# CHAPTER- 2

**REVIEW OF LITERATURE**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2.2</td>
<td>Review of literature</td>
</tr>
<tr>
<td>2.3</td>
<td>Research Gap</td>
</tr>
</tbody>
</table>
CHAPTER- 2
REVIEW OF LITERATURE

2.1 INTRODUCTION

Research is a creative and strategic process that involves constantly assessing, reassessing, and making decisions about the best possible means for obtaining trustworthy information, carrying out appropriate analysis, and drawing credible conclusions. It’s an original contribution to the existing stock of knowledge making for its advancement. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic method about the overview and the formulation of the theories are also considered as research. The term ‘research’ refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analysing the facts and reaching certain inference either in the form of solutions towards the problem or in certain generalisations for some theoretical formulation.

Research also requires engagement with the literature at each and every stage of the process. Literature informs the process by helping you: focus your ideas; develop appropriate questions; argue societal and scientific relevance of your work; inform
your thinking/approach with theory; design suitable methods; and construct and write the formal literature reviews. This chapter consists of Review of literature related with capital budgeting and its techniques used by different company’s or firms. This chapter provides various literatures related to the techniques of capital budgeting used by the company with respect to its performance and with its feasibility in the study area. In this way, the review of literature also helps the researcher to understand the problem and to find out the gap between the previous studies with the present one.

2.2 REVIEW OF LITERATURE

The following are the various review of literature made on capital budgeting and its techniques used in India and other countries by many researchers, academicians and other people. For the purpose of the study various research papers, articles, thesis, dissertations and projects were provided in this section for understanding the areas covered by them on the topic of capital budgeting and its techniques used by the company for the evaluation of their investments projects and through that the gap was identified in this chapter:

1. **Richard P (1996)**, the study is based on a survey on capital budgeting techniques. In their study, the complete examination is provided, which is considered as constant and complete techniques of capital budgeting, which has also evolved in recent years in large UK companies. The paper explored various methods of capital budgeting excess present value method, PB period method, ARR and IRR (trial & error) methods and its efficiency while using these techniques for the evaluation of the investment projects. The paper reveals that NPV is most used techniques amongst the other technique for the evaluation of the techniques.

2. **Binder John J. and Chaput Scott J. (1996)**, the study is on a significant analysis of the techniques of capital budgeting in the business world in the article named as Review of quantitative finance & accountancy. In their article cost benefit analysis suggested that Discounting cash flow methods will be used more frequently for large
projects. The paper reveals the different techniques used in the corporate and its benefits while using it for the evaluation of investment projects. The paper analyse the effective practices of capital budgeting and the implementation of it in their corporate. The paper also examines each techniques and its efficiency in their investment projects.

3. **Colin Drury and Milke Talvas (1996)**, in the paper the practices of capital budgeting shown in United Kingdom for which for which survey is used as a tool for evidence and published in European journal of finance. The papers have focused a light on some of unresolved issues on capital budgeting in UK and scrutinize the impact of company size on the use of techniques for financial evaluation. The paper studied various capital budgeting practices in United Kingdom and highlighted many issues on the same. The study discusses the unresolved issues related to the capital budgeting techniques and found out the right tool through the survey conducted in United Kingdom, so to reach the appropriate tool applied in the companies.

4. **Kester et.al. (1996)**, the paper discusses on techniques of long term budgets of the registered organisations in Singapore and distributed for the review of Singapore Management. The study was on different practices of long term budgets of registered organisation in the country for which researcher took a sample size of 211 companies and the survey resulted in 54 responses. They found that the responding executives in Singapore considered IRR (trial & error) and PBP to be equally important for evaluating and ranking capital investment projects. The paper evaluated all the techniques of capital budgeting i.e. PB period, excess PV, ARR, PI and IRR to find the best among them and use the appropriate tools for their firms in Singapore.

5. **Rao U (1996)**, the study gives insight on capital budget practices between India and select South East Asian Countries, in other words comparative study between them. The paper used survey as a tool for which 74 Indian companies revealed that 51 percent use Internal Rate of Return as project appraisal criterion. The study focused on a comparative study of India and select South East Asian Countries Firms, it shows that various methods typically use 92 percent or more multiple evaluation methods. The Average rate of return and PB period methods are widely
used as supplementary decision criteria. The paper clearly shown that almost every method was used to evaluate the investments decisions in the companies in South East Asian Countries.

6. Babu Prabhakara C and Sharma Aradhana (1996), the paper spoke on various factors relating to the practices of capital budgeting in Indian Industry. The paper had done some observational study on capital budgeting techniques and its practices in Indian Industry. The paper explored the various capital budgeting practices used in Indian Industry. For that the researcher has conducted a survey of 73 companies in and around Delhi and Chandigarh. They used personal interview method. It has been found by them that 90% of companies have been using different capital budgeting methods i.e. payback period, net present value method, internal rate of return etc. Around 73% of the companies have been using Discounted Cash Flow methods.

7. Geoffrey T. Mills (1996), The purpose of the study is to continue the discussion of the role of inflation in capital budgeting and to focus on the individual mechanism of the process to depict the conclusions with respect to the interaction between the cost of capital inflation and the cash flow variables with a discounted cash flow – internal rate of return framework. The paper mostly focused on the relationship between the cost of capital and inflation and the aggregate and the price a firm places on its specific products that result from capital budgeting decisions. It is concluded in the paper that the corporate financial behaviour is influenced by inflation. The paper also shows that inflation will cause the firm to reduce its capital budget, which is attempted to reduce net working capital.

8. Jain P K and Kumar M (1998), the study is based on different capital budgeting techniques from Indian Context especially from management and Change perspective. The paper basically deals with the proportional survey on various methods on long term budgeting in Indian context which has done a comparative study of capital budgeting practices in India and observed that 25 percent of sample companies invested for expansion and diversification and firms were making regular investments for replacement and maintenance.
The paper has focused on various techniques of capital budgeting methods such as Excess present value method, trial and error rate of return, Annual rate of return etc to measure and evaluate the financial capabilities of the companies running in India.

9. **Kenneth A. Froot and Jeremy C. Stein (1998)**, the researcher in the paper has focused on the relationship between companies structural policies, risk management in banks and capital budgeting. In the paper it is shown that all these three primitive fictions are costly for banks, in this way it is its difficult to raise funds from outside that to on short notice and second it is also costly for banks to hold a buffer stock of equity capital on the balance sheet, even if this is accumulated over time through retained earnings. The paper the key implications of our two factor model. In this way bank should evaluate investments according to both their correlation with the market portfolio and their portfolio and their correlation with the banks existing portfolio.

10. **Kester George W and Chang Rosita P (1999)**, the paper exhibits the various practices of Capital Budgeting in different regions of Asia-Pacific. The paper shows that many parts of the Asia-pacific regions have adopted various methods of capital budgeting for the assessment of their projects.

The paper found that techniques based on present value concept of money such as excess present value i.e. NPV and IRR were considered to be more significant and applied methods used for asset selection except in the selected country of Asia. The paper surveyed the methods of capital budgeting in the Asia-Pacific and selected Region for the purpose of study and also to find out the appropriate method to be used in the companies and for the project investments.

11. **Robert A Ashley, Stanley M Atikinson and Stephten M Lebrutho (2000)**, the objective of the paper was to determine about the capital budgeting and cost of capital procedures being utilized for the food industry sector of the hospitality industry and to evaluate the feedbacks. The study also found the most popular and adopted technique was selected by the hospitality industry were Excess PV and break even of NPV and also called as primary technique and payback method was considered and selected as a secondary technique in the study. The paper was focused on the overall working of capital budgeting techniques in the area of hospitality sector i.e. the food service segment.
12. **Stanley B (2000)**, the research is based on the integration of conventional budgeting of proposals and its notion in the environment of decision making at international level. The paper has analyzed the policies of capital budgeting where 146 multinational companies were considered for the study with respects to its current financial theory. The paper also explored the various concepts of capital budgeting and capital budgeting methods i.e. excess PV, Benefit cost ratio, average of return and break even of NPV and also to figure out how these concepts and methods can be used for taking investments decisions in the international environment. The paper tried to focus on the improvements taken with respects to budgeting techniques, advantages and disadvantages of the capital budgeting and it techniques.

