<tr>
<td>5.5.3</td>
<td>PORTFOLIO III</td>
<td>65</td>
</tr>
<tr>
<td>5.6.1</td>
<td>ABNUVO-CALCULATION OF VARIOUS STATISTICAL DATA</td>
<td>66</td>
</tr>
<tr>
<td>5.6.1a</td>
<td>CALCULATED STATISTICAL DATA- FOR THE INDIVIDUAL STOCKS</td>
<td>67</td>
</tr>
<tr>
<td>5.6.2a</td>
<td>PORTFOLIO I - EVALUATING PORTFOLIO</td>
<td>68</td>
</tr>
<tr>
<td>5.6.2b</td>
<td>PORTFOLIO II - EVALUATING PORTFOLIO</td>
<td>70</td>
</tr>
<tr>
<td>5.6.2c</td>
<td>PORTFOLIO III - EVALUATING PORTFOLIO</td>
<td>72</td>
</tr>
<tr>
<td>5.6.2.1</td>
<td>CHOOSING THE BEST PORTFOLIO</td>
<td>74</td>
</tr>
<tr>
<td>SI. NO.</td>
<td>TITLE</td>
<td>PAGE NO.</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>5.1</td>
<td>ABNUVO - STOCK MOVEMENT PATTERN</td>
<td>52</td>
</tr>
<tr>
<td>5.2</td>
<td>RELIANCE INDUSTRIES - STOCK MOVEMENT PATTERN</td>
<td>52</td>
</tr>
<tr>
<td>5.3</td>
<td>SBI BANK - STOCK MOVEMENT PATTERN</td>
<td>53</td>
</tr>
<tr>
<td>5.4</td>
<td>HDFC BANK - STOCK MOVEMENT PATTERN</td>
<td>53</td>
</tr>
<tr>
<td>5.5</td>
<td>WIPRO - STOCK MOVEMENT PATTERN</td>
<td>54</td>
</tr>
<tr>
<td>5.6</td>
<td>IDEA CELLULAR - STOCK MOVEMENT PATTERN</td>
<td>54</td>
</tr>
<tr>
<td>5.7</td>
<td>ABML - STOCK MOVEMENT PATTERN</td>
<td>55</td>
</tr>
<tr>
<td>5.8</td>
<td>QUANTUM INDEX FUND - STOCK MOVEMENT PATTERN</td>
<td>55</td>
</tr>
<tr>
<td>5.9</td>
<td>L&amp;T FINANCE HOLDINGS - STOCK MOVEMENT PATTERN</td>
<td>56</td>
</tr>
<tr>
<td>5.10</td>
<td>SBI GOLD ETF - STOCK MOVEMENT PATTERN</td>
<td>56</td>
</tr>
<tr>
<td>5.11</td>
<td>ABML - BOLLINGER BAND ANALYSIS</td>
<td>57</td>
</tr>
<tr>
<td>5.12</td>
<td>ABNUVO - BOLLINGER BAND ANALYSIS</td>
<td>57</td>
</tr>
<tr>
<td>5.13</td>
<td>RELIANCE INDUSTRIES - BOLLINGER BAND ANALYSIS</td>
<td>58</td>
</tr>
<tr>
<td>5.14</td>
<td>WIPRO - BOLLINGER BAND ANALYSIS</td>
<td>58</td>
</tr>
<tr>
<td>5.15</td>
<td>IDEA CELLULAR - BOLLINGER BAND ANALYSIS</td>
<td>59</td>
</tr>
<tr>
<td>5.16</td>
<td>L&amp;T FINANCE HOLDINGS - BOLLINGER BAND ANALYSIS</td>
<td>59</td>
</tr>
<tr>
<td>5.17</td>
<td>SBI BANK - BOLLINGER BAND ANALYSIS</td>
<td>60</td>
</tr>
<tr>
<td>5.18</td>
<td>HDFC BANK - BOLLINGER BAND ANALYSIS</td>
<td>60</td>
</tr>
<tr>
<td>5.19</td>
<td>SBI GOLD ETF - BOLLINGER BAND ANALYSIS</td>
<td>61</td>
</tr>
<tr>
<td>5.20</td>
<td>QUANTUM INDEX FUND - BOLLINGER BAND ANALYSIS</td>
<td>61</td>
</tr>
<tr>
<td>5.21</td>
<td>RELIANCE INDUSTRIES-MACD ANALYSIS</td>
<td>62</td>
</tr>
<tr>
<td>5.22</td>
<td>ABNUVO-MACD ANALYSIS</td>
<td>62</td>
</tr>
<tr>
<td>5.23</td>
<td>PORTFOLIO I</td>
<td>63</td>
</tr>
<tr>
<td>5.24</td>
<td>PORTFOLIO II</td>
<td>64</td>
</tr>
<tr>
<td>5.25</td>
<td>PORTFOLIO III</td>
<td>65</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

1.1 COMPANY PROFILE

ADITYA BIRLA GROUP

The Aditya Birla Group is an Indian multinational conglomerate corporation headquartered in Mumbai, India. It operates in 33 countries with more than 133,000 employees worldwide. The group has diversified business interests and is dominant player in all the sectors in which it operates such as viscose staple fibre, metals, cement, viscose filament yarn, branded apparel, carbon black, chemicals, fertilisers, insulators, financial services, telecom, BPO and IT services.

A US $35 billion corporation, the Aditya Birla Group is in the League of Fortune 500. The Group has been ranked Number 4 in the Global 'Top Companies for Leaders' survey and ranked Number 1 in Asia Pacific for 2011.

Over 60 per cent of its revenues flow from its overseas operations. The Group operates in 36 countries – Australia, Austria, Bangladesh, Brazil, Canada, China, Egypt, France, Germany, Hungary, India, Indonesia, Italy, Ivory Coast, Japan, Korea, Laos, Luxembourg, Malaysia, Myanmar, Philippines, Poland, Russia, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Turkey, UAE, UK, USA and Vietnam.

Globally, the Aditya Birla Group is:

- A metals powerhouse, among the world’s most cost-efficient aluminium and copper producers.
- Hindalco-Novelis is the largest aluminium rolling company.
- It is one of the three biggest producers of primary aluminium in Asia, with the largest single location copper smelter.
- No.1 in viscose staple fibre
- No.1 in carbon black
- The fourth-largest producer of insulators
• The fifth-largest producer of acrylic fibre
• Among the top 10 cement producers
• Among the best energy-efficient fertiliser plants
• The largest Indian MNC with manufacturing operations in the USA

In India
• A top fashion (branded apparel) and lifestyle player
• The second-largest player in viscose filament yarn
• The largest producer in the chlor-alkali sector
• Among the top three mobile telephony companies
• A leading player in life insurance and asset management
• Among the top two supermarket chains in the retail business
• Among the top 10 BPO companies

BEYOND BUSINESS - THE ADITYA BIRLA GROUP

➢ Works in 3,000 villages.
➢ Reaches out to seven million people, annually through the Aditya Birla Centre for Community Initiatives and Rural Development, spearheaded by Mrs. Rajashree Birla.
➢ Focuses on healthcare, education, sustainable livelihood, infrastructure and espousing social reform in India, Asia, Egypt, Philippines, Korea and Brazil.

IN INDIA
• Our Group runs 42 schools, which provide quality education to 45,000 children. Of these, over 18,000 children receive free education
• Its 18 hospitals tend to more than a million villagers
• In line with its commitment to sustainable development, has partnered with the Columbia University in establishing the Columbia Global Centre’s Earth
Institute in Mumbai

• To embed CSR as a way of life in organisations has set up the FICCI – Aditya Birla CSR Centre for Excellence, in Delhi

VISION, MISSION AND VALUES

Vision
To be a premium global conglomerate with a clear focus on each business.

Mission
To deliver superior value to our customers, shareholders, employees and society at large.

Values
• Integrity
• Commitment
• Passion
• Seamlessness
• Speed
A formidable force in Indian industry, Mr. Aditya Birla dared to dream of setting up a global business empire at the age of 24. He was the first to put Indian business on the world map, as far back as 1969, long before globalisation became a buzzword in India.

In the then vibrant and free market South East Asian countries, he ventured to set up world-class production bases. He put Indian business on the globe, 22 years before economic liberalisation was formally introduced by the former Prime Minister, Mr. Narasimha Rao and the former Union Finance Minister, Dr. Manmohan Singh. He set up 19 companies outside India, in Thailand, Malaysia, Indonesia, the Philippines and Egypt.

Interestingly, for Mr. Aditya Birla, globalisation meant more than just geographic reach. He believed that a business could be global even whilst being based in India. Therefore, back in his home-territory, he drove single-mindedly to put together the building blocks to make our Indian business a global force.

At the time of his untimely demise in 1995, the Group's revenues crossed Rs.8,000 crore globally, with assets of over Rs.9,000 crore, comprising of 55 benchmark quality plants, an employee strength of 75,000 and a shareholder community of 600,000. In his time, his success was unmatched by any other industrialist in India.
Mr. Kumar Mangalam Birla (44) is the Chairman of the US$35 billion multinational Aditya Birla Group, which operates in 36 countries across six continents. Over 60 per cent of its revenues flow from its operations outside India.


**BUSINESS RECORD**

Mr. Birla took over as Chairman of the Group in 1995, at the age of 28, after the untimely demise of his father. As Chairman, Mr. Birla has taken the Aditya Birla Group to an altogether higher growth trajectory. In the 17 years that he has been at the helm of the Group, he has accelerated growth, built a meritocracy and enhanced stakeholder value.
ADITYA BIRLA FINANCIAL GROUPS

GROUP COMPANIES

- Grasim Industries Ltd.
- Hindalco Industries Ltd.
- Aditya Birla Nuvo Ltd.
- Ultra Tech Cement Ltd.

INDIAN COMPANIES

- Aditya Birla Minacs Worldwide Limited
- Essel Mining & Industries Ltd.
- Idea Cellular Ltd.
- Aditya Birla Insulators
- Aditya Birla Retail Ltd.
- Aditya Birla Chemicals(India) Limited
INTERNATIONAL COMPANIES

THAILAND

- Thai Rayon
- Indo Thai Synthetics
- Thai Acrylic Fibre
- Thai Carbon Black
- Aditya Birla Chemicals (Thailand) Limited
- Thai peroxide

NORTH AND SOUTH AMERICA, EUROPE AND ASIA

- Novelis Inc.

