

**A COMPARATIVE STUDY ON NPV AND IRR METHOD; WHICH ONE  
IS MORE APPLICABLE IN DECISION MAKING.**

**A PROJECT PAPER SUBMITTED TO THE MARA INSTITUTE OF  
TECHNOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR  
THE ADVANCED DIPLOMA IN ACCOUNTANCY.**

**PREPARED BY :**

**AHMAD ZAKI BIN HAJI MAHMOOD**

**90652680**

**31 OF MARCH 1993**

**ADVISOR : MR WONG HIM YIEN.**

## ACKNOWLEDGEMENT

This study is part of the requirement of final semester Advanced Diploma In Accountancy students. Therefore, I would like to extend my sincere thanks and appreciation to those who have assisted in compiling this project paper. My special thanks to the following who have devoted their time in assisting me.

1. En. Azahari B. Hashim  
Accountant at British Petroleum(BP)  
Malaysia Sdn Bhd.
2. En. Sunari B. Solor  
Senior Audit Executive  
Dunlop Malaysia Industry Berhad(DMIB)
3. En. Azhar Bin Ahmad  
Credit Officer  
Bank Pertanian Cawangan Alor Setar
4. Pn. Nor Hashimah Hashim  
Internal Audit Department  
Petronas Dagang, Kuala Lumpur.
5. En. Zulkifli B. Mohamed  
Credit Department  
BBMB. Kota Bharu.
6. Hj. Fauzi Yusoff  
Manager of KEDECO, Kota Bharu, Kelantan
7. En. Fauzi Bin Mohamed  
Accountant, Permodalan Kelantan Berhad(PKB)  
Management and Service.

To my adviser, Mr Wong Him Yien, I would like to thank him for the special guidance, advice and encouragement in preparation of this project paper.

My sincere appreciation to all directly or indirectly involved in making the project a success.

## ABSTRACT

I had chosen the topic on the decision making process, especially in the capital budgeting because I had been attracted to the argument of using either Net Present Value(NPV) or Internal Rate of Return(IRR) method in capital budgeting decision making. It had been argued that NPV is superior to that of IRR method but according to the study and research conducted, the number of firms using either one of both methods are almost equal. There should be pros and cons supporting the use of the selected method.

There are two major problems that posed setbacks throughout the preparation of this project paper. The problems were time constraints and availability of information, especially primary/first hand information. A comprehensive and thorough study on a topic of capital budgeting decision process could not be covered in four to five months period especially during the practical training period. Only after that period had ended, I could concentrate on the preparation of the project paper.

While the officers interviewed or asked had refused to reveal the real situation happened in their capital budgeting decision. They said that it was against their companies' policy to release any information regarding the subject matter.

Data collection for the topic were gathered by setting relevant questionnaires to be distributed and answered by a selected respondents. Interviews with some financial officers were also conducted and this face to face meetings were more effective as the answers to the questions asked could be explained in detail.

Besides having information from primary sources, data was also gathered from books, newsletters, magazines and periodicals.

This project paper concerned on the comparative study on NPV and IRR method used in the capital budgeting decision. The objective of investment/capital budgeting is to find real assets which are worth more than they cost. The research had revealed that whether to use NPV or IRR, consideration should be given to the sources of fund available to the company.

If a project is financed by using internal sources of fund i.e reserves, then the company normally use NPV method which concern with the time value of money. However, by using other sources of fund such as varieties of loans, the company normally use IRR method to ensure that the rate of return from the investment will exceed the cost of capital. While other methods such as Pay Back Period, Accounting Rate

## TABLE OF CONTENTS

	PAGE
1. Acknowledgement.....	i
2. Abstract.....	ii
3. Table of contents.....	v
4. List of appendices.....	vii
5. Introduction.....	1
6. Capital Budgeting	
Theory and process.....	8
Measuring cash flows.....	11
Initial outlay.....	11
Differential flows over the project's life.....	12
Terminal cash flow.....	13
7. Capital Budgeting Techniques	
Payback period.....	15
Accounting (simple) rate of return.....	17
Profitability index.....	19
8. NPV and IRR	
NPV.....	21
Concept of NPV.....	22
IRR.....	32
Characteristic of IRR.....	37
Factors influencing capital budgeting decision.....	42
9. Background of study.....	44
10. Objective of study.....	45
11. Methodology.....	46
12. Limitations.....	48
13. Literature review.....	49
14. Findings	
Section A.....	52
Section B.....	55
15. Conclusions.....	60
Reason for conflicting result	