13. **J.H. hall (2000)**, the paper reveals the most important stages in capital budgeting process used by the companies. The methods used by their companies according to their utility and approachability are basically dealt in the paper by the researcher. The paper explores and evaluates the capital investment projects, South African companies seem to prefer return as methods to determine the feasibility of a project. The study explore that the use of these methods such as NPV, IRR and Average rate of return is influenced by the size of a company’s annual budget, as that there is correlation between a company’s annual budget and preference for these methods.

14. **Arnold Glen C. and Hatzopoulos Panos D (2000)**, the paper highlighted the evidence on the gap in the implementation of the capital budgeting techniques and it practices in the country like United Kingdom. The researcher has done a study of the gap existed in the Capital Budgeting which is consider to be the extent to which modern investment appraisal techniques are being employed by the most significant United Kingdom corporations or companies. The paper explores and to evaluate the theory –practice gap in capital budgeting and it various methods practices in the company and the evidence is taken from the United Kingdom. The paper clearly state that modern methods were mostly used by their companies than traditional methods.
15. **Cooper et.al. (2001)**, the study was based on the models of capital budgeting applied in their companies. Also it is important to notice that the paper highlights the theory and practices made by the companies. The researcher has done a study to measure the current stage of capital budgeting sophistication in Corporate America. The paper explored various capital budgeting models, its theory Vs. Practice in corporate America. The researcher has sent the questionnaire to the Chief Finance Officers of the Fortune 500 companies. The researcher received response from 113 companies out of which 23 percent responses were received. According to the results of their study, the most common used method of capital budgeting technique for evaluation is considered by their companies is IRR, which is 57 percent.

16. **Graham John R. and Harvey Campbell R. (2001)**, In their research paper, the research gave the insights on theories and practices applied in the corporate of finance. The researcher surveyed about 392 chief financial officers (CFOs) about their companies’ and various corporate practices pertained in the company/firms. Out of these firms, 26 percent shows the sales less than $100 million, 32 percent of the respondent says sales between $100 million and $1billion, and 42 percent exceeded $1billion. The research paper also analyses various capital budgeting techniques and its practices in corporate sector. The paper gave understanding of capital budgeting theory and practical knowledge of the methods and it usage on the investments projects.

17. **Ryan, P.A. and Ryan, G.P. (2002)**, this study focused on the changed trend in using the budgeting of capital investments techniques, in past years importance was given to the traditional method of capital budget like PB period, ARR and ROI etc but changing trend shows the diversification of traditional techniques to modern techniques like Excess present value method, Benefit Cost Ratio & Trial & Error method. In other words, the study clearly reveals that the modern techniques were mostly used than the traditional techniques in the study area. The paper mostly focused on the capital budgeting practices, which shows the changes of its usage in the companies for the benefits.

18. **Anand Manoj (2002)**, the paper here deals with the practices of corporate Finance takes place in India. For which researcher made survey and distributed
questionnaire to 81 CFOs of India. In this way the paper find out their corporate finance practices vis-à-vis to capital budgeting decisions, cost of capital, capital structure, and dividend policy decisions.

It is also observed from the study that the feedbacks by the company features which is useful of for their corporate like size of the firm, profitability, leverage, Price earnings ratio, CFO’s education and the other sector. The research paper also focused on the corporate finance practices in India and the capital budgeting practices used for taking investment decisions in their companies for the evaluation purpose.

19. Mekonnen A. (2002), the paper evaluates the capacity of standard investment appraisal methods which was discussed at Tinbergen Institute. The study has made an attempt to calculate the capacity of standard investment appraisal methods indicating the existence of gap between theory and practice of capital budgeting in their companies.

The paper also has examined the various capital budgeting methods/ techniques and its practices to evaluate the capacity of standard investment appraisals methods in the companies. The paper here focused on various methods/ techniques i.e. excess present value, PBP method, IRR, ROI, ARR, PI and its advantage and disadvantages.

20. John Graham (2002), the paper analyzed the current practices of the company economy with specific converge on the part of long term investments and framing of capital sources and its uses. The result in the study enabled us to figure out the various facets of the corporate finance. The aspects were hard to resolve with what is taught in the business schools today. The findings show that the practice of corporate finance are both reassuring and puzzling for people who teach in the business school. In the paper it is also seen that net present value is encouraging more for project evaluation method. The paper also depicts that our capital structure yielded financial flexibility and credit ratings for setting debt policy.

21. Stanley B (2003), the study reveals the variances in the procedures of long term investment decisions. The study is pragmatic and found the dissimilarities between the procedures of capital budgeting and the industries. The paper has studied the
utilisation of long term investment procedures between organisations. 1000 firms answered to tests taken. The paper depicts that there is any difference in the process of investment selection. The paper evidently discusses on various capital budgeting techniques and its usages on the investment projects in their companies with its appropriate implementation.

22. **Sandahl G. and Sjogren S. (2003)**, In the Journal of Production Economics, the earlier studies on capital budgeting methods like payback period & average rate of return called to be the most employed methods for the evaluation of the capital projects. The paper studied the various capital budgeting techniques i.e. PB period, excess present value, indifference of NPV, ARR and cost benefit ratio and evaluated its each methods with its pro’s and con’s and find the appropriate method used in Sweden’s largest group of companies. The tools and techniques used for the evaluation of the capital budgeting decisions among the Sweden’s largest sets of organisations.

23. **Lazaridis T. (2004)**, in their article, the researcher has depicted the application of capital budgeting and surveyed in the firms of Cyprus. The study had done a test of long term capital investment methods of the firms in Cyprus and he found that around 30 percent of the sample firms use different types of capital budgeting techniques for all their investment decisions, while approx 51% of the pilot firms uses methods of long term investment decisions for evaluation of a few other types of savings excess of a particular level. The paper also discusses all the traditional method and modern method with its benefits in the area of the study. The study reveals that there is stated level of investments decides the capital budgeting methods, which has to be used for which survey was conducted in the firms Cyprus.

24. **Eva Liljeblom and Mika Vaihekoski (2004)**, the paper shows the proposal ranking techniques and expected return rate in the organisations registered with the share markets, conducted a survey of 144 companies listed on the Helsinki Stock Exchange to examine the practice of the use of investment evaluation methods and Average Rate of Return in Finnish. The paper discusses the investment evaluation methods and annual rate of return in finish public listed companies. The results show that the Finish companies still lag behind US and Swedish companies in their use of
the Excess value of inflows over outflows, and the trial and error method, even though it has become more commonly used during the last ten years.

25. **Lord Beverley R. and Boyd Jennifer R. (2004)**, the paper reveals the employment of Capital Budgeting in state of the local body of the country named New Zealand. There was an examination of the implementation of the methods of long term investment acquisition. The study also reveals the survey done by the researcher and half of the New Zealand local authorities were taken as sample to find out how they actually undertook capital budgeting techniques. In the paper the researcher has explored the capital budgeting techniques in New Zealand local authorities and its practices are scrutinized in the study. The appropriate tool selected on the basis of its project and investment size and applied for the project in the company.

26. **Hogaboam Liliya S. and Shook Steven R. (2004)**, in the paper the academician focused on various techniques of capital budgeting and its practices with special reference to United States. The forest products industries of United States were selected for survey purpose and a review of Forest Products were observed. The paper also investigated the capital budgeting and its methods of investments of private forest products companies in the US that trade stock on the NYSE and National association of securities dealers automated quotations (NASDAQ)by repeating the research which explained. The paper explored the capital budgeting and its implantation in the US forest products companies and its effectiveness is monitored in the area where study is conducted.