CANADA

- A.V. Group

AUSTRALIA

- Aditya Birla Minerals Ltd

LAOS

- Birla Laos Pulp and Plantations Company Limited

PHILIPPINES

- Indo Phil Textile Mills
- Indo Phil Cotton Mills
- Indo Phil Acrylic Manufacturing Corporation
INDONESIA

- PT Indo Bharat
- PT Elegant Textile Industry
- PT Sunrise Bumi Textiles
- PT Indo Liberty Textiles
- PT Indo Raya Kimia

SINGAPORE

- Swiss Singapore Overseas Enterprises Pte Limited

EGYPT

- Alexandria Carbon Black Company SAE
- Alexandria Fibre Company SAE

CHINA

- Liaoning Birla Carbon Company Limited
- Birla Jingwei Fibres Company Limited

JOINT VENTURES

- Birla Sun Life Insurance Company
- Birla Sun Life Asset Management Company
- Aditya Birla Money Mart Limited
- Tanfac Industries Limited
1.2 ABML INTRODUCTION

- **Aditya Birla Money Limited** formerly known as Apollo Sindhoori Capital Investment is a leading player in the broking space with nearly 15 years of experience
- It became a part of Aditya Birla Group in March 2009, when the group acquired 76% of the company
- The Company has a strong distribution network of over 1000 own branches and franchisee network, a large customer base in excess of 1,80,000, a strong technology backbone and a range of products delivered through a robust online and offline model
- The Company boasts of immense talent pool and vertical specialists which add to its positioning as a major player in this segment
- Aditya Birla Money is listed on National Stock Exchange of India Limited [NSE] and The Bombay Stock Exchange Limited [BSE]. It is also registered as Depository Participant with both NSDL and CDSL

**ADITYA BIRLA MONEY** is a pioneer in the concept of partnership to reach multiple locations in order to effectively service its large base of individual clients. Besides the reach of **ADITYA BIRLA MONEY**, the clients of the company greatly benefit by its strong research capability, which encompasses fundamentals as well as technical knowledge.

**ADITYA BIRLA MONEY** in recent years has expanded its reach in health care and financial services wherein it has multiple specialty hospital and labs which provide health care services and multiple financial services such as secondary market equity services, portfolio management services, depository services etc.

Financial services group comprises of **ADITYA BIRLA MONEY**, Comdex Limited and Finvest Limited which provide services in Equity, Commodity and Financial Services business & Religare Insurance Advisory Ltd.
MR. SUDHAKAR RAMASUBRAMANIAN
MD, Aditya Birla Money Ltd and CEO, Aditya Birla Money Mart Ltd

Mr. Sudhakar Ramasubramanian took over as Managing Director of Aditya Birla Money Ltd (ABML) and CEO of Aditya Birla Money Mart Ltd (ABMML) with effect from February 2011.

He joined Aditya Birla Financial Services Group (ABFSG) from the Aditya Birla Group (ABG) in March 2009, as Executive Director of Aditya Birla Money and held the position till December 2010. Subsequently, in January 2010, he moved to Aditya Birla Finance Ltd (ABFL) as the CEO and scaled it to greater heights. Through this period he continued to remain as a Director on the Board of ABML.

TAKEOVERS
Apollo Sindhoori Capital Investments Limited was takeover by Aditya Birla Group and changed its name to Aditya Birla Money Limited in August 2009.

PROMOTER
COMPETITORS OF ADITYA BIRLA MONEY

There are several financial security companies playing their roles in Indian equity market. But company faces competitions from these few companies.

- ICICI Direct.com
- Share Khan (SSKI)
- Kotak Securities.com
- India Bulls
- HDFC Securities
- 5paisa.com
- Motital Oswal
- IL&FS
- Karvy

NATURE OF BUSINESS CARRIED OUT

Aditya Birla Money Ltd offerings are delivered through a strong pan India distribution network of about 1000 own and franchisee, terminals branches, a robust online and offline model with a strong technology backbone to a large customer base, in excess of 1.8 lakhs.
SERVICES PROVIDED BY ABML

FINANCIAL PRODUCTS

- Equity
- Derivatives
- Commodity
- Currency
- Life Insurance
- Mutual Funds
- IPO
• Alternative Investments
• General Insurance
• Fixed Deposits
• Health Plan
• Property Services
• Depository Participant
CHAPTER II

OBJECTIVE, SCOPE AND LIMITATIONS OF THE STUDY

2.1 OBJECTIVES OF THE STUDY

- To make a detailed study on the overall concepts of the portfolio management
- To find out the various factors that an investor should take into consideration to make proper investment decisions
- To do an in detailed analysis of the risk and return characteristics of stocks related to different industries and different companies
- To help the investors to decide the effective portfolio of securities
- To identify the best portfolio of securities

2.2 SCOPE OF THE STUDY

This project deals with the different investment decisions made by different people and focuses on element of risk in detail while investing in securities. It also explains how portfolio hedges the risk in investment and giving optimum return to a given amount of risk. It also gives an in depth analysis of portfolio creation, selection, revision and evaluation. The report also shows different ways of analysis of securities, different theories of portfolio management for effective and efficient portfolio construction. It also gives a brief analysis of how to evaluate a portfolio.

2.3 LIMITATIONS OF THE STUDY

- The data collected is basically confined to secondary sources, with very little amount of primary data associated with the project.
- There is a constraint with regard to time allocated for the research study.
- The availability of information in the form of annual reports & price fluctuations of the companies is a big constraint to the study.
- In this study the statistical tools used are risk, return, average, variance, correlation
CHAPTER III
LITERATURE REVIEW

3.1 INTRODUCTION TO PORTFOLIO MANAGEMENT

A portfolio is a collection of investments held by an institution or a private individual. In building up an investment portfolio a financial institution will typically conduct its own investment analysis, whilst a private individual may make use of the services of a financial advisor or a financial institution which offers portfolio management services. Holding a portfolio is part of an investment and risk-limiting strategy called diversification. By owning several assets, certain types of risk (in particular specific risk) can be reduced. The assets in the portfolio could include stocks, bonds, options, warrants, gold certificates, real estate, futures contracts, production facilities, or any other item that is expected to retain its value.

Portfolio management involves deciding what assets to include in the portfolio, given the goals of the portfolio owner and changing economic conditions. Selection involves deciding what assets to purchase, how many to purchase, when to purchase them, and what assets to divest. These decisions always involve some sort of performance measurement, most typically expected return on the portfolio, and the risk associated with this return (i.e. the standard deviation of the return).

The unique goals and circumstances of the investor must also be considered. Some investors are more risk averse than others. Mutual funds have developed particular techniques to optimize their portfolio holdings. Thus, portfolio management is all about strengths, weaknesses, opportunities and threats in the choice of debt vs. equity, domestic vs. international, growth vs. safety and numerous other trade-offs encountered in the attempt to maximize return at a given appetite for risk.

ASPECTS OF PORTFOLIO MANAGEMENT:

- A proper investment decision making of what to buy & sell
- Effective money management in terms of investment in a basket of assets so as to satisfy the asset preferences of investors.
- Diversification of the risk and increase returns.
3.2 OBJECTIVES OF PORTFOLIO MANAGEMENT:

The basic objective of Portfolio Management is to maximize yield and minimize risk. The other ancillary objectives are as per needs of investors, namely:

- Regular income or stable return
- Appreciation of capital
- Marketability and liquidity
- Safety of investment
- Minimizing of tax liability

3.3 ELEMENTS OF PORTFOLIO MANAGEMENT:

Portfolio Management is an on-going process involving the following basic tasks.

- Identification of the investors objective, constrains and preferences which help formulated the invest policy.
- Strategies are to be developed and implemented in tune with invest policy formulated. This will help the selection of asset classes and securities in each class depending upon their risk-return attributes.
- Review and monitoring of the performance of the portfolio by continuous overview of the market conditions, company’s performance and investor’s circumstances.
- Finally, the evaluation of portfolio for the results to compare with the targets and needed adjustments have to be made in the portfolio to the emerging conditions and to make up for any shortfalls in achievements (targets).
3.4 SCHEMATIC DIAGRAM OF STAGES IN PORTFOLIO MANAGEMENT:

- Specification and quantification of investor objectives, constraints, and
- Monitoring investor related input factors
- Portfolio policies and strategies
- Portfolio construction and revision asset allocation, portfolio optimization, security selection, implementation and execution
- Attainment of investor objectives
- Performance
- Capital market expectations
- Monitoring economic and market input factors
- Relevant economic, social, political sector and security considerations
3.5 PROCESS OF PORTFOLIO MANAGEMENT:

The Portfolio Program and Asset Management Program both follow a disciplined process to establish and monitor an optimal investment mix. This six-stage process helps ensure that the investments match investor’s unique needs, both now and in the future.

1. **Identify goals and objectives:**

When will you need the money from your investments? What are you saving your money for? With the assistance of financial advisor, the Investment Profile Questionnaire will guide through a series of questions to help identify the goals and objectives for the investments.

2. **Determine optimal investment mix:**

Once the Investment Profile Questionnaire is completed, investor’s optimal investment mix or asset allocation will be determined. An asset allocation represents the mix of investments (cash, fixed income and equities) that match individual risk and return needs.

This step represents one of the most important decisions in your portfolio construction, as asset allocation has been found to be the major determinant of long-term portfolio performance.
3. **Create a customized investment policy statement**

When the optimal investment mix is determined, the next step is to formalize our goals and objectives in order to utilize them as a benchmark to monitor progress and future updates.

4. **Select investments**

The customized portfolio is created using an allocation of select QFM Funds. Each QFM Fund is designed to satisfy the requirements of a specific asset class, and is selected in the necessary proportion to match the optimal investment mix.

5. **Monitor progress**

Building an optimal investment mix is only part of the process. It is equally important to maintain the optimal mix when varying market conditions cause investment mix to drift away from its target. To ensure that mix of asset classes stays in line with investor’s unique needs, the portfolio will be monitored and rebalanced back to the optimal investment mix.

6. **Reassess needs and goals**

Just as markets shift, so do the goals and objectives of investors. With the flexibility of the Portfolio Program and Asset Management Program, when the investor’s needs or other life circumstances change, the portfolio has the flexibility to accommodate such changes.

**RISK:**

Risk refers to the probability that the return and therefore the value of an asset or security may have alternative outcomes. Risk is the uncertainty (today) surrounding the eventual outcome of an event which will occur in the future. Risk is uncertainty of the income/capital appreciation or loss of both. All investments are risky. The higher the risk taken, the higher is the return. But proper management of risk involves the right choice of investments whose risks are compensation.

**RETURN:**

Return-yield or return differs from the nature of instruments, maturity period and the creditor or debtor nature of the instrument and a host of other factors. The most important factor influencing return is risk return is measured by taking the price income plus the price change.
PORTFOLIO RISK:

Risk on portfolio is different from the risk on individual securities. This risk is reflected by in the variability of the returns from zero to infinity. The expected return depends on probability of the returns and their weighted contribution to the risk of the portfolio.

RETURN ON PORTFOLIO:

Each security in a portfolio contributes returns in the proportion of its investment in security. Thus the portfolio of expected returns, from each of the securities with weights representing the proportionate share of security in the total investments.

3.6 RISK – RETURN RELATIONSHIP:

The risk/return relationship is a fundamental concept in not only financial analysis, but in every aspect of life. If decisions are to lead to benefit maximization, it is necessary that individuals/institutions consider the combined influence on expected (future) return or benefit as well as on risk/cost. The requirement that expected return/benefit be commensurate with risk/cost is known as the "risk/return trade-off" in finance.

All investments have some risks. An investment in shares of companies has its own risks or uncertainty. These risks arise out of variability of returns or yields and uncertainty of appreciation or depreciation of share prices, loss of liquidity etc. and the overtime can be represented by the variance of the returns. Normally, higher the risk that the investors take, the higher is the return.

GRAPHICAL REPRESENTATION OF RISK AND RETURN ANALYSIS
3.7 THEORETICAL ANALYSIS OF THE STUDY

The objective of portfolio management is to invest in securities in such a way that:

- Maximize one’s splitter and
- Minimize the risk

In order to achieve ones investment objectives, a good portfolio should have multiple objectives and achieve a sound balance among them. Any one objective should not be given undue importance at the cost of others.

Some of the main objectives are given below:

**Safety of the investment:**

Investment safety or minimization of risks is one of the important objectives of portfolio management. There are many types of risks, which are associated with investment in equity stocks, including supper stocks. We should keep in mind that there is no such thing as a zero-risk investment. Moreover, relatively low-risk investments give correspondingly lower returns.

**Stable Current Returns:**

Ones investments safety is guaranteed, the portfolio should yield a study current income. The current returns should at least match the opportunity cost of the funds of the interest or dividends, not capital gains. The portfolio should give a steady yield of income i.e. interest or dividends the returns have to match the opposite cost of funds of interest.

**Marketability:**

If there are too many unlisted or inactive shares in our portfolio, we will have to face problems in encasing them, and switching from one investment to another.

**Liquidity:**

The portfolio should ensure that there are enough funds available at short notice to take care of the investor’s liquidity requirements. It is desirable to keep a line of credit from a bank for use in case it becomes necessary to participate in right issues, or for any other personal needs.
Tax planning:

Since taxation is an important variable in total planning. A good portfolio should enable its owner to enjoy a favourable tax shelter. The portfolio should be developed considering not only income tax but capital gains tax, and gift tax, as well. What a good portfolio aims at is tax planning, not tax evasion or tax avoidance.

3.8 PORTFOLIO MANAGEMENT FRAMEWORK:

Investment management is also known as portfolio management, it is a complex process or activity that may be divided into seven broad phases:-

- Specification of Investment Objectives and Constrains
- Choice of Asset Mix
- Formulation of portfolio strategy
- Selection Of Securities
- Portfolio Execution
- Portfolio Rebalancing
- Performance Evaluation

3.9 SEBI NORMS

SEBI has prohibited the portfolio manager to assume any risk on behalf of the client. Portfolio manager cannot also assure any fixed return to the client. The investments made or advised by him are subject to risk, which is the client has to bear. The investment consultancy and management has to be charged at rates, which are fixed at the beginning and transparent as per the contract. No sharing of profits or discounts or cash incentives to clients is permitted.

The portfolio manager is prohibited to do lending, badla financing and bills discounting as per SEBI norms. He cannot put the client’s funds in any investment can be made in capital market and money market instruments. Client’s money has to be kept in a separate account with the public sector bank and cannot be mixed up with his own funds or investments. All the deals done for a client’s account are to be entered in his name and contract notes, bills and etc., are all passed by his name.
A separate ledger account is maintained for all purchases/sales on client’s behalf, which should be done at the market price. Final settlement and termination of contract, portfolio manager is only acting on a contractual basis and on a fiduciary basis. No contract for less than a year is permitted by the SEBI.

**SEBI GUIDELINES FOR THE PORTFOLIO MANAGERS:**

On 7th January 1993 the securities exchange board of India issued regulations to the portfolio managers for the regulation of portfolio management services by merchant bankers. They are as follows:

- Portfolio management services shall be in the nature of investment brokery consultancy management for an agreed fee at client’s risk.
- The portfolio manager shall not guarantee return directly or indirectly the fee should not be depended upon or it not be a return sharing basis.
- Various terms of agreements, fees, disclosures of risk and repayment should be mentioned.
- Client’s funds should be kept separately in client wise account, which should be subject to audit.
- Manager should report clients at intervals not exceeding 6 months.
- Portfolio manager should maintain high standard of integrity and not desire any benefit directly or indirectly from client’s funds.
- The client shall be entitled to inspect the documents.
- Portfolio manager shall not invest in funds belonging to clients in badly financing, bills discounting and lending operations.
- Client money can be invested in money and capital market instruments.
- Settlement on termination of contract should be as agreed in the contract.
- Client’s fund should be kept in a separate bank account opened in scheduled commercial bank.
- Purchase or sale of securities shall be made at prevailing market price.
CHAPTER IV
PORTFOLIO MANAGEMENT PROCESS

4.1 PORTFOLIO MANAGEMENT PROCESS:

The following are the major steps involved in this process.

- Security analysis
- Portfolio analysis
- Selection of portfolio
- Portfolio revision
- Portfolio evaluation

4.1.1 SECURITY ANALYSIS

Definition:

Security analysis is the analysis of tradable financial instruments called securities. These can be classified into debt securities, equities, or some hybrid of the two. For making effective and ideal investment involving both risk and return, the investor has to make a study of the alternative avenues of investment their risk and return characteristics and make a proper projection or expectation of the risk and return of the alternative investments under consideration. The process of analyzing the individual securities and the market as a whole and estimating the risk and return expected from each of the investments with a view to identifying undervalued securities for buying and overvalued securities for selling is both an art and a science that is what called security analysis.

Security:

The security has inclusive of share, scripts, stocks, bonds, debenture stock or any other marketable securities of a like nature in or of any debentures of a company or body corporate, the government and semi government body etc.

Analysis of securities:

Security analysis in both traditional sense and modern sense involves the projection of future dividend or ensuring the intrinsic value of a security based on the forecast of earnings or dividend. Security analysis in traditional sense is essentially on analysis of the fundamental
value of shares and its forecast for the future through the calculation of its intrinsic worth of the share.

Modern security analysis relies on the fundamental analysis of the security, leading to its intrinsic worth and also rise-return analysis depending on the variability of the returns, covariance, safety of funds and the projection of the future returns. If the security analysis based on fundamental factors of the company, then the forecast of the share price has to take into account inevitably the trends and the scenario in the economy, in the industry to which the company belongs and finally the strengths and weaknesses of the company itself.

**APPROACHES TO SECURITY ANALYSIS:-**

A) Fundamental analysis  
B) Technical analysis  
C) Efficient market hypothesis

**A) FUNDAMENTAL ANALYSIS:**

The intrinsic value of an equity share depends on a multitude of factors. The earnings of the company, the growth rate and the risk exposure of the company have a direct bearing on the price of the share. These factors intern rely on the host of other factors like economic environment in which they function, the industry they belong to, and finally company’s own performance. The fundamental school of thought apprised the intrinsic value of share through

- Economic analysis  
- Industry analysis  
- Company analysis

**ECONOMIC ANALYSIS:**

The level of economic activity has an investment in many ways. If the economy grows rapidly, the industry can also expect to show rapid growth and vice versa. When the level of economic activity is low, stock prices are low, and when the economic activity is high, stock prices are high reflecting the prosperous outlook for sales and profits of the firms. The analysis of macroeconomic environment is essential to understand the behavior of the stock prices. The commonly analyzed macro economic factors are as follows:
• Gross Domestic product (GDP)
• Savings and investments
• Rate of inflation
• Rates of interest
• Budget
• The tax structure
• Balance of payments
• Monsoon and agriculture
• Infrastructure facilities
• Demographic factor

INDUSTRY ANALYSIS:

As referred earlier, performance of a company has been found to depend broadly up to 50% on the external factors of the economy and industry. These externalities depend on the availability of inputs, like proper labour, water, power and inter-relations between the economy and industry and the company.

In this context a well-diversified company performs better than a single product company, because while the demand for some products may be declining, that for others may be increasing. Similarly, the input prices and cost factors would vary from product line to product line, leading to different margins and a diversified company is better bet for the investor.

The industry analysis should take into account the following factors among others as influencing the performance of the company, whose shares are to be analyzed. They are as followed:

• Product line
• Raw materials and inputs
• Capacity installed and utilized
• Industry characteristics
• Demand and market
• Government policy with regard to industry
• Labour and other industrial problems
COMPANY ANALYSIS:

Investors should know the company results properly before making the investment. The selection of investment is depends on optimum results of the following factors.

1. Marketing forces:

Manufacturing companies profit depends on marketing activities. If the marketing activities are favourable than it can be concluded that the company may have more profit in future years Depending upon the previous year results fluctuations in sales or growth in sales can be identified. If the sales are increasing in trend investor may be satisfied.

2. Accounting Profiles:

Different accounting policies are used by organization for the valuation of inventories and fixed assets

A) Inventory policy:

Raw materials and their value at the end of the year is calculated by using FIFO, LIFO, or any other average methods. The particular method is must be suitable to access the particular raw materials.

B) Fixed Asset Policy:

All the fixed assets are valued at the end of every year to know the real valu of the business.

Net value of the fixed assets =

Value of the asset at the beginning of the year – Depreciation

For income tax purpose written down value method is used as per this separate schedule of assets are to be prepared.

3. Profitability situation:
It is a major factor for the investor. Profitability of the company must be better compared with the industry. The efficiency of the profitability position or operating activities can be identified by studying the following factors

A) Gross profit margin ratio:

It should be more than 30%. But, other operating expenses should be less compared to operating incomes.

\[
\text{GPMR} = \frac{\text{Sales} - \text{cost of goods sold}}{\text{Sales}}
\]

B) Operating & net profit ratio:

Operating profit is the real income of the business it is calculated before non operating expenses and incomes. It should be nearly 20%. The net profit ratio must be more than 10%.

\[
\text{NPR} = \frac{\text{Profit after tax}}{\text{Sales}}
\]

4. **Dividend policy:** It is determined in the general body meeting of the company, for equity shares at the end of the year. The dividend payout ratio is determined as per the dividend is paid. Dividend policies are divided into two types.

a) Stable dividend policy

b) Unstable dividend policy

When company reached to optimum level it may follow stable dividend policy it indicates stable growth rate, no fluctuation are estimated. Unstable dividend policy may used by developing firms. In such a case study growth market value of share is not possible to identify.

5. **Capital structure of the company:**
Generally capital structure of the company consists of equity shares, preference shares, debentures and other long term funds. On the basis of long term financial sources cost of capital is calculated.

6. Operating efficiency:

It is determined on the basis of capital expenditure and operating activities of a company. Increased capital expenditure indicates increase of operating efficiency. The operating efficiency of a company directly affects the earnings of a company an expanding company that maintains high operating efficiency with low breakeven point. Efficient use of fixed assets with raw materials, labour, and management would lead to more income from sales.

7. Management:

Good and capable management generates profits to the investors. The management of the firm should efficiently plan, organizes, actuate and control the activities of the company. The good management depends on the qualities of the manager. Knootz and O’ Donnell suggest the following as special traits of an able manager.

- Ability to get along with people
- Leadership
- Analytical competency
- Industry
- Judgment.

8. Financial analysis:

The best source of financial information about a company is its own financial statements. This is a primary source of information for evaluating the investment prospects in the particular company’s stock. The statement gives the historical and current information about the company’s information aids to analysis the present status of the company. The main statements used in the analysis are:

a) Balance sheet
b) Profit and loss account

Balance Sheet:
The balance sheet shows all the company’s sources of funds (liabilities and stockholders equity) and uses of funds at a given point of time. The balance sheet provides an account of the capital structure of the company. The net worth and the outstanding long-term debt are known from the balance sheet. The use of debt creates financial leverage beneficial or detrimental to the shareholders depending on the size and stability of earnings. It is better for the investor to avoid accompany with excessive debt components in its capital structure.