27. **Antonio apap and Dubos J. Masson (2004)**, the research was undertaken to establish the capital budgeting techniques and its utility in the companies. This will make company to understand the current use of appropriate techniques and to discover that whether they had changed the prominence on the usage of methods of capital budgeting from past ten years. The studies here also made to understand that how often the different companies/firms capsize disapproving the capital budgeting analyses and also to discover the tendency of the company’s audits. The important finding under the study was the utility companies do use the methods of budgeting of capital and
application of the different methods i.e. excess of present value, IRR and PBP into the systems.

28. Hermes N. (2006), the study here is relating to carry out the capital Budgeting Practices at nether land china. The researcher exercised and understood the various facets of evaluation techniques used in the form of comparative Study. The paper here evaluated with the implementation of various methods of capital budgeting in case of various firms at Dutch and Chinese companies, using data gathered from a study of 250 Dutch and 300 Chinese companies. The paper conducted comparative study of Netherlands and China in regards with the methods of capital budgeting and its implementation in their states. The study revealed the various challenges and measures adopted while adopting capital budgeting techniques.

29. Partington G. and Peat M. (2006), the researcher essayed the estimation of the cost of capital and the methods of capital projects evaluation in Australia. The paper revealed that real options methods have benefited a toehold in Australian capital investment techniques but are still waiting for the implementation. The paper has used survey method and clearly shows that the projects usually are evaluated by using Net Present Value method. The paper also surveyed about the capital budgeting practices in Australia and found that out of recovery period, ARR, Excess present value, cost benefit ratio, IRR etc, the NPV method is adopted the most for evaluation of project.

30. Elumilade, T. O, Asaolu and A. O. Ologunde (2006), the study reveals the efficiency of the Nigeria stock exchange and security and exchange commission in controlling the activities of public companies. The study shows that the growth performance of public company is influenced by retained earnings and investment returns subject to practical knowledge and experience of management. The study reveals that the most common method adopted here is payback period. In the end paper concluded that capital budgeting decisions is a nonnegotiable investment decision making strategy that must be taken seriously. The fact in the study therefore pushes that the government should embrace capital budgeting if it is to witness appreciable economic development.
31. **Gupta Sanjeev et.al. (2007)**, The researcher has made an attempt to explore which capital budgeting techniques is used by industries in Punjab, and the influence of factors such as volume of the investment budget, age and nature of the company, and education and experience of the CEO in capital budgeting decisions. The paper explored various techniques of capital budgeting and its practices in Punjab-based companies. The research paper basically focused on Capital Budgeting Practices in the companies working in Punjab which discusses all the traditional method i.e. Recovery period of an investment and annual rate of return and modern methods i.e. NPV method, PI and IRR.

32. **Agarwal N. P. and Mishra B.K. (2007)**, the study reveals the capital Budgeting, Jaipur: RBSA Publishers, The book is classified into 9 chapters which covers introduction to capital budgeting, project formulation, condition of certainty & uncertainty of risk. Meaning & definition of capital budgeting is covered along with its features, importance, types & procedures. Project identification & formulation is also effectively explained. The paper reveals various aspects of capital budgeting, where capital budgeting concept and its methods are also discussed. The paper explored capital budgeting significance, its various types and the project evaluation and techniques to be adopted is also discussed at the end of the study.

33. **Nadja Ferlan (2007)**, in the article, the researcher dealt with the employment of capital budgeting methods. The paper highlighted that for the purpose of investment and evaluation of the civil engineering were using the more appropriate capital budgeting technique. The article presented here is to perform the survey between the managers of the project of the Slovene companies. Their personal views on the utilisation of the long term project investments and its various techniques and understanding of their drawbacks were the main part evaluated in the work.

34. **Nicoleta Vintila (2007)**, the study reveals that traditional discounted cash flows method for the assessments of the projects presume that the investment decisions are irrevocable and that is not correct. The investment decisions can be reconsidered by the company's managers after getting information on project life. The paper underlined the attributes and valuation methodologies of the real option.
The paper analyzed that there is advantages of the opportunities which are associated with an analyzed projects. The paper clearly had shown the real options of capital budgeting and pricing the option to delay to abandon a project.

35. **Tim Baldenius, Sunil Dutta and Stefan Reichstein (2007)**, the paper explored the investment decision frequently require coordination across multiple division of a firm. The paper investigates a group of capital budgeting mechanism in which decisions related concerns are reported in regards to the anticipated the profitability of recommended investment projects. The paper also finds that more severe divisional agency problems will increase the hurdle rate for common assets. Yet this is generally not true for competing projects. The paper overall clearly defines that how the cost allocation use for the capital budget decision.

36. **Davina F. Jacobs (2008)**, the working paper titled “A review of capital budgeting practices” explored the key challenge in government for using capital budgeting practices. Budgeting is defined the appropriate balance between current and capital expenditures. The working paper shows on how capital budgeting for government capital investment remains not well integrated in the process of investment. Here, the paper overviews the past investments and capital budgeting practices for the process of investments. The paper also studied the comparisons between budgeting practices between low income countries and develops countries. The study also makes recommendations to ensure proper planning and budget management.

37. **Khan M.Y. and Jain P. K. (2008)**, Management Accounting: Text, Problems and Cases, New Delhi: The McGraw-Hill Publishing Company Ltd., capital budgeting chapter of this book deals with the discussion of the principles & techniques, meaning, importance, difficulties, rationale & types. The book is basically discuss on various factors in regards to its techniques, various concepts, risks & difficulties in capital budgeting. The book simplifies various methods and its various concepts so to understand it with more ease and better way. The books also gave the methods benefits and its adoption for evaluation purpose.
38. Kishore Ravi M. (2009), Financial Management: Comprehensive text Book with case studies, New Delhi: Taxmann Publications p. Ltd., the entire financial management is presented in two parts by the author in this book. All latest developments of the subject have taken into consideration. The book is a comprehensive work on the subject, which meets the requirements of all levels of professional and research courses. In the book, capital budgeting is one topic which is discussed with all its concepts and different methods. The book tried to clear all the necessary terms and theory of capital budgeting with related illustrations.

39. Fazilah Abdul samad and Roseler Shahrudin (2009), in the paper, the researcher has revealed the findings on the insights of loss or damage and the utility of the methods of budgeting employed by the registered public firms in the country. In the paper it is also shown that the number of companies notice the danger as probable volume of loss considered as the major cause of contingencies comes from the alterations of fiscal policies. Overall the study here suggests that as far as the observation of jeopardy and uncertainties and the utility of investments budgeting techniques are relate to, it is shown here that there is still gap in the implementation exists in the state.

40. Pradeep Brijlal and Lemay Quesada (2009), the study was based on various capital budgeting techniques used by the western cape to evaluate capital budgeting projects namely PB period, ARR, Excess present value, PI and Breakeven point of NPV. The research mostly focused on all types of businesses examined the number of factors relating to the implementation of investment evaluation proposals in businesses in the Western Cape of South Africa. The Outcomes depicts that the PBP is commonly used method of capital budgeting followed by excess present value, which is considered to be the most approachable method across various volumes and types of the business. It can also be seen that large business are adopting excess present Value and IRR the most used method.

41. John Hall and Sollie millard (2009), in the article, it is investigated that the implementation of various methods for evaluating and ranking the projects and the incorporation of danger into the long term budgeting process among sample of companies in the countries registered with JSE securities Exchange for minimum 10
years. The study reveals that NPV is most popular technique and sometimes more so than the internal rate of return. The main aim of the work is to substantiate the applicability of the methods of capital budgeting based on a survey of a number of carefully selected companies registered with their security market in the study area.