**Profit and loss account:**

Income statements report the flow of funds from business operations that take place in between two points of time. It lists down the items of income and expenditure. The difference between the income and expenditure represents profit or loss for the period. It is also called income and expenditure statement.

**Limitations of financial statements:**

- The financial statements contain historical information. This information is useful, but an investor should be concerned more about the present and future.
- Financial statements are prepared on the basis of certain accounting concepts and conventions. An investor should know them.
- The statements contain only information that can be measured in monetary units. For example, the loss incurred by a firm due to flood or fire is included because it can be expressed in monetary terms.

9. **Ratio analysis:**

Ratio is relationship between two figures expressed mathematically. Financial ratio provides numerical relationship between two relevant financial data. Financial ratios are calculated from the balance sheet and profit and loss account. The relationship can be either expressed as a percent or as a quotient. Classification of financial ratios is as follows:

I. **Liquidity ratios:**

   Liquidity ratio measure the ability of the firm to meet its current obligations liquidity ratios by establishing a relationship between cash and other current assets to current obligations, provide quick measure of liquidity.

   A firm should ensure that it does not suffer from lack of liquidity ,and also that it does not have excess liquidity the failure of a company to meet its obligations due to lack of sufficient
liquidity, will result in a poor creditworthiness, loss of creditor’s confidence, or even in legal
tangles resulting in the closure of the company

II. Leverage ratios:

These ratios are used to judge the long-term financial position of the firm, to measure the
financial risk and the firm’s ability of using debt to share holders’ advantage. Leverage ratios
may be calculated from the balance sheet items to determine the proportion of the debt in
total financing. Many variations of these ratios exist. But all these ratios indicate the same
thing ---- the extent to which the firm has relied on debt in financing assets. Leverage ratios
are also computed from the profit and loss items by determining the extent to which operating
profits are sufficient to cover the fixed charges.

III. Activity ratios:

These ratios are employed to evaluate the efficiency with which the firm manages and
utilizes its assets. These ratios are also called turn over ratios because they indicate the
speed with which assets are being converted or turned over into sales. These ratios, thus,
involve a relationship between assets and sales. A proper balance between sales and assets
generally reflects that assets are managed well. Several activity ratios can be calculated to
judge the effectiveness of asset utilization.

IV. Profitability ratio:

These ratios relate the firms profit to the factors that generates the profits. These ratios are
calculated to measure the operating efficiency of the company. Generally, two major types of
profitability ratios are calculated.

a) Profitability in relation to sales.

b) Profitability in relation to investment.

V. Valuation ratio:

The share holders are interested in assessing the value of shares. The value of the share
depends on the performance of the firm and the market factors. The performance of the firm
in turn depends on the host of factors.

Hence, the valuation ratios provide a comprehensive measure of the performance of
the firm itself. In the subsequent section some of the valuation ratios are dealt in detail.

Book value per share:
This ratio indicates the share of equity share holders after the company has paid all its liabilities, creditors, debentures and preference shareholders.

Price earnings ratio:

This ratio is widely used by the security analysts to value the firm’s performance as expected by investors. It indicates investors’ judgment about the firm’s performance. It reflects investors’ expectations about the firm’s earnings. Industries differ in their growth prospects; accordingly the P / E ratios for industries vary widely.

- \[
P/E \text{ ratio} = \frac{\text{Market value per share}}{\text{Earnings per share}}
\]

- \[
\text{Earnings per share} = \frac{\text{Profit after tax}}{\text{Number of equity shares}}
\]

- \[
\text{Market value – To – book value ratio} = \frac{\text{Market value Per Share}}{\text{Book value per share}}
\]

- \[
\text{Dividend – payout ratio} = \frac{\text{Dividends per share}}{\text{Earnings per share}}
\]

B) TECHNICAL ANALYSIS

Technical analysis involves identification of share price fluctuations on short period basis. This analysis can be made by brokers, dealers. They are treated as technicians. The following are the major factors in technical analysis:

- Company results are not analyzed. The changes in national and international level about political and other factors.
- The shares are exchanged immediately when there is a small change in the price level of shares.
- Average results of the particular industry are identified and they are treated as basic factors.
- Brokers do not expect any dividend by holding the share. Dividend is not return for calculated of better return to the technicians.
• The holding period is determined very less. It may range from hours to days. Generally holding period may not be more than one month. The technical analysis can be made in this respect by identifying price fluctuations of the particular share.
• No capital gains expected by transfer of the share so needed to pay any capital gain takes, short run return about exchange in price of share is not treated as capital gain.
• ESP declared by company at the end of financial year and dividend declared may be treated as base figures for technical analysis.
• Interim dividend if any declared by the company that will be analyzed to sell the shares.
• Stock exchange will announce the average result of securities traded on day – to – day basis.
• By conducting of the technical analysis technician anticipate high level of short run profit.

Moving average:

The analysis of the moving average of the prices of scripts is another method in technical analysis. Generally, 7 days, to days and 15days moving averages are worked out in respect of scripts studied and depicted on a graph along with similar moving averages of the market index like BSE Sensitive Index. There will then be two graphs to be compared and when the trades are similar the scrip and BSE market induces will show comparable averages risks.

Oscillators indicate the market momentum scrip momentum. Oscillator shows the shares price movement across a reference point from one extreme to another.

Charts:

Charts are the valuable and easiest tools in the technical analysis. The graphic presentation of the data helps the investor to find out the trend of the price without any difficulty. The charts also have the following uses.

• Spots the current trend for buying and selling.
• Indicates the probable future action of the market by projection.
• Shows the past historic movement.
• Indicates the important areas of support and resistance.
The charts do not lie but interpretation differs from analyst to analyst according to their skills and experience.

Point and figure charts:

Technical analyst to predict the extent and direction of the price movement of a particular stock or the stock market indices uses point and figure charts. This P.F charts are of one-dimensional and there is no indication of time or volume. The price changes in relation to previous prices are drawn in rules paper.

Candle stick charts:

A candlestick chart is a style of bar-chart used primarily to describe price movements of a security, derivative, or currency over time. It is a combination of a line-chart and a bar-chart, in that each bar represents the range of price movement over a given time interval. It is most often used in technical analysis of equity and currency price patterns. They appear superficially similar to error bars, but are unrelated.

Bollinger band analysis:

Bollinger Bands and the related indicators %b and Bandwidth are technical analysis tools invented by John Bollinger in the 1980s. Having evolved from the concept of trading bands, Bollinger Bands can be used to measure the highness or lowness of the price relative to previous trades.

Bollinger Bands consist of:

- an $N$-period moving average (MA)
- an upper band at $K$ times an $N$-period standard deviation above the moving average ($MA + K\sigma$)
- a lower band at $K$ times an $N$-period standard deviation below the moving average ($MA - K\sigma$)

**RISK AND RETURN ANALYSIS**

The two main components to be studied while construction of a portfolio is

1. Risk of a portfolio
2. Returns on a portfolio
RISK:

Existence of volatility in the occurrence of an expected incident is called risk. Higher the unpredictability greater is the degree of risk. The risk any or may not involve money. In investment management, risk involving pecuniary matter has importance; the financial sense of risk can be explained as the volatility of expected future incomes or outcomes. Risk may give a positive or a negative result. If unimagined incident is a positive one, then people have a pleasant surprise. To be able to take negative risk with the same spirit is difficult but not impossible, if proper risk management techniques are followed.

Risk is uncertainty of the income/capital appreciation or loss of the both. The two major types of risks are:

- Systematic or market related risk.
- Unsystematic or company related risk.

The systematic risks are the market problems of raw material availability, tax policy or any government policy, inflation risk, interest rate risk and financial risk. The unsystematic risks are mismanagement increasing inventory, wrong financial policies. The systematic risk is caused by factors external to the particular company and uncontrollable. The systematic risk affects the market as a whole. In a case of unsystematic risk the factors are specific, unique and related to the particular industry or company.

RISK ON A PORTFOLIO:

Risk on a portfolio is different from the risk on individual securities. This risk is related in the variability of the returns from zero to infinity. The expected return depends on the probability of the returns and their weighted contribution to the risk of the portfolio. There are two measures of the risk in this context--- one is the absolute deviation and the other standard deviation.

RETURN OF PORTFOLIO:

Each security in a portfolio contributes returns in the proportion of its investment in security. Thus, the portfolio expected return is the weighted average of the expected returns, from each of the securities, with weights representing the proportionate share of the security in the total investment. Why an investor does have so many securities in his portfolio? The answer to this question lie in the investor’s perception of risk attached to the investment, his
objectives of income, safety, appreciation, liquidity and hedge against the loss of value of money etc.,

This pattern of investment in different asset categories security categories types of instrument etc. would all be described under the caption of diversification which aims at the reduction or even elimination of unsystematic or company related risks and achieve the specific objectives of the investors.

Portfolio management service helps investor to make a wise choice among alternative investments without any post training hassles. This service renders optimum returns to the investors by a proper selection by continuous shifting of portfolio from one scheme to other scheme or from one brand to the other brand within the same scheme.

Any portfolio manager must specify the maximum return, optimum returns and risk, capital appreciation, safety etc in their offer.

From the return angle securities can be classified into two types:

- Fixed income securities
-Variable income securities.

**Fixed income securities:**

- Debt – partly convertible and Non convertible debt with tradable warrant.
- Preference shares
- Government securities and Bonds
- Other debt instruments.

**Variable income securities:**

- Equity shares
- Money market securities like treasury bills, commercial papers etc.

Portfolio manager have to decide upon the mix of securities on basis of contract with the client and objective of the portfolio. Portfolio managers in the Indian context, has been brokers (big brokers) who on the basis of their experience, market trend, insider trading personal contact and speculations are the one who used to manage funds or portfolios.
4.1.2 PORTFOLIO ANALYSIS

Portfolios which are the combinations of securities may or may not take the aggregate characteristics of their individual parts. Portfolio analysis considers the determination of future risk and return in holding various blends of individual securities. An investor can sometimes reduce portfolio risk by adding another security with greater individual risk than any other security in the portfolio. This seemingly curious result occurs because risk depends greatly on the covariance among returns of individual securities. An investor can reduce expected risk level of a given portfolio of assets if he makes a proper diversification of portfolios.

There are two main approaches for analysis of portfolio

- Traditional approach
- Modern approach

TRADITIONAL PORTFOLIO APPROACH:

The traditional approach basically deals with two major decisions. Traditional security analysis recognizes the key importance of risk and return to the investor. Most traditional methods recognize return as some dividend receipt and price appreciation over a forward period. But the return for individual securities is not always over the same common holding period, nor are the rates of return necessarily time adjusted. An analysis may well estimate future earnings and a P/E ratio to derive future price. He will surely estimate the dividend.

In any case, given an estimate of return, the analyst is likely to think of and express risk as the probable downside price expectation (either by itself or relative to upside appreciation possibilities). Each security ends up with some rough measures of likely return and potential downside risk for the future.

Portfolios or combinations of securities are though of as helping to spread risk over many securities may specify only broadly or nebulously. Auto stocks are, for example recognized as risk interrelated with fire stocks, utility stocks display defensive price movement relative to the market and cyclical stocks like steel, and so on. This is not to say that traditional portfolio analysis is unsuccessful. It is to say that much of it might be more objectively specified in explicit terms.
They are:

- Determining the objectives of the portfolio
- Selection of securities to be included in the portfolio.

Normally this is carried out in four to six steps. Before formulating the objectives, the constraints of the investor should be analyzed. With in the given frame work of constraints, objectives are formulated. Then based on the objectives securities are selected. After that risk and return of the securities should be studied. The investor has to assess the major risk categories that he or she is trying to minimize. Compromise of risk and non-risk factors has to be carried out. Finally relative portfolio weights are assigned to securities like bonds, stocks and debentures and the diversification is carried out.

**MODERN PORTFOLIO APPROACH:**

The traditional approach is a comprehensive financial plan for the individual needs such as housing, life insurance and pension plans. But these types of financial planning approaches are not done in the Markowitz approach. Markowitz gives more attention to the process of selecting the portfolio. His planning can be applied more in the selection of common stocks portfolio than the bond portfolio. The stocks are not selected on the basis of need for income or capital appreciation. But the selection is based on the risk and return analysis, return includes market return and dividend. The investor needs return and it may be either in the form of market return or dividend.

The investor is assumed to have the objectives of maximizing the expected return and minimizing the risk. Further, it is assumed that investors would take up risk in a situation when adequately rewarded for it. This implies that individuals would prefer the portfolio of highest expected return for a given level of risk. In the modern approach the final step is asset allocation process that is to choose the portfolio that meets the requirement of the investor.

**PORTFOLIO CONSTRUCTION**

Portfolio is combination of securities such as stocks, bonds and money market instruments. The process of blending together the broad assets classes so as to obtain optimum return with minimum risk is called portfolio construction.

**Minimization of risks:**
The company specific risks (unsystematic risks) can be reduced by diversifying into a few companies belonging to various industry groups, asset group or different types of instruments like equity shares, bonds, debentures etc. thus, asset classes are bank deposits, company deposits, gold, silver, land, real estate, equity shares etc. industry group like tea, sugar paper, cement, steel, electricity etc. Each of them has different risk – return characteristics and investments are to be made, based on individual’s risk preference. The second category of risk (systematic risk) is managed by the use of beta of different company shares.

**Approaches in portfolio construction:**

Commonly there are two approaches in the construction of the portfolio of securities viz,

- Traditional approach
- Markowitz efficient frontier approach.

In the traditional approach, investors needs in terms of income and capital appreciation are evaluated and then appropriate securities are selected to, meet the needs of investors. The common practice in the traditional approach is to evaluate the entire financial plan of the individuals. In the modern approach, portfolios are constructed to maximize the expected return for a given level of risk. It view portfolio construction in terms of the expected return and the risk associated with obtaining the expected return.

**Efficient portfolio:**

To construct an efficient portfolio, we have to conceptualize various combinations of investments in a basket and designate them as portfolio one to ‘N’. Then the expected returns from these portfolios are to be worked out and then portfolios are to be estimated by measuring the standard deviation of different portfolio returns. To reduce the risk, investors have to diversify into a number of securities whose risk – return profiles vary.

A single asset or a portfolio of assets is considered to be “efficient” if no other asset offers higher expected return with the same risk or lower risk with the same expected return. A portfolio is said to be efficient when it is expected to yield the highest returns for the level of risk accepted or, alternatively, the smallest portfolio risk or a specified level of expected return.
Main features of efficient set of portfolio:

- The investor determines a set of efficient portfolios from a universe of ‘n’ securities and an efficient set of portfolio is the subset of ‘n’ security universe.
- The investor selects the particular efficient that provides him with most suitable combination of risk and return.

CAPITAL ASSETS PRICING MODEL (CAPM):

Under CAPM model the changes in prices of capital assets in stock exchanges can be measured by using the relationship between security return and the market return. So it is an economic model describes how the securities are priced in the market place. By using CAPM model the return of security can be calculated by comparing return of security with market place. The difference of returns of security and market can be treated as highest return and the risk premium of the investor is identified. It is the difference between the return of security and risk free rate of return.

Risk premium = Return on security – Risk free rate of return

So the CAPM attempts to measure the risk of a security in the portfolio sense.

Assumptions:

The CAPM model depends on the following assumptions, which are to be considered while calculating rate of return.

- The investors are basically average risk assumers and diversification is needed to reduce the risk factor.
- All investors want to maximize the return by assuming expected return of each security.
- All investors assume increase of net wealth of the security.
- All investors can borrow or lend an unlimited amount of fund at risk free rate of interest.
- There are no transaction costs and no taxes at the time of transfer of security.
- All investors have identical estimation of risk and return of all securities. All the securities are divisible and tradable in capital market.
• Systematic risk factor can be calculated and it is assumed perfectly by the investor.
• Capital market information must be available to all the investors.

**Beta:**

Beta described the relationship between the stock return and the market index returns. This can be positive and negative. It is the percentage change in the price of his stock regressed (or related) to the percentage changes in market index. If beta is 1, a one-percentage change in market index will lead to one percentage change in price of the stock. If beta is 0, stock price is unrelated to the market index if the market goes up by a +1%, the stock price will fall by 1% beta measures the systematic market related risk, which cannot be eliminated by diversification. If the portfolio is efficient, Beta measures the systematic risk effectively.

\[
\beta = \frac{\text{Co-variance of security and market}}{\text{Variance of market}}
\]

Higher value of beta indicates higher systematic risk and vice versa. When number of securities is held by an investor, composite beta or portfolio can be calculated by the use of weights of security and individual beta. Risk free rate of return is identified on the basis of the market conditions.

**Limitations of CAPM:**

In practical purpose CAPM can’t be applied due to the following limitations.

• The calculation of beta factor is not possible in certain situations due to more assets are traded in the market.
• The assumption of unlimited borrowings at risk free rate is not certain. For every individual investor borrowing facilities are restricted.
• The wealth of the shareholder or investor is assessed by using security return. But it is not only the factor for calculation of wealth of the investor.
• For every transfer of security transition cost is required on every return tax must be paid.

4.1.3 SELECTION OF PORTFOLIO

Certain assumptions were made in the traditional approach for portfolio selection, which are discussed below:

• Investors prefer large to smaller returns from securities and take more risk.
• Ability to achieve higher returns depends upon investor’s judgment of risk.
• Spreading money among many securities can reduce risk.

An investor can select the best portfolio to meet his requirements from the efficient frontier, by following the theory propounded by Markowitz. Selection process is based on the satisfaction level that can be achieved from various investment avenues.

**Stages in the selection process:**

The process of selecting a portfolio is very crucial in the investment management and involves four stages which are given below:

• Determination of assets, which are eligible for constructing of a portfolio.
• Computation of the expected return for the eligible assets over a holding period.
• Arriving at an acceptable balance between risk and return for constructing optimum a portfolio i.e. selecting such a portfolio for which there is highest return for each level of risk.

**Selecting the best portfolio mix:**

When an infinite number of portfolios are available, investor selects the best portfolio by using the Markowitz portfolio theory. The investors base their selection on the expected return and standard deviation of the portfolio and decide the best portfolio mix taking the magnitude of these parameters.

**Optimum portfolio:**
Sharpe has identified the optimal portfolio through his single index model, according to Sharpe, the beta ratio is most important in portfolio selection. The optimal portfolio is said to relate directly to the beta value. It is the excess return to the beta ratio. The optimal portfolio is selected by finding out the cut-off rate \([c]\). The stock where the excess return to the beta ratio is greater than cut-off rate should only be selected for inclusion in the optimal portfolio. Shape proposed that desirability of any stock is directly referred to its excess returns to betas coefficient.

\[
\frac{R_i - R_f}{\beta}
\]

Where, 
- \(R_i\) = expected return on stock
- \(R_f\) = risk free rate of return on asset
- \(\beta\) = expected change in the rate of return on stock 1 associated with 1% change in the market return

4.1.4 PORTFOLIO REVISION

Having constructed the optimal portfolio, the investor has to constantly monitor the portfolio to ensure that it continues to be optimal. As the economy and financial markets are dynamic, the changes take place almost daily. The investor now has to revise his portfolio. The revision leads to purchase of new securities and sale of some of the existing securities from the portfolio.

Need for revision:

- Availability of additional funds for investment
- Availability of new investment avenues
- Change in the risk tolerance
- Change in the time horizon
- Change in the investment goals
- Change in the liquidity needs
- Change in the taxes
4.1.5 PORTFOLIO EVALUATION

Portfolio managers and investors who manage their own portfolios continuously monitor and review the performance of the portfolio. The evaluation of each portfolio, followed by revision and reconstruction are all steps in the portfolio management.

The ability to diversify with a view to reduce and even eliminate all unsystematic risk and expertise in managing the systematic risk related to the market by use of appropriate risk measures, namely, betas. Selection of proper securities is thus the first requirement.

Methods of evaluation:

✔ Sharpe index model:

It depends on total risk rate of the portfolio. Return of the security compare with risk free rate of return, the excess return of security is treated as premium or reward to the investor. The risk of the premium is calculated by comparing portfolio risk rate. While calculating return on security any one of the previous methods is used. If there is no premium Sharpe index shows negative value (-). In such a case portfolio is not treated as efficient portfolio.

\[
(Sp) = \frac{rp - rf}{\sigma p}
\]

Where,

*Sp* = Sharpe index performance model

*rp* = return of portfolio

*rf* = risk free rate of return

*σp* = portfolio standard deviation

This method is also called “reward to variability” method. When more than one portfolio is evaluated highest index is treated as first rank. That portfolio can be treated as better portfolio compared to other portfolios. Ranks are prepared on the basis of descending order.

✔ Treynor’s index model:

It is another method to measure the portfolio performance, where systematic risk rate is used to compare the unsystematic risk rate. Systematic risk rate is measured by beta. It is also called “reward to systematic risk “.
\[ (T_p) = \frac{r_p - rf}{\sigma_p} \]

Where,

\( T_p = \) treynor’s portfolio performance model

\( r_p = \) return of portfolio

\( rf = \) risk free rate of return

\( \sigma_p = \) portfolio standard deviation.

If the beta portfolio is not given market beta is considered for calculation of the performance index. Highest value of the index portfolio is accepted.

✓ **Jensen’s index model:**

It is different method compared to the previous methods. It depends on return of security which is calculated by using CAPM. The actual security returns is less than the expected return of CAPM the difference is treated as negative (-) then the portfolio is treated as inefficient portfolio.

\[ (J_p) = r_p - [rf + \sigma_p (r_m - rf)] \]

Where,

\( J_p = \) Jensen’s index performance model

\( r_p = \) return of portfolio

\( rf = \) risk free rate of return

\( \sigma_p = \) portfolio standard deviation

\( r_m = \) return on market

This method is also called “reward to variability “method. When more than one portfolio is evaluated highest index is treated as better portfolio compared to other portfolios. Ranks are prepared on the basis of descending order.
4.2 HEDGING A PORTFOLIO:

Hedging is defined as making an investment to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.

Investors use this strategy when they are unsure of what the market will do. A perfect hedge reduces your risk to nothing (except for the cost of the hedge). Portfolio hedging describes a variety of techniques used by investment managers, individual investors and corporations to reduce risk exposure in an investment portfolio. Hedging uses one investment to minimize the negative impact of adverse price swings in another.