42. Tomonari Shinoda (2010), the paper is made to discuss the utility of long term budgeting in the country and focuses on the employment of various methods of capital budgeting. Almost all investigative research in Japan has shown that the managers of Japanese firms tend to prefer a non-discounted cash flow model, such as simple payback period method. The outcome of the study shows that their companies administer their choice by using the mixture of two methods i.e. PB period method and excess present value method. While many financial managers utilize multiple tools in the capital budgeting process, these results reflect a better alignment of views between the academia and business.

43. Xin Wang (2010), the research in the dissertation discussed various objectives of the study. The research explored factors influencing the decision making process of multi-national corporations. The findings may help marketers in multinational companies to choose their financial strategies in the competitive market. The study explores that the poor choice method or a combination of methods leads to the selection of a weak projects with greater profitability than in case of choosing a good one. The study also identified various possible themes and modified findings based on suggestions and comments for completing data analysis process.

44. V.K Saxena and Vashist C. D. (2010), Essentials of Financial Management, New Delhi: Sultan Chand & Sons Educational Publishers, chapter capital budgeting of this book covers all the learning objectives. It helps students, investors and researchers in most efficient manner in understanding the meaning of capital budgeting, selection criteria of a project, various concepts along with its limitations. The book tried to show the essential facts and figures of capital budgeting and its techniques with some necessary illustrations to understand it in more prudent way for the academicians, researchers, businessman and others.
45. **Goran Karanovic, Suzana Baresa and Sinisa Bogdan (2010)**, the paper examined capital budgeting process and technique of risk analysis in the process of selecting optimal project. The manager of the company in process of long term budgeting uses numerous techniques. The selection is established on or moreover the intuition of manager or some of them based on sensitive, scenario, decision tree and Monte Carlo method. All the methods are used to determine and to predict risk influence on the projects. It can be concluded that analysing different methods of risk techniques is that on right combinations of these techniques, the manager could decide correctly to choose optimal capital project.

46. **Agne Kersyte (2011)**, in the study, the paper shown that the capital budgeting decisions are most significant decision made by the organisation. There are certain pattern, which is decided by the organisations about the investments decisions and how are they going to make the investment decisions. The paper also focused on evaluation of projects and risk analysis tools while doing capital budgeting process. The paper overall investigated the investment project decisions in company by applying theoretical aspects. Here, the capital budgeting approach in regards to its techniques and how it works in the organisation for the success of the investment projects.

47. **Victor Dragota and Lucian Tatu (2011)**, According to the study, the paper showed the acceptance of non-performing proposals, which is encouraged by the tax regulation in the businesses. As per the conventional excess present value decisive factor, the performative organisations will not accept the number of proposals but few companies are rare performative companies which could acknowledge the similar proposals. In other words, the paper reveals the other term of the assessment of the company's proposal separately by the corporation should be adopted and to be used carefully.

48. **Akpan N.P., Etuk E. H. & Essi I. D. (2011)**, the research paper focuses on the process of evaluating, comparing and selecting the needed project given the limited resources is called capital budgeting. The rationale behind this article is to evaluate the model of long term budgeting of akwa ibom state, Nigeria. The approach is employed in solving the problems and the optimal solution was obtained. The paper
identified by achieving either minimizing the cost such that it invests in as much project as possible given the limited resources or maximizes the values of the projects.

49. **Ramesh S. & Nimalathasan B. (2011)**, the research paper is exploratory in nature. Capital budget techniques i.e. excess present value, average rate of return, PB period, IRR and PI methods have been used as the techniques of capital budgeting. The results show that NPV method is mainly dominant capital budgeting technique according to the perception of executives of all sectors. The paper shows that the executives mostly prefer excess present value and indifference of NPV methods of long term investment estimation from the companies of the manufacturing, pharmaceuticals and chemical sectors, whereas the executives of the textile sector prefer the NPV method for evaluating the investment projects.

50. **Vongai Maroyi & Huibrecht Margaretha Van D P (2012)**, the study of long term investments evaluation methods adopted by the registered extraction firms in the country. In the research work, the authors in the study explored various long term budgeting techniques applied by the mines registered companies of the countries stock market. The main aim of the study was to investigate the utility of those methods by them. The basic motto of this study was to ascertain the frequently used methods of proposal evaluation. The paper discussed almost all the techniques used of capital budgeting by using survey method in registered extraction firms in the country.

51. **Ghahremani M. et.al. (2012)**, the selection of Capital budgeting technique with a huge focus in concern of real option through four decades. The International journal of business and management this paper aims to provide a review and analysis on capital budgeting techniques from 1970- 2012 in developing & developed countries regarding the most effective factors on selecting techniques. The paper observed the capital budgeting selection with a great focus on real option for four decades and found out the most appropriate tool used for their companies by measuring the various factors on selecting the techniques.
52. **Fredrick Hartwig (2012)**, the research study contributes to an understanding of Capital budgeting and accounting practices. In the paper it is investigated whether practice diverges from what is prescribed by finance text books and accounting standards frameworks. The thesis consists of four paper out of which first two paper focused the usage of project evaluation choices and the other two paper discussed on accounting choices. The study overall focused on the utilisation of sophisticated investment estimation techniques such as net present value and CAPM and the non-preparers supported amortization of goodwill to a greater extent than did preparers.

53. **Vongai Maroyi and Huibrecht Margaretha Van der poll (2012)**, the paper explored the decisions of various scheme of long term estimation exercise for the particular purpose. The paper indicates that excess present value is 69%, the indifference of NPV is 46%, and the Investment recovery period is 23% were called as the major and appropriate techniques used for evaluating the important proposals. The foremost and key cause for the use of the NPV was its accuracy as it’s always consider time value concept of money. For calculating the accurate performance of the asset and its breakeven point indifference of NPV (IRR) method is used.

54. **Shveta Singh, P.K. Jain and Surendra S. Yadav (2012)**, the paper was made to understand the current practices in capital budgeting in Indian companies and provide the appropriate guidelines for the practitioner. The trends in the paper shows the sophisticated techniques and sound capital budgeting decisions have continued in India. Internal rate of return were used by more than three quarters of the sample companies, Net present value is also used by half of the sample companies, showed as one of the favored technique. The paper overall find the studies using both primary and secondary data to reach the appropriate conclusion in the study.

55. **Thabani si banda (2012)**, the study was conducted using primary data gathered through a self administered web based survey and evaluation of secondary data related to other companies both small and large. In the survey respondents revealed that they often used capital budgeting techniques to analyse the potential investment projects. The capital budgets of companies listed on the Alt x were slightly larger than the typical capital budgets available to their unlisted counterparts. The primary
data reveals capital budgeting tools used by company, such as indifference at NPV (IRR) and excess present value methods adopted by larger companies.

56. **Dr. G. S. Popli and Sima Singh (2012)**, the empirical studies have attempted to throw light on capital structure related issues. The paper studies the determinants of capital structure choice of selected Indian Industries. The main objective of the study was to investigate whether and to what extent the main structure theories can explain the capital structure choice of Indian firms. The paper depicts the results from the executives of companies of different industries. The paper insights by analyzing how theoretical corporate finance concepts are applied by the experts in practice.

57. **Tarun Kumar Vashisht, Dr. Ravindra Babu and Dr. Rajendra Kumar Singh (2012)**, the study highlighted that capital budgeting is a major task in the organisations because of rising medical costs, due to funds limitations, competition in environment among the organisations. The main aim of the research were present a model capable of dealing with the problems of multiple conflicting goals, indivisibility of projects and capital rationing which characterized the unique decision environment of the hospital administrator. The paper study and showed the use of zero-one goal programming model to analyse capital budgeting analysis which involves multiple conflicting goals indivisibility of projects.