Hedging using options provide the trader an opportunity to practice complex options trading strategies to maximize his return and protect the investments by entering into an option contract by making an premium which will protect the value of investments erosion in case of bearish market conditions.

Advantages of Hedging:

1. Hedging using futures and options are very good short-term risk-minimizing strategy for long-term traders and investors.
2. Hedging tools can also be used for locking the profit.
3. Hedging enables traders to survive hard market periods.
4. Successful hedging gives the trader protection against commodity price changes, inflation, currency exchange rate changes, interest rate changes, etc.
5. Hedging can also save time as the long-term trader is not required to monitor/adjust his portfolio with daily market volatility.
### CHAPTER V

**DATA ANALYSIS AND INTERPRETATION**

#### 5.1 INDIVIDUAL STOCK'S FUNDAMENTAL ANALYSIS:

<table>
<thead>
<tr>
<th>STOCK</th>
<th>BOOK VALUE</th>
<th>EPS</th>
<th>P/E</th>
<th>PRICE TO BOOK</th>
<th>DIV %</th>
<th>DIVIDEND YIELD%</th>
<th>BETA</th>
<th>MARKET PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABML</td>
<td>10.37</td>
<td>-</td>
<td>-</td>
<td>1.46</td>
<td>-</td>
<td>-</td>
<td>0.61</td>
<td>15.10</td>
</tr>
<tr>
<td>SBI BANK</td>
<td>1023.4</td>
<td>120.91</td>
<td>17.58</td>
<td>2.08</td>
<td>300.00</td>
<td>1014</td>
<td>1.19</td>
<td>2125.10</td>
</tr>
<tr>
<td>WIPRO</td>
<td>86.74</td>
<td>19.00</td>
<td>22.33</td>
<td>4.89</td>
<td>200.00</td>
<td>0.94</td>
<td>0.89</td>
<td>424.25</td>
</tr>
<tr>
<td>RELIANCE INDUSTRIES</td>
<td>384.66</td>
<td>55.57</td>
<td>14.06</td>
<td>2.03</td>
<td>80.00</td>
<td>1.02</td>
<td>1.19</td>
<td>781.20</td>
</tr>
<tr>
<td>IIDEA CELLULAR</td>
<td>37.15</td>
<td>7.94</td>
<td>47.89</td>
<td>2.50</td>
<td>-</td>
<td>-</td>
<td>0.59</td>
<td>92.90</td>
</tr>
<tr>
<td>ABNUVO</td>
<td>-</td>
<td>33.19</td>
<td>25.32</td>
<td>55.00</td>
<td>0.65</td>
<td>0.68</td>
<td>0.68</td>
<td>840.00</td>
</tr>
<tr>
<td>HDFC BANK</td>
<td>108.38</td>
<td>20.62</td>
<td>24.89</td>
<td>4.74</td>
<td>165.00</td>
<td>0.64</td>
<td>0.94</td>
<td>513.30</td>
</tr>
<tr>
<td>L&amp;T FINANCE</td>
<td>12.55</td>
<td>0.42</td>
<td>105.60</td>
<td>3.53</td>
<td>-</td>
<td>-</td>
<td>0.71</td>
<td>44.8</td>
</tr>
<tr>
<td>QUANTUM INDEX FUND</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.20</td>
<td>534</td>
</tr>
<tr>
<td>SBI MUTUAL FUND GOLD ETS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.00</td>
<td>2809.5</td>
</tr>
</tbody>
</table>

**TABLE 5.1 INDIVIDUAL STOCK'S FUNDAMENTAL ANALYSIS**
## 5.2 Individual Equity Stock-Future Maintainable Profit Calculation (FMP)

<table>
<thead>
<tr>
<th></th>
<th>ABML</th>
<th>HDFC</th>
<th>SBI</th>
<th>RELIANCE</th>
<th>ABNUVO</th>
<th>IDEA CELLULAR</th>
<th>WIPRO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weighted Avg Net Profit (cr)</strong></td>
<td>10</td>
<td>2848</td>
<td>10899</td>
<td>16855</td>
<td>908</td>
<td>933</td>
<td>4382</td>
</tr>
<tr>
<td><strong>Total Share Capital (cr)</strong></td>
<td>13</td>
<td>465</td>
<td>635</td>
<td>3,273</td>
<td>113</td>
<td>3,303</td>
<td>490</td>
</tr>
<tr>
<td><strong>Reserves (cr)</strong></td>
<td>51</td>
<td>24914</td>
<td>64,351</td>
<td>142,799</td>
<td>5,287</td>
<td>8,979</td>
<td>20,829</td>
</tr>
<tr>
<td><strong>Own Funds (cr)</strong></td>
<td>65</td>
<td>25379</td>
<td>64,986</td>
<td>146,073</td>
<td>5,400</td>
<td>12,282</td>
<td>21,320</td>
</tr>
<tr>
<td><strong>Beta</strong></td>
<td>0.61</td>
<td>0.94</td>
<td>1.19</td>
<td>1.19</td>
<td>0.68</td>
<td>0.59</td>
<td>0.89</td>
</tr>
<tr>
<td><strong>Cost of Equity</strong></td>
<td>10.83%</td>
<td>7.88%</td>
<td>8.38%</td>
<td>12.57%</td>
<td>11.04%</td>
<td>10.77%</td>
<td>11.67%</td>
</tr>
<tr>
<td><strong>Total Debt (cr)</strong></td>
<td>24</td>
<td>222980</td>
<td>1053501</td>
<td>67396</td>
<td>3287</td>
<td>10557</td>
<td>4744</td>
</tr>
<tr>
<td><strong>Interest Expended (cr)</strong></td>
<td>5</td>
<td>6357</td>
<td>68086</td>
<td>2413</td>
<td>566</td>
<td>396</td>
<td>77</td>
</tr>
<tr>
<td><strong>Interest Cost (cr)</strong></td>
<td>15.77%</td>
<td>2.9%</td>
<td>4.38%</td>
<td>2.43%</td>
<td>11.67%</td>
<td>2.55%</td>
<td>1.11%</td>
</tr>
</tbody>
</table>
### Table 5.2 Individual Equity Stock-Future Maintanable Profit Calculation (FMP)

**Inference:** According to the calculated FMP values of the selected stocks, it is clear that all stocks will earn high profits in the future. Thus growth of the stocks is ensured.

<table>
<thead>
<tr>
<th>TOTAL FUNDS(Cr) (TOTAL SHARE CAPITAL + TOTAL DEBT)</th>
<th>90</th>
<th>248359</th>
<th>1118487</th>
<th>213470</th>
<th>8687</th>
<th>22840</th>
<th>26064</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL WEIGHTED FUNDS(cr)</td>
<td>11</td>
<td>8357</td>
<td>51590</td>
<td>19997</td>
<td>979</td>
<td>1591</td>
<td>2540</td>
</tr>
<tr>
<td>WACC</td>
<td>12.19%</td>
<td>3.37%</td>
<td>4.61%</td>
<td>9.37%</td>
<td>11.28%</td>
<td>6.97%</td>
<td>9.75%</td>
</tr>
<tr>
<td>FMP VALUE (cr) (AVG NET WEIGHTED PROFIT/WACC)</td>
<td>78</td>
<td>84645</td>
<td>236298</td>
<td>179933</td>
<td>8050</td>
<td>13383</td>
<td>44958</td>
</tr>
</tbody>
</table>

**TABLE 5.2 INDIVIDUAL EQUITY STOCK-FUTURE MAINTANABLE PROFIT CALCULATION (FMP)**
5.3 EVA-ANALYSIS:

<table>
<thead>
<tr>
<th></th>
<th>ABML</th>
<th>HDFC</th>
<th>SBI</th>
<th>RELIANCE</th>
<th>ABNUVO</th>
<th>IDEA CELLULAR</th>
<th>WIPRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETURN ON RISK FREE INVESTMENT</td>
<td>9%</td>
<td>6%</td>
<td>6%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>MARKET PREMIUM</td>
<td>12%</td>
<td>8%</td>
<td>8%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>BETA VARIANT</td>
<td>0.61</td>
<td>0.94</td>
<td>1.19</td>
<td>1.19</td>
<td>0.68</td>
<td>0.59</td>
<td>0.89</td>
</tr>
<tr>
<td>COST OF EQUITY</td>
<td>10.83%</td>
<td>10.88%</td>
<td>8.38%</td>
<td>12.57%</td>
<td>11.04%</td>
<td>10.77%</td>
<td>11.67%</td>
</tr>
<tr>
<td>WACC</td>
<td>12.19%</td>
<td>6.38%</td>
<td>4.61%</td>
<td>9.37%</td>
<td>11.28%</td>
<td>6.97%</td>
<td>9.75%</td>
</tr>
<tr>
<td>AVG CAPITAL EMPLOYED (cr)</td>
<td>90</td>
<td>248359</td>
<td>1118487</td>
<td>213470</td>
<td>8687</td>
<td>22840</td>
<td>26064</td>
</tr>
<tr>
<td>COST OF CAPITAL (cr)</td>
<td>11</td>
<td>15852</td>
<td>51590</td>
<td>19996</td>
<td>979</td>
<td>1591</td>
<td>2540</td>
</tr>
<tr>
<td>OPERATING PROFIT (cr)</td>
<td>-0.23</td>
<td>3926</td>
<td>11198</td>
<td>38004</td>
<td>2487</td>
<td>3725</td>
<td>6446</td>
</tr>
<tr>
<td>ADD:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTEREST (cr)</td>
<td>5.8</td>
<td>9385.08</td>
<td>494.99</td>
<td>2,413.91</td>
<td>566.08</td>
<td>396.45</td>
<td>77.6</td>
</tr>
<tr>
<td>LESS:TAX (cr)</td>
<td>-4.15</td>
<td>124.53</td>
<td>353.55</td>
<td>4796.67</td>
<td>194.42</td>
<td>98.15</td>
<td>969.5</td>
</tr>
<tr>
<td>LESS:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COST OF CAPITAL (cr)</td>
<td>11</td>
<td>7926</td>
<td>8598</td>
<td>19996</td>
<td>979</td>
<td>1591</td>
<td>2540</td>
</tr>
<tr>
<td>EVA (cr)</td>
<td>-1.30</td>
<td>5260</td>
<td>2,741.15</td>
<td>15,625</td>
<td>1,878</td>
<td>2,432</td>
<td>3,013</td>
</tr>
</tbody>
</table>

**TABLE 5.3 EVA ANALYSIS**

**INFERENCES**: According to the EVA analysis, it is inferred that except ABML stock, all stocks have fair economic value added to it.
5.4 TECHNICAL ANALYSIS FOR THE SELECTED STOCKS-

5.4.1 INDIVIDUAL STOCK MOVEMENT PATTERN:

1. ABNUVO

![Chart of ABNUVO stock movement](chart.png)

**CHART 5.1 ABNUVO**

**INFERENCES:** The price over a year shows upward momentum and the current market is in bullish trend.

2. RELIANCE INDUSTRIES

![Chart of RELIANCE IND stock movement](chart.png)

**CHART 5.2 RELIANCE INDUSTRIES**

**INFERENCES:** The decrease in prices over a year shows downward trend and the prices started to increase after January-12. So the market may be in bullish trend for some time.
3. STATE BANK OF INDIA

![Chart 5.3 SBI BANK](chart.png)

**INFEERENCE:** The decrease in prices over a year show downward trend and the prices started to increase after January-12. So the market may be in bullish trend for some time.