58. **Ron Sookram & Balraj Kistow (2012)**, the paper depicts the increase in the scale of social, environmental and economic problems, which led to many questions and suggestions about the role and responsibilities of business in society with universal calls- emanating from the wide range of stakeholders- for companies to play a greater role in mitigating the issues. The paper finally-discusses and focused on the sustainable framework and the development of sustainable enterprises which would not be achievable without a value based leadership approach.

59. **John H. Hall (2012)**, the basic objective of the survey was to link the length of decision maker's employment in a firm and their academic qualifications to their choice of capital budgeting methods and of cost of capital techniques. The results show that the net present value is more popular than the internal rate of return as capital budgeting technique. The study also shows that there is significant tendency
among respondents with post graduations to prefer the net present value as a capital budgeting techniques. Thus in South Africa academic qualification do plays role in decision makers capital budgeting practices.

60. **Prakash Vir Gupta and Dr. Ashok Purohit (2012)**, the paper explored the concepts of capital budgeting, capital structure, cost of capital, capitalization, dividend policy and working capital of the firm. In the paper, it is revealed that excess present value method is extensively used in their industries. Alternative methods were payback method were also common. It is found in the study that 94 percent of the use of excess present value, IRR or benefit cost ratio (PI) criteria in their capital budgeting decisions. The paper overall discussed the role of financial services sector in Indian economy and corporate investment practices of IT industry in India.

61. **Beatrice Njeru warue & thuo Vivian wanjaira (2013)**, the study assess various factors affecting the budgeting processes among small and medium enterprises i.e. the hospitality industry. The research was descriptive and stratified random sampling was employed in selecting the sample. The factor under the study contributes significantly to the budgeting process and in general performance of SMEs. The study also recommends involvement of workers at all the levels of budgeting separation of ownership from management issues and continuous improvement of manager’s skills.

62. **Rakesh H M (2013)**, the investment estimation techniques in registered firms of Bombay stock exchange. The research gives basic focus on the utilisation of the methods of capital estimation applied by the Bombay stock exchange and for which the survey was conducted. The researcher framed questionnaire and sent it to five thousand one hundred and sixty three respondents of project evaluation at companies registered on the Bombay share market by focusing on capital budgeting practices. The study focused on various techniques used by the listed companies with Bombay stock exchange and it practices in their firm. The study brings out the apt techniques used by them for the evaluation of the investment projects.

63. **Antwi Nana Kofi Tufuor and James Ntiamoah Doku (2013)**, the study explored the application of capital budgeting practices by the listed firms on the Ghana Stock
exchange. With the study it can be seen that excess Present Value, investment recovery period; DCF PBP and IRR were used by the various firms like banking, manufacturing firms, distribution and insurance. The study reveals that MIRR i.e modified internal rate of return and ARR i.e annual rate of return haven’t attracted much attention compared to the excess present value method applied in their company for the evaluation of investment projects.

64. Asif Hussain and Imran Shafique (2013), In the paper, the basic objective of the survey was to find out the amount of current technique in the decision making of the capital budgeting in Islamic banking sector in Pakistan. The most preferred technique among the other capital budgeting techniques was IRR and NPV. In the selected sample, who used DCF were shown as not so effective and also ignore real option. The paper at the end suggest that a analysis of decisions making on long term capital assets, of different papers DCF where novel illustrations are made advice was given to managers to improve the opportunities of investments by making appropriate decisions.

65. Maruf Hasan (2013), the paper mostly focused on the small firms related on capital budgeting techniques. The main purpose behind the paper was to find out that, the micro manufacturing units in the country prefer the adoption of the methods of capital estimations and risk ascertainment. The study shows that, there is an suggestion of using of investment recovery period with present value & DCF techniques, there is necessity for more frequent utilisation of risk analysis. It is also seen that risk analysis techniques found missing in capital budgeting process of micro manufacturing units.

66. H Jamal Zubairi (2013), the paper tried to examine the relationship between the techniques employed and various factors such as volume of the capital expenditure, nature of industry, size of the company, nature of the industry, growth rate and capital structure. The study also reveals that the bigger size firms preferred indifference of NPV (IRR) and micro companies preferred excess present value. Also the micro units were eager in forecasting the PB period as compared to large scale units. The paper overall investigated the decision making practices in Pakistani
companies with respect to capital budgeting including the techniques employed on
the basis for estimation of cost of capital and project risk.

67. **Ibrahim E. Ahmed (2013)**, the study found that many financial and non financial
factors influence the selection of capital budgeting technique such as size of the
company, revenues profitability, leverage level, expenditure, familiarity with the
project, availability of cash and the level of decision makers. There is significant
differences were found between the methods selected and the influencing the
selection of the techniques. The paper also reveals that there is a positive
association between most of the financial factors and the methods but negative with
majority of the non-financial variables.

68. **Dorothy Kiget (2014)**, the paper discusses the adoption of the appropriate capital
budgeting technique provides managers with both the processes and techniques
required to make decisions that will enhance the Organization's resources base
while improving its ability to serve its members and evaluate effectiveness of its
investment.

The paper determine four specific objectives including determining the structure of
capital budgeting process adopted by companies listed at Nairobi securities
exchanges, secondly to determine the capital budgeting techniques adopted by
companies listed at the Nairobi securities exchanges, third objective is to analyse the
various factors affecting choice of capital budgeting techniques listed at Nairobi
securities exchanges and forth to determine the risks in adoption of capital budgeting
techniques listed at Nairobi securities exchanges.

69. **Irungu Esther Nyambura (2014)**, the study examined the investment expenditure
methods utilized in project appraisal among companies listed at the Nairobi
Securities Exchange. The objective of the study was to arose due to the inconsistent
research findings both elsewhere and in Kenya.

The study found out that all of the four capital budgeting methods researched on PB
period, excess present value, ARR & ROI and IRR (Break Even of NPV) were being
adopted by registered in the Nairobi stock market and results depicted that there was
no significant connection between the performance of the firm and the method of
capital expenditure used by the company. It is concluded that PB period, excess
present value of inflows on outflows, average rate of return, return on original investment and IRR were well adopted methods by companies.

70. **Mbabazi Mbabazize Peter & Daniel Twesige (2014)**, capital budgeting practices in developing countries: A case of Rwanda, Research journal’s Journal of finance, 2 (3), pp. 1-19, the article emphasis on the methods of capital proposal evaluation in Rwanda by looking on the capital budgeting techniques and the cash flow estimation. The findings of this research show that firms in Rwanda are adopting the use of discounted cash flow techniques though are still some inconsistencies on the acceptability as most firms are still using wrong discount rates in discounting the expected cash flows.

71. **Weerakun Banda Yatiwelle Koralalage (2014)**, the adoption of various methods of long term investment in large scale organisations: Evidence from Sri Lanka, International Journal of Arts & Commerce, 3(9), pp. 77-84, this research article examines the adoption of the project evaluation methods & investigates a number of items & their relationship with the techniques of capital evaluation in large scale registered firms in Sri Lanka. From the study it was found that NPV, ARR, PB period, ROI, IRR, MIRR & PI are used to evaluate investment project.

72. **G.Rigopoulos (2014)**, the study includes a wide range of questionnaires in its first part and scrutinize various aspects of capital budgeting. The study also reveals the adoption trend of real options in various settings among different countries and businesses. The second parts of the questionnaires were mostly focused on capital budgeting method utilized by their firms. The paper also explores various pros and con’s while adopting the appropriate capital budgeting techniques in their company for the evaluation of investment projects with its size.

73. **Mihaela Tulvinchi (2014)**, in the study, the article was based on the analysis of two factors i.e. excess present value and IRR. The investment projects are considered to be efficient if net present value is positive and has a larger value. The investment projects become more profitable as the value of the internal rate of profitable as the value of the internal rate of profitability gets higher. In the paper it is concluded that
the two efficiency factors are complementary and their simultaneous use leading to a better grounding of the investment decisions than their separate use.

74. **Muhammad Arslan, Rashid Zaman and Dr. Muhammad ayub Sidiqui (2014)**, the study identified the kind of capital budgeting methods used by the textile firms and the impact of firm size on these methods on Pakistan. The investigation also took place to find out the relationship between the total assets of the firm and annual turnover of the firm according to the traditional methods of proposal evaluation in terms of long term investments. The study also reveals that excess present value and IRR are two mostly used and favored methods in Pakistan.

75. **Sourav Paul Chowdhary, Rony Kumar Dutta, Md. Shamin Hossain, Mahbuda Akhtar and Jesmin Ara (2014)**, in the study capital budgeting decisions requires tactic for setting budgets or projects expected to have long term insinuation having involved its techniques bear the significance and importance for successful operation of banking business along with any other business. The paper clearly shows that the capital budgeting and its techniques used for specific projects can only be understood by using or applying some useful tactics. In this way the appropriate technique can be used by having understanding of the investments projects and its size.

76. **Sven-olov Daunfeldt and Fedrick Hartwig (2014)**, the paper investigated the relationship between company features and the choice of capital budgeting methods. The result supported hypothesis that Swedish listed companies have become more sophisticated over the years, which indicates a closing of the he often and the companies with stricter debt targets less management ownership employed accounting rate of return more frequent. The paper depicts the relationship between companies overall features and accordingly selecting the appropriate method of capital budgeting in their companies.

77. **Deresse Mersha Lakew and D. Prabhakaran Rao (2014)**, the study was made to identify firms and officers related attribute that conclude the choice of appropriate capital budgeting method. The result of the analysis under the normative approach which shows the firms size, officers educational qualifications, officers experience
and multinational corporations culture are the main factors that influence the choice of capital budgeting method and therefore, firms can improve their capital budgeting decisions by hiring qualified employees and retaining well experienced personnel.

78. Sehilat Bolarinwa, Babatunde yusuf, Khadijah idowu and Jamiu tijani (2014), the paper presents empirical evidence on the impact of abandonment of capital investments on the survival of small medium enterprise in nigeria. The study show the performance small medium enterprises is characterized by many problems including lack of proper and effective budgeting mechanism, failure to access loan, lack of funds, strict banking policies, unethical business practices, lack of stable business policy among others. The study also explored poor capital budgeting impacts on the survival of SMEs in Nigeria. The main contribution of this paper to knowledge lies capital budgeting decisions and abandonment option.

79. Jabr I. El-daour and Muhsen Abu Shaaban (2014), the purpose behind the survey was to investigate the application of methods of proposal evaluation. The researcher discovers the assessment of various opportunities for investments and the barriers that hinder the implementation of the methods of project evaluation in Palestinian public corporation in Gaza strip. The result indicates the overall utilisation of various methods of capital budgeting and its selection for determination of exclusively compatible investment projects. The paper illustrates that benefit cost ratio (PI) depicts as the most used technique among other techniques of capital budgeting whereas excess present value was considered as the least used techniques. The study suggests that excess present value (NPV) usage has to be increased while choosing among alternative investments.

80. Roopali Batra and Satish verma (2014), the research focuses on previous studies to understand the financial analysis and project selection stage of capital budget. The paper figures out the previous or past capital budgeting survey literature which brings out some neglected areas of capital budgeting. Four stages are neglected in the area of the study i.e. (i) identification and development; (ii) project implementation; (iii) project review and (iv) Post audit and control. The study further discuss to evaluate the impact of different company related variables of size of
capital budgeting, nature of industry, company age, company education and the level of difficulty of different stages of capital budget.

81. Julian Ochoa Yepes and Andres Mauricio Nora Cuartas (2014), the research paper is an empirical analysis of capital budgeting or investment appraisal that has been widely studied in developed countries like United States, United Kingdom, and Canada etc. The paper also provides some information about current capital budgeting techniques through an empirical study of practices in a group of Colombian companies in the construction industries. In the companies, it is surveyed that 86 percent professionals use the most recommended methods in the study i.e. Internal rate of return i.e. 50 percent over the net present value, which is 36 percent always use it for the evaluation of projects.

82. Atul K. Saxena (2015), the study is based on the capital budgeting regulations and rules its wide theory and implementation. The paper explains a evaluation of projects for the purpose of newly started business set up. depends on the categories of proposals required students forecasts the new startup the generating and incurring the revenues and expenses over the estimated life of the business and any terminating cash flows. Once the cash flows are estimated the business is evaluated for profitability and risk using the capital budgeting techniques of the NPV and the IRR.

83. Yadav Anuradha (2015), “Capital Budgeting Procedures and Practices of Unsung Entrepreneur in Delhi”, International Journal of Science and Research (IJSR), 4(1), pp. 37-41, in this paper the author investigated the extent to which capital budgeting practices & procures are employed by unsung entrepreneur of Delhi work in this area has been focusing on corporate firms, paying little attention to nonprofit organisations.

The study reveals that the larger size of the company prefer internal rate of return and the unsung entrepreneur were relying on net present value technique. The paper found out the challenges and possible solutions to the problems faced by the employees while implementing the process and practices.
84. Lunkes Rogerio J. et.al. (2015), “Capital Budgeting practices: A comparative study between a port company in Brazil and in Spain.” Journal of Public Administration and Policy Research, 7(3), pp. 39-49, this research paper aims to analyse the capital budgeting practices used in port companies in Brazil and another in Spain from a comparative perspective. The paper analyses the comparative study between the port companies working in Brazil and in Spain in regards to the practices of capital budgeting takes place. The paper clearly reveals the usage of various tools & techniques and effects of the same in these countries.

85. Kimunguyi Sammy et.al. (2015), “Effect of Budgetary process on Financial Performance of Ngos in Health sector in Kenya.” International Journal of Business and social science, 6(12), pp. 163-172, the main objective of this research was to establish the effect of budgetary process on financial performance of NGO’s in health sector in Kenya, applying priority based budgeting theory. It is clear with the study that the financial position of the company also determines the capital budgeting techniques and the whole budgetary process deals accordingly.

86. Tomasz Wnuk-Pel (2015), “Factors determining the selection of capital budgeting methods in companies operating in Poland.” Stowarzyszenie Księgowych w Polsce, this paper aimed to explore the extent of the adoption and implementation of the techniques of capital investments. The methods focused on all the traditional method i.e. PBP, ARR and modern methods i.e. NPV, PI and IRR. The paper discusses all the methods and depicts the use of each method in the companies operating in Poland. The various factors related to these methods were discussed in the study area and shown the benefits of each capital budgeting techniques and determine each factors for selecting the best tool of capital budgeting.

87. Mawih Kareem Al-Ani. (2015), A strategic Framework to use payback period in evaluating the capital budgeting in energy and oil and gas sectors in Oman.” International Journal of Economics and financial Issues, 5(2), pp. 469-475, this research article aims to examine the associations between strategic variables & use the payback period in evaluating the capital budgeting decisions from the perspective of managers and investors in Oman. The paper in all brief the outlook of
strategic framework made to use payback period in evaluating the capital budgeting is focused with respect to energy and oil gas sectors in Oman.

88. **Prof. Tatikonda Neelakantam (2015)**, Advancements in Capital Budgeting Evaluation Practices: A Conceptual Analysis, 9, pp.6-15, this study investigates the evaluation in capital budgeting practices on the basis of advancements; all the concepts are properly analyzed through this study to find out the most used capital budgeting method. The paper analyzed both the methods i.e. traditional and modern methods and concluded that the modern methods i.e. excess present value, benefit cost ratio (PI) and break-even point of NPV (IRR) methods are very helpful in decision making about the long term investment for companies.

89. **Kulkarni P.V. and Satyaprasad B.G. (2015)**, Financial Management: A conceptual approach, Mumbai: Himalaya Publication House, this book elaborates capital budgeting decisions in risks & uncertainties. Main focus is given on types & sources of risks. The books discuss each method of capital expenditure forecasting. i.e. excess present value (NPV) method, PBP method, IRR & MIRR, ARR & ROI and PI methods and related risks and uncertainties. The book also examines the risks and evaluated those risks and finds the possible solutions to solve the problems and uncertainties.