4. HDFC BANK

![Chart 5.4 HDFC BANK](chart.png)

**INFEERENCE:** The price over a year shows upward momentum and the current market is in bullish trend.
5. **WIPRO**

![WIPRO Chart]

**CHART 5.5 WIPRO**

**INFERENCE:** The price over a year shows downward momentum up to September 2011 and then the price increases, making the market to be in bullish trend.

6. **IDEA CELULAR**

![IDEA CELLULAR Chart]

**CHART 5.6 IDEA CELLULAR**

**INFERENCE:** The price over a year shows upward momentum and the current market is in bullish trend.
7. ABML

**CHART 5.7 ABML**

**INFEERENCE:** The price over a year shows steep downward momentum and the current market is in bearish trend.

8. QUANTUM INDEX FUND

**CHART 5.8 QUANTUM INDEX FUND**

**INFEERENCE:** The price over a year shows only slight momentum and the current market may be in bullish trend.
9. L&T Finance Holdings

**CHART 5.9 L&T FINANCE HOLDINGS**

**INFERENCE:** The price over a year shows downward momentum and the current market is in bullish trend.

10. SBI Gold Traded ETF

**CHART 5.10 SBI GOLD ETF**

**INFERENCE:** The price over a year shows upward momentum and the current market is in bullish trend.
5.4.2 BOLLINGER BAND ANALYSIS

1. ABML

![Chart 5.11 ABML](image)

**CHART 5.11 ABML**

**INERENCE**: Here, the prices move closer towards the lower band, so it is an oversold market. Therefore ABML is in bearish trend now.

2. ABNUVO

![Chart 5.12 ABNUVO](image)

**CHART 5.12 ABNUVO**

**INERENCE**: Here, the prices move closer towards the upper band, so it is an overbought market. Therefore, currently ABNUVO is in bullish trend.
3. RELIANCE INDUSTRIES

CHART 5.13 RELIANCE INDUSTRIES

INFERENCES: Here, the prices move closer towards the upper band first and then moves steadily towards the lower band, so it is an oversold market now. Therefore RELIANCE INDUSTRIES is in bearish trend.

4. WIPRO

CHART 5.14 WIPRO

INFERENCES: Here, the prices move closer towards the lower band first and then moves steadily towards the upper band, so the market changes from over sold to overbought. Therefore, the trend reverses from bearish to bullish.
5. IDEA CELLULAR

![Chart 5.15 IDEA CELLULAR](chart)

**INFERENCE:** Since, the prices move closer towards the upper band, it is an overbought market. Therefore IDEA CELLULAR is in bullish trend now.

6. L&T FINANCE HOLDINGS

![Chart 5.16 L&T FINANCE HOLDINGS](chart)

**INFERENCE:** Here, the prices show a clear trend reversal from overbought to oversold market. Therefore, the trend reverses from bullish to bearish.
7. SBI BANK

CHART 5.17 SBI BANK

INFERRENCE: Since, the prices move closer towards the upper band it is an overbought market. Therefore, the market is in bullish trend now.

8. HDFC BANK

CHART 5.18 HDFC BANK

INFERRENCE: Since, the prices move closer towards the upper band it is an overbought market. Therefore, the market is in bullish trend now.
9. SBI GOLD TRADED ETF

CHART 5.19 SBI GOLD TRADED ETF

INFORMATION: Since, the prices move closer towards the lower band it is an oversold market. Therefore, the market is in bearish trend now.

10. QUANTUM INDEX FUND

CHART 5.20 QUANTUM INDEX FUND

INFORMATION: Since, the prices move closer towards the lower band it is an oversold market. Therefore, the market is in bearish trend now.
5.4.3 MACD ANALYSIS – FOR ANY TWO STOCKS

1. RELIANCE INDUSTRIES

![Chart 5.21 Reliance Industries](chart)

**INFERENCE**: Here, the MACD falls below the signal line, so it is a bearish signal, which indicates that it may be time to sell.

2. ABNUVO

![Chart 5.22 ABNUVO](chart)

**INFERENCE**: Here, the MACD first rises above the signal line, then falls below the signal line, indicating that it may be the time to sell (bearish signal).
5.5 PORTFOLIO CONSTRUCTION - BASED ON INVESTOR TYPE

5.5.1. PORTFOLIO I – AGGRESSIVE INVESTOR

<table>
<thead>
<tr>
<th>S.NO</th>
<th>PORTFOLIO A(aggressive)</th>
<th>ASSET CLASS ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L&amp;T Finance holdings</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>SBI Bank(high dividend .yield)</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>HDFC Bank</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Idea cellular</td>
<td>20%</td>
</tr>
<tr>
<td>5</td>
<td>SBI Gold Traded ETF</td>
<td>30%</td>
</tr>
<tr>
<td>6</td>
<td>Reliance Industries</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

TABLE 5.5.1 PORTFOLIO I

CHART 5.23 PORTFOLIO I
PORTFOLIO II – MODERATE INVESTOR

<table>
<thead>
<tr>
<th>PORTFOLIO B(moderate)</th>
<th>ASSET CLASS ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wipro</td>
<td>15%</td>
</tr>
<tr>
<td>L&amp;T Finance Holdings</td>
<td>20%</td>
</tr>
<tr>
<td>Aditya Birla Nuvo</td>
<td>20%</td>
</tr>
<tr>
<td>Idea Cellular</td>
<td>20%</td>
</tr>
<tr>
<td>Aditya Birla Money Ltd</td>
<td>15%</td>
</tr>
<tr>
<td>HDFC Bank</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**TABLE 5.5.2 PORTFOLIO II**

**CHART 5.24 PORTFOLIO II**
PORTFOLIO III – CONSERVATIVE INVESTOR

<table>
<thead>
<tr>
<th>PORTFOLIO C (conservative)</th>
<th>ASSET CLASS ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliance Industries</td>
<td>20%</td>
</tr>
<tr>
<td>Aditya Birla Nuvo</td>
<td>20%</td>
</tr>
<tr>
<td>L&amp;T Finance Holdings</td>
<td>20%</td>
</tr>
<tr>
<td>SBI Bank</td>
<td>20%</td>
</tr>
<tr>
<td>Quantum Index Fund</td>
<td>10%</td>
</tr>
<tr>
<td>Idea Cellular</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

TABLE 5.5.3 PORTFOLIO III

![Pie Chart](chart.png)

CHART 5.25 PORTFOLIO III
5.6 PORTFOLIO EVALUATION:

5.6.1 FINDING VARIOUS STATISTICAL DATA - FOR THE INDIVIDUAL STOCKS
(Standard Deviation, Variance, Beta, Covariance & Correlation)

<table>
<thead>
<tr>
<th>Date</th>
<th>Close</th>
<th>return%</th>
<th>deviation</th>
<th>deviation 2</th>
<th>prod of dev(ABNUVO, BSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb-12</td>
<td>879.70</td>
<td>7.91</td>
<td>-6.44</td>
<td>41.50</td>
<td>21.34</td>
</tr>
<tr>
<td>Jan-12</td>
<td>815.20</td>
<td>10.54</td>
<td>-9.07</td>
<td>82.32</td>
<td>102.61</td>
</tr>
<tr>
<td>Dec-11</td>
<td>737.45</td>
<td>-17.62</td>
<td>19.09</td>
<td>364.32</td>
<td>78.00</td>
</tr>
<tr>
<td>Nov-11</td>
<td>895.15</td>
<td>-1.26</td>
<td>2.73</td>
<td>7.47</td>
<td>24.25</td>
</tr>
<tr>
<td>Oct-11</td>
<td>906.60</td>
<td>-0.59</td>
<td>2.06</td>
<td>4.23</td>
<td>-15.76</td>
</tr>
<tr>
<td>Sep-11</td>
<td>911.95</td>
<td>0.40</td>
<td>1.87</td>
<td>3.49</td>
<td>2.39</td>
</tr>
<tr>
<td>Aug-11</td>
<td>915.60</td>
<td>-3.91</td>
<td>5.38</td>
<td>28.94</td>
<td>44.62</td>
</tr>
<tr>
<td>Jul-11</td>
<td>952.85</td>
<td>5.71</td>
<td>-4.24</td>
<td>18.01</td>
<td>-14.35</td>
</tr>
<tr>
<td>Jun-11</td>
<td>901.35</td>
<td>0.49</td>
<td>0.98</td>
<td>0.96</td>
<td>-1.87</td>
</tr>
<tr>
<td>May-11</td>
<td>896.95</td>
<td>3.50</td>
<td>-2.03</td>
<td>4.11</td>
<td>-6.58</td>
</tr>
<tr>
<td>Apr-11</td>
<td>866.65</td>
<td>6.46</td>
<td>-4.99</td>
<td>24.92</td>
<td>-7.64</td>
</tr>
<tr>
<td>Mar-11</td>
<td>814.05</td>
<td>5.28</td>
<td>-3.81</td>
<td>14.54</td>
<td>34.93</td>
</tr>
<tr>
<td>Feb-11</td>
<td>773.20</td>
<td>3.00</td>
<td>-1.53</td>
<td>2.33</td>
<td>-4.11</td>
</tr>
<tr>
<td>Jan-11</td>
<td>750.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>1.47</td>
<td></td>
<td>45.93</td>
<td>19.83</td>
</tr>
</tbody>
</table>

Variance: 45.93  Correlation (ABNUVO, BSE INDEX): 0.48
Beta: 0.53

TABLE 5.6.1: ABNUVO-CALCULATION OF VARIOUS STATISTICAL DATA
## TABLE 5.6.1a CALCULATED STATISTICAL DATA FOR INDIVIDUAL STOCKS

<table>
<thead>
<tr>
<th>STOCK</th>
<th>STD.DEV</th>
<th>VARIANCE</th>
<th>COVARIANCE</th>
<th>CORRELATION</th>
<th>BETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABNUVO</td>
<td>6.78</td>
<td>45.93</td>
<td>19.83</td>
<td>0.48</td>
<td>0.53</td>
</tr>
<tr>
<td>ABML</td>
<td>16.18</td>
<td>261.77</td>
<td>38.40</td>
<td>0.39</td>
<td>1.03</td>
</tr>
<tr>
<td>IDEA-cellular</td>
<td>11.35</td>
<td>128.76</td>
<td>22.98</td>
<td>0.33</td>
<td>0.62</td>
</tr>
<tr>
<td>HDFC bank</td>
<td>6.75</td>
<td>45.62</td>
<td>37.53</td>
<td>0.91</td>
<td>1.01</td>
</tr>
<tr>
<td>SBI bank</td>
<td>11.03</td>
<td>121.62</td>
<td>53.32</td>
<td>0.79</td>
<td>1.44</td>
</tr>
<tr>
<td>Wipro</td>
<td>6.42</td>
<td>41.17</td>
<td>21.74</td>
<td>0.56</td>
<td>0.59</td>
</tr>
<tr>
<td>SBI gold traded ETF</td>
<td>4.99</td>
<td>24.91</td>
<td>11.14</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>L&amp;T finance</td>
<td>5.66</td>
<td>32.05</td>
<td>26.41</td>
<td>0.77</td>
<td>0.71</td>
</tr>
<tr>
<td>Quantum index fund</td>
<td>12.63</td>
<td>159.42</td>
<td>7.40</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>Reliance industries</td>
<td>8.39</td>
<td>70.39</td>
<td>42.65</td>
<td>0.83</td>
<td>1.15</td>
</tr>
</tbody>
</table>
5.6.2 SHARPE, TREYNOR & JENSEN MODEL:

5.6.2a PORTFOLIO I

<table>
<thead>
<tr>
<th>S.NO</th>
<th>PORTFOLIO I (aggressive)</th>
<th>RETURN ON PORTFOLIO</th>
<th>STD.DEV</th>
<th>BETA</th>
<th>APLHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L&amp;T Finance holdings</td>
<td>0.11</td>
<td>0.06</td>
<td>0.11</td>
<td>0.84</td>
</tr>
<tr>
<td>2</td>
<td>SBI Bank</td>
<td>0.08</td>
<td>0.11</td>
<td>1.19</td>
<td>1.21</td>
</tr>
<tr>
<td>3</td>
<td>HDFC Bank</td>
<td>0.08</td>
<td>0.07</td>
<td>0.94</td>
<td>1.21</td>
</tr>
<tr>
<td>4</td>
<td>Idea cellular</td>
<td>0.11</td>
<td>0.11</td>
<td>0.59</td>
<td>1.90</td>
</tr>
<tr>
<td>5</td>
<td>SBI Gold Traded ETF</td>
<td>0.12</td>
<td>0.05</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>6</td>
<td>Reliance Industries</td>
<td>0.13</td>
<td>0.08</td>
<td>1.19</td>
<td>0.004</td>
</tr>
</tbody>
</table>

| AVG  | 0.1037 | 0.08 | 0.84 | 1.02 |

TABLE 5.6.2a PORTFOLIO I – EVALUATING PORTFOLIO

SHARPE’S INDEX = (return on portfolio – risk free return)  
Standard deviation (total risk)

= (0.1037 – 0.09)/0.08

= 17.12%
TREYNOR’S INDEX = (return on portfolio – risk free return) 
Beta (systematic risk)

= (0.1037 – 0.09)/0.84

= 1.63%

JENSEN’S INDEX = Alpha (idiosyncratic risk)
Beta (systematic risk)

= 1.02/0.84

= 1.22
<table>
<thead>
<tr>
<th>S.NO</th>
<th>PORTFOLIO II (moderate)</th>
<th>RETURN ON PORTFOLIO</th>
<th>STD.DEV</th>
<th>BETA</th>
<th>ALPHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WIPRO</td>
<td>0.12</td>
<td>0.06</td>
<td>0.89</td>
<td>3.68</td>
</tr>
<tr>
<td>2</td>
<td>L&amp;T FINANCE HOLDINGS</td>
<td>0.11</td>
<td>0.06</td>
<td>0.11</td>
<td>0.85</td>
</tr>
<tr>
<td>3</td>
<td>ABNUVO</td>
<td>0.11</td>
<td>0.07</td>
<td>1.19</td>
<td>0.69</td>
</tr>
<tr>
<td>4</td>
<td>IDEA CELLULAR</td>
<td>0.11</td>
<td>0.11</td>
<td>0.59</td>
<td>1.90</td>
</tr>
<tr>
<td>5</td>
<td>ABML</td>
<td>0.12</td>
<td>0.05</td>
<td>1.00</td>
<td>1.21</td>
</tr>
<tr>
<td>6</td>
<td>HDFC BANK</td>
<td>0.08</td>
<td>0.07</td>
<td>0.94</td>
<td>1.21</td>
</tr>
</tbody>
</table>

AVG 0.1083 0.07 0.79 1.58

TABLE 5.6.2b PORTFOLIO II – EVALUATING PORTFOLIO
SHARPE’S INDEX = (return on portfolio – risk free return) 
Standard deviation (total risk) 

= (0.1083 – 0.09)/0.07 

= 26.14%

TREYNOR’S INDEX = (return on portfolio – risk free return) 
Beta (systematic risk) 

= (0.1083 – 0.09)/0.79 

= 2.31%

JENSEN’S INDEX = Alpha (idiosyncratic risk) 
Beta (systematic risk) 

= 1.58/0.79 

= 2.01
### 5.6.2c PORTFOLIO-C

<table>
<thead>
<tr>
<th>S.NO</th>
<th>PORTFOLIO –C (conservative)</th>
<th>RETURN ON PORTFOLIO</th>
<th>STD.DEV</th>
<th>BETA</th>
<th>ALPHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliance Industries</td>
<td>0.13</td>
<td>0.08</td>
<td>1.19</td>
<td>0.004</td>
</tr>
<tr>
<td>2</td>
<td>ABNUVO</td>
<td>0.11</td>
<td>0.07</td>
<td>1.19</td>
<td>0.69</td>
</tr>
<tr>
<td>3</td>
<td>L&amp;T Finance holdings</td>
<td>0.11</td>
<td>0.06</td>
<td>0.11</td>
<td>0.848</td>
</tr>
<tr>
<td>4</td>
<td>SBI Bank</td>
<td>0.08</td>
<td>0.11</td>
<td>1.19</td>
<td>1.21</td>
</tr>
<tr>
<td>5</td>
<td>QUANTUM INDEX FUND</td>
<td>0.10</td>
<td>0.13</td>
<td>0.20</td>
<td>3.87</td>
</tr>
<tr>
<td>6</td>
<td>Idea cellular</td>
<td>0.11</td>
<td>0.11</td>
<td>0.59</td>
<td>1.90</td>
</tr>
<tr>
<td><strong>AVG</strong></td>
<td></td>
<td><strong>0.1067</strong></td>
<td><strong>0.09</strong></td>
<td><strong>0.75</strong></td>
<td><strong>1.42</strong></td>
</tr>
</tbody>
</table>

**TABLE 5.6.2c PORTFOLIO III – EVALUATING PORTFOLIO**

**SHARPE’S INDEX =** *(return on portfolio – risk free return)*

Standard deviation (total risk)

\[
= \frac{(0.1067 - 0.09)}{0.09}
\]

= 18.55%

**TREYNOR’S INDEX =** *(return on portfolio – risk free return)*

Beta (systematic risk)

\[
= \frac{(0.1067 - 0.09)}{0.75}
\]

= 2.22%
JENSEN’S INDEX = Alpha (idiosyncratic risk)
              Beta (systematic risk)

= 1.420/0.75

= 1.893

5.6.2.1 CHOOSING THE BEST PORTFOLIO:

<table>
<thead>
<tr>
<th></th>
<th>PORTFOLIO A</th>
<th>PORTFOLIO B</th>
<th>PORTFOLIO C</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHARPE’S INDEX</td>
<td>17.12%</td>
<td>26.14%</td>
<td>18.55%</td>
</tr>
<tr>
<td>TREYNOR’S INDEX</td>
<td>1.63%</td>
<td>2.31%</td>
<td>2.22%</td>
</tr>
<tr>
<td>JENSEN’S INDEX</td>
<td>1.22</td>
<td>2.01</td>
<td>1.89</td>
</tr>
<tr>
<td>RANK</td>
<td>III</td>
<td>I</td>
<td>II</td>
</tr>
</tbody>
</table>

TABLE 5.6.2.1 CHOOSING THE BEST PORTFOLIO

INFEERENCE:

- According to SHARPE’S INDEX, PORTFOLIO B has the highest return of 26.14% and this portfolio is Ranked I. Hence PORTFOLIO B, the better performer than the other portfolios is selected as the BEST PORTFOLIO.

- According to TREYNOR’S INDEX, as Tn B > Tn C > Tn A, PORTFOLIO B gets the highest return of 2.31% and it is ranked I. Therefore, PORTFOLIO B is selected as the BEST PORTFOLIO.

- According to JENSEN’S INDEX, PORTFOLIO B is better, since it is Ranked I with the highest return of 2.01%. Therefore, PORTFOLIO B is selected as the BEST PORTFOLIO.
CONCLUSION:

- By evaluating the three portfolios using Sharpe’s index, Treynor’s index and Jensen’s index, it is concluded that the PORTFOLIO B with the moderate risk and moderate return criteria is the best portfolio.
CHAPTER VI

FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 FINDINGS OF THE STUDY:

- The investor can recognize and analyze the risk and return of the shares by using this analysis.
- The investor who bears high risk will be getting high returns.
- The investors, who holds their investments for medium terms will fetch attractive returns.
- The investor who is having optimum portfolio will be taking optimum returns with minimum risk.
- The investor should include all securities which are undervalued in their portfolio and remove those securities that are overvalued.
- The investor has to maintain the portfolio of diversified sectors stocks rather than investing in a single sector of different stocks.
- People who are investing in portfolios mostly depend on the advice of their friends, relatives, financial advisers.
- People generally invest their savings in fixed deposits, recurring deposits, and national savings certificates and government securities as they are less risky and the returns are guaranteed.
- Most of the investor invests in basic necessities. They plan to invest in insurance (LIC, GIC) and pension fund as these give guaranteed returns and are less risky.
- Most of the investors feel that investing in stock/capital market is of high risk therefore they don’t invest in them.
- Most of the investors think that, hedging involves cost that can eat up the profit.
- Hedging is a precise trading strategy and successful hedging requires good trading skills and experience.
6.2 SUGGESTIONS AND RECOMMENDATIONS:

- Select the investments on the basis of economic grounds.
- Buy stock with a disparity and discrepancy between the situation of the firm - and the expectations and appraisal of the public.
- Buy stocks in companies with potential for surprises.
- Take advantage of volatility before reaching a new equilibrium.
- Listen to rumours and tips, check for yourself.
- Don’t put trust in only one investment. Diversify your investment.
- The investor must select the right advisory body which is has sound knowledge about the product which they are offering.
- Professionalized advisory is the most important feature to the investors.
- Professionalized research analysis will be helpful for reducing any kind of risk to overcome.
6.3 CONCLUSIONS:

- When compared to other portfolios, portfolio B is selected as the best portfolio, based on portfolio evaluation models.

- If the portfolio management is efficient and investor is risk tolerant person and investment is the long term perspective than it is better to invest in the MID–Caps and SMALL-Caps companies securities, where the growth of the returns are higher than the LARGE-Caps.

- If investor is risk tolerant person and short term perspective it is good to invest in the LARGE-Caps companies securities.

- Finally, the portfolio should be hedged effectively in order to minimize the risk and to protect the investment.

- Hedging also saves time as the long-term trader is not required to monitor/adjust his portfolio with daily market volatility.
CHAPTER VII
BIBLIOGRAPHY

7.1 BIBLIOGRAPHY:

Books

Security Analysis & Portfolio Management - Fishers & Jordon,

Security Analysis & Portfolio Management – V.A. Avadhani

Financial Management – M.Y. Khan

Financial Management – Prasanna Chandra

News Papers

Business Line

Times of India

India Today

Magazines

Week

Business Daily

Websites:

www.nseindia.com

www.sebi.com

www.bseindia.com

www.moneycontrol.com