90. **Sihlaer William W. et.al (2015)**, Financial Management: Theory and Practice, Mumbai: Jaico Publishing House, according to this book, wealth management is decorated to guide the CEO, CFO etc of a micro industries & particularly of a fastest growing sectors, ensuring that the firm’s financial management is in the agreement with the organization’s tactic. Through structured framework of book all the concepts are systematically covered for the better understanding of capital budgeting practices and its various tools and techniques. The theoretical concepts were also dealt in the books with the appropriate examples.

91. **Natalia Ermasova and Dwight Vick (2015)**, the paper focused on the improvements in investment analysis in capital budgeting practices. The study undertaken to report on the recent practices of capital budgeting techniques on state level in the USA. The research paper expend knowledge of capital budgeting for
practice planners, developers, budget analysis, debt managers and policy makers in the area of regional collaborators, capital planning and capital budgeting. The overall focus of the paper was to understand the techniques appropriateness on the basis of evaluation of project investments and decision making purpose.

92. Nadia Umair (2015), the study examines the study the different type of the capital budgeting methods and its impact on the firms in Pakistan. The researcher also investigated the relationship of the total assets of the firm and annual turnover of the firm by using chi-square test in the study. The study also reveals after evaluating all the investments forecasting methods, the excess present value and IRR i.e. modern methods are mostly used methods in their company.

93. Imegi John c. and Nwokoye Gladys A. (2015), the study examined the effectiveness of investment forecasting methods on the examination of projects profitability. It is concluded that the various investments forecasting methods utilized in examining the profitability of a project are PB period, average rate of return, excess present value, IRR, MIRR, ROI, DPBP, Benefit cost ratio and net terminal index. It is also concluded that the conventional methods of investment forecasting are not effective in evaluation of profitability of project than the modern methods of capital budgeting.

94. Tomasz wnuk-pel (2015), the paper explored the extent use of capital budgeting methods and to determine the factors in their selection in companies in Poland. The study mostly dealt with two hypotheses. The first hypothesis stating that the diffusion of capital budgeting methods in Poland is similar to other central and east European (CEE) countries and lesser than in more developed countries and second hypothesis state that the type of a company’s activity, equity capital origin, company size and magnitude of capital expenditure budget is associated with capital budgeting method selection. Both the hypotheses reveals that the research carried out enabled to be verified partly positive. IRR and NPV significantly increases when a company has foreign ownership and when the capital expenditure budget is large.
95. Stephen O. Menya and Lucy Gichinga (2015). The paper identified payback period influences the spread of micro finance enterprises in mobasa country. The study tried to establish the linkages between net present value and micro-finance enterprises in Mombasa country. The paper explored the overall aim of the survey was to ascertain the impact of investment forecasting on the growth of micro-finance enterprise in Mombasa country. In the study, the researcher has provided some recommendations like better communication needed in between micro-finance enterprise and the essentiality for better trained employees.

96. Rogerio Joao Lunkes, Vincente Ripoll Feliu, Arturo Giner-Fillol and Fabricia Silva da Rosa (2015), the main aim of the work was to analyze the investment forecasting techniques used in port company in Brazil and another in Spain from a comparative perspective. The primary data was collected to meet the objective and to study these two ports. The result reveals that the Brazilian port uses only the IRR for Investment forecasting determination combined with the random rate to determine the minimum acceptable return and scenario analysis to assess investment risks in their company.

97. Tamar Gamsa Khurdia & Ketevan Maisuradze (2015), the research paper explored the selection of investment estimation techniques used by companies show that basic cause for the utilisation of the excess present value was it accuracy because of the time value concept. The IRR method is used for evaluating the financial breakeven of the projects. In other words, it can be seen here that IRR is more used technique in comparison to other techniques of capital budgeting. The result also indicates that the continual use of payback was based on the ease of the technique.

98. Prof. Tatikonda Neelakantam (2015), the paper mainly focused on advances in capital budgeting techniques, theory and practices and its impact on the investment decisions at the same time focused on evaluation practices. The result of the study are both encouraging and infuriating. The most popular technique according to this paper is internal rate of return. In this paper it is shown that the payback period method is also simple to calculate and to understand. In short the paper is made to know the advances evaluation practices in capital budgeting.
99. Sadia Farrukh, Nelson Area and Artur Rodrigues (2015), the study aims to evaluate current techniques in Pakistan. During the study it is reveal that IRR and NPV are the most practiced techniques. The paper also shows that majority of firms adjust risks in computation of cash flows but small number of firms use sophisticated techniques for risk assessment. The paper basically deals with issues on how sophisticated firms use investment decisions in evaluating different projects. On that basis financial manager chooses investments with satisfactory cash flows and return on investment.

100. Kyle S. Meyer & Halil Kiymaz (2015), the research focus on the environmental dimension of sustainability and examine the impact of sustainability on capital investment decisions. Specifically the researcher in the study aspires to reveal the extent of investment, which is considered to be in maintaining the technologies affects of capital investment decisions. Based on the analysis of response. The study found that for most companies, sustainability dimensions is not significant consideration in capital investment decisions. Capital investment opportunities are evaluated based on traditional measures such as NPV & IRR.

101. Shakila Yasmin (2015), the paper elaborates the capital budgeting practices of Bangladeshi companies, which identified the extend of different capital budgeting techniques such as excess present value, indifference of NPV (IRR), PB period, discounted PB period, benefit cost ratio (PI), sensitivity analysis, scenario analysis. Real options approach and decision tree analysis are used. According to survey excess present value is most frequently used capital budgeting technique in the companies. IRR, PI and PB period are next most popular methods. The result also reveals that majority of the companies use multiple techniques.

102. Matteo Rossi (2015), the study is an attempt to evaluate different techniques of capital budgeting i.e. initial cost recovery period method, excess present value, IRR. The result reveals that PB period followed by NPV is most used methods. It is reveal in the paper that the more complex methods are most favored by the large enterprises. The study is exploratory and provides those evaluating investment projects or imagining investment forecasting manuals or policies with the knowledge about common pitfalls that, if acted upon, could improve decision making.
103. Sayan Banerjee (2015), the paper aims at exploring the causality between the timing of cash flows and contravention of excess present value and IRR in regards to investment forecasting decisions. The paper also showed that excess present value and IRR are leading in terms of it usage for their projects. Discounting techniques has been used to compute excess present value and IRR. The study shows the possibility of contravening results in case of mutually exclusive projects. The study found that due to severity of discounting factor, timing of cash flows of projects lead to contradicting results as depicted by excess present value and IRR.

104. Kengatharan Lingesiya (2016), “Capital Budgeting Theory and Practice: A Review and Agenda for Future Research.” Applied Economics and Finance, 3(2), pp. 15-38. The main purpose of this research was to delineate unearth lacunae in the extant capital budgeting theory & practice during the last two decades and ipso facto become springboard for future scholarships. The paper made to understand the theory and practices of capital budgeting in the companies. The research also suggests the best techniques to be used for the decision making of the companies and evaluation of the investment projects or project.

105. Pankaj Kumar Gupta and Dr. Vipul Jain (2016), The study is made to evaluate various techniques i.e. PB period, average rate of return, excess present value and IRR and PI of capital budgeting. The paper highlights that internal rate of return (IRR) or non-discounted payback period were more preferred than Net Present Value (NPV) in the worldwide. The research also focused to evaluate the capital budgeting practices by small medium Enterprises in taking decision for buying different types of assets.

106. Divya Gupta (2016), the researcher in this paper explores the applications of capital budgeting techniques in Indian companies. The paper also tries to explore the relationship between capital budgeting decisions and firm’s size. The paper also provides the new insights about the frequency of the capital budgeting technique used in the firms along with the type of the company using various techniques. In all it is always important for the firm to choose the right technique of capital budgeting
for the success of the firm and to yield the benefits at the same time by exploring all the capital budgeting techniques in Indian Firms.

107. Paula de dsouza (2016), the study examined the adoption and implementation of project evaluation methods by the large scale Brazilian firms. The result shows that the companies mostly adopting PB period, excess present value and IRR in the assessment of investments forecasting and to examine the investment risk. The study is made to evaluate the hypothetical assumptions which is developed and shown that there is no relationship of cause and effect among the variables to explain the use of more sophisticated budgeting practices by the large Brazilian firms.

108. Akki siva Naga Raju (2016), The paper explored the various types of identifying risks, managing the resources and computing cash flows plays vital role in capital budgeting. The paper shows that how capital budgeting techniques helps manager in evaluating the efficient allocation of the capital. The study of capital budgeting also helps to decide whether or no fund should be invested in long term projects and helps to analyse the proposal for expansion or creating additional capacities to analyse various proposals regarding capital investment and also to choose the best out of many alternatives proposals.

109. Lidija Barjaktarovic, Katarina Djulic, Renata Pindzo and Ana Vjetroc (2016), the paper focused on two major research questions which discusses the techniques used by the serbian firms for project evaluation and their cost of capital is calculated. The result reveals that payback period is dominant capital budgeting technique used by Serbian firm. The paper also says that CAPM is not dominant method for calculating cost of capital. It is said that skilled human capital, the adequate knowledge and developed procedures contribute in accepting capital budgeting techniques.

110. Rajendra Shankararo Pillewar (2016), the paper analyzed the overall decision taken by the firms on evaluation of capital budgeting techniques. The study targets the factors to be considered while selecting the capital budgeting methods and its impact on the basis of the perceptions of accounting professionals and management
executives of the media industry. The paper also focuses on various factors and their relationship in capital budgeting methods like cash flow estimation, cost of capital, hurdle rate, risks, technological changes and user’s choice. The paper also says that capital budgeting is important tool to analyze and decide the investment decision.

111. Klara (2016), the paper provides comprehensive overviews of capital budgeting methods preferred by corporate managers in some European countries and in United States. The paper explore three major observations i.e. a considerable amount of European and United States corporations calculate the indicator of the PB period. Second observation reveals that Excess present value and IRR were the most influential methods. Lastly the companies in France and Hungary used the PI more often than companies in other surveyed countries.

112. C. Pathirawasam (2016), the present study examined the investment forecasting methods of sri-lankan companies. The study found that the discounted as well as non-discounted methods are equally used by the sri- lankan companies for the capital budgeting decisions. The data reveals that majority of the respondents i.e. 80 % used excess present value, IRR and PB period as their important investment ranking methods. The study also shows that all the companies were relying on the single capital budgeting techniques.

113. Ejoh Ndifon Ojong, Okpa, Inah Bassey Ibanga, Udo Jimmy (2016), the paper examined the relationship between capital investment appraisal techniques and firm’s growth and survival in Nigeria. The paper studied the project appraisal and investment as a tool for sustainable growth and value creation. The study reveal that there is significant relationship between capital investment appraisals techniques and firms sustainable growth and value creation and sound financial management is complicated and difficult to the sustain and long-term growth of firms based on the findings. The ANOVA (F- ratio) test was used to test the formulated hypothesis.

114. Roopali Batra and Satish Verma (2017), the study re-examined Indian corporate capital budgeting practices. The result shows that many corporate practitioners largely follow the capital budgeting practices proposed by the academic theory. Through the study it is quite clear that discounted cash flow techniques of excess
present value and IRR and risk adjusted sensitivity analysis are more popular amongst the other capital budgeting techniques. The study was meant for the re-examination of the capital budgeting practices in the Indian companies.

115. Mr. T. Venkatesh and Dr. Sardar Gugloth (2017), the paper discusses the effective control of capital expenditure in order to achieve by forecasting the long term financial requirements. The objective of the paper was to ensure the selection of the possible profitable capital projects to facilitate the coordination of interdepartmental project funds among in competing capital projects. The paper objective is also to ensure the maximization of profit by allocating the available investible. Both traditional methods and modern methods are discussed in the research paper and gave different aspects of each technique thoroughly.

116. Anuradha Yadav (2017), the study was aim to present evidence on current small scale entrepreneur investments practices and to determine how far these practices reflect the latest financial theories. The paper also determines the linkage between employed and various factors such as size investment, nature of investment, firms size and growth rate and capital structure. The paper discloses that the large scale organisations gives first preference to IRR, while small scale entrepreneurs are eager in forecasting the PB period as compared to larger firms. The main purpose of the study was to ascertain the use of investment forecasting methods and risk analysis.

117. Hung Chan, Kamal M. Haddad and William Sterk, the paper shows the effective decision of capital budgeting techniques, which are crucial for the success and survival of the companies. The researcher studies the US firms and usage of capital budgeting practices. The study used the survey method for US firms and for their executives, who shifted away from non-discounted to discounted cash flow techniques. In the research, it is clearly shown that the Chinese firm and executive were giving importance to non-discounted cash flows and discounted flows equally for the evaluating and ranking the investment projects.

118. Prof. Dorel Berceanu and Prof. Costel Ionascu, in the paper, it is shown that capital budgeting is one of the complex decision process taken by the company. This
is a process of evaluating the cash flows from investment opportunities and deciding which one is need to be accepted or rejected by the firm.

The study has also shown the four stages of capital investment decisions in illustrative form i.e. to identify the investment opportunities, development of the projects, evaluating selections and last stage is control for the purpose of the study. In the study, various methods of capital budget are discussed in brief for the better understanding of the selection.

119. **K. C. Lam, S. O. Cheung and C.M. Tang**, the paper examines the capital budgeting evaluation procedures used in the construction industry of Hongkong in 1994-1999 and highlighted the financial management behaviour in Hongkong construction industry. The paper used sampling method is adopted by the researcher for the analysis of the capital budgeting evaluation practices and procedures. The paper shown 100 contractors selected randomly from Hongkong construction association. The findings state that excess present value & IRR were predominant techniques for investment forecasting.

120. **Yusuf R. Babatunde, Bolarinwa S. Abike, Idowu K. Adeola and Lukman A Adeyemo**, this work was examined the various techniques of capital budgeting available to small medium enterprises and their relationship with the risk management. The total population of 100 was selected as the sample by the researcher on a random basis. The researcher says that there is relationship between capital budget and profitability and capital budgeting and risk management. The study also focused on the capital budgeting process and its stages to define the procedures of the capital budget. the important indicators which are discussed in the study were profitability, sales turnover, liquidity, return on investment, market share and size.

**2.3 RESEARCH GAP:**

The chapter reviews the existing literature on the concept of capital budgeting and its techniques used to measure and evaluate the financial performance of the companies. The section of review of literature has provided on secondary data. The secondary data here in previous study depicts the importance of capital budgeting among small, medium and large companies from all the sectors i.e. Industry,
hospitality, banking and finance sector, Multinational companies and other sectors. Most of the previous studies focused on the capital budgeting practices of unlisted SMEs of outside countries like South Africa, United States, United Nation, Germany, Pakistan and others.

Majority of the study can be seen in the other part of India but there is no comprehensive study on capital budgeting carried out in Mumbai, especially with regard to Mumbai Suburbs. It is very obvious to have most of the manufacturing companies are working here in Mumbai, which is one of the metro city and hence it could be seen that how capital budgeting practices takes place here in Mumbai. Therefore, the researcher has chosen the topic “Measuring & Evaluating the financial performance of manufacturing companies by using techniques of capital budgeting: With special reference to Mumbai (Western Suburbs)” for the detailed study.