

AN ISLAMIC FRAMEWORK FOR PROJECT EVALUATION:
A THEORETICAL STUDY

BY

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AN ISLAMIC FRAMEWORK FOR PROJECT EVALUATION: A THEORETICAL STUDY

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APPROVAL PAGE

I certify that I have supervised and read this Project Paper and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a Project Paper for the degree of Master of Business Administration.

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I hereby declare that this research is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

Signature: _____ Date: 6th July 2004

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This work is dedicated to

(1)

My beloved parents, Hj. Jalil Omar and Hapisah Ismail

Who have guided and encouraged me along the way

(2)

My brothers, Abdurrahman, Ibraahiim, Abdul 'Afuww, Ismaail and Yuusof

and my adored sister, Ufairah 'Adilah

for their encouragement, love and support

May Allah's guidance and blessing be upon them in this world as well as in the

hereafter

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TABLE OF CONTENTS

Approval Page	ii
Declaration and Copyright Page	iii
Dedication	iv
Acknowledgements	v
Table of Contents	vi
List of Tables	x
List of Figures	ix
List of Abbreviations	xii
Abstract	xiii
1. INTRODUCTION	
1.1 Problem Statement	1
1.2 Objectives of the Study	2
1.3 Significance of the Study	3
1.4 Research Methodology	4
1.5 Limitations of the Study	5
1.6 Organisation of the Project Paper	6
2. PART ONE: PROJECT EVALUATION FRAMEWORK IN MAINSTREAM ECONOMICS	
2.1 Definition of Project	7
2.2 Project Evaluation Definition and Function	8
2.3 Project Evaluation vis-à-vis the Project Cycle	10
2.3.1 Project Formulation	12
2.3.2 Feasibility Study	12
2.3.3 Investment Decision	15

2.3.4 Implementation	16
2.3.5 Ex-Post Evaluation	16
2.4 Overview on the Major Developments of the Project Evaluation Framework in Mainstream Economics	17
2.5 The Framework for Project Evaluation	21
2.5.1 Commercial Profitability	23
2.5.1.1 Investment Profitability Analysis	23
2.5.1.2 Financial Analysis	25
2.5.2 National Profitability	26
2.5.2.1 Social Cost-Benefit Analysis	27
2.5.3 Uncertainty Analysis	28
2.5.4 Project's Overall Merit	29

2. PART TWO: REVIEW OF THE FRAMEWORK: ISLAMIC POINT OF VIEW

2.6 The <i>Raison D'être</i> for <i>Ex-Ante</i> Project Evaluation from the Islamic Standpoint	32
2.7 The Mainstream Framework for Project Evaluation: Review of the Main Issues from the Islamic Standpoint	33
2.7.1 The Need to Accommodate <i>Shari'ah</i> Objectives	34
2.7.2 The Principle of Cost Benefit Analysis	36
2.7.3 The Rationale for Discounting Project's Cost and Benefit	38
2.7.3.1 Positive Time Preference	39
2.7.3.2 Discounting Future Costs and Benefits	41
2.7.3.3 Discount Rate	42
2.7.3.4 Time as an Element in Contract of Exchange and Project Evaluation	43
2.7.4 The Notion of (Commercial) Profit Maximisation for Private Projects	45

3. THE CONCEPT OF MAŞLAĤAH (SHARĪĤAH OBJECTIVES) IN PROJECT EVALUATION	
3.1 Introduction	48
3.2 The Concept of <i>MaşlaĤah</i> : <i>SharĪĤah</i> Objectives	48
3.3 Classification of Projects According to the Concept of <i>MaşlaĤah</i>	50
3.3.1 Necessities (<i>Ḍarūrīyyāt</i>)	52
3.3.2 Conveniences (<i>Hāġīyyāt</i>)	55
3.3.3 Refinements (<i>TaĤsīmīyyāt</i>)	56
3.4 The Rules Governing the Relationships amongst the Three Categories of <i>MaşlaĤah</i>	56
3.5 Beyond the <i>MaşlaĤah</i> : <i>Al-IsrāĤ</i> and <i>Al-TabdhĪr</i>	58
3.6 Beneath the <i>MaşlaĤah</i> : <i>Al-TaqtĪr</i>	59
3.7 The Incorporation of the <i>Maslahah</i> Concept into the Project Evaluation	60
3.8 The Need for Continuous Judgment	63
4. ISLAMIC VALUES IN PROJECT EVALUATION	
4.1 Introduction	65
4.2 Islamic Value 1: Preservation of Future Generations' Welfare	66
4.3 Islamic Value 2: Environmental Balance	67
4.4 Islamic Value 3: Public Interest is Given Priority over Private Interest	69
4.5 Islamic Value 4: Balance between Physical and Spiritual Development	70
4.6 Islamic Value 5: Avoidance of Both Extravagance and Niggardliness	71
4.7 Islamic Value 6: Promotion of Cooperation and Partnership	72
5. CONCLUSION AND RECOMMENDATIONS	
5.1 Conclusion	76
5.2 An Islamic Framework for Project Evaluation	78
5.3 Suggestions for Further Research	80
BIBLIOGRAPHY	81
GLOSSARY	87

APPENDIX 1

91

APPENDIX 2

94

LIST OF TABLES

Table 1: Classification and Priority of Projects According to the Concept of
Maşlahah

Table 2: Project's Category, Status and Value According to the Concept of
Maşlahah

LIST OF FIGURES

- Figure 1: Steps Involved in the Project Formulation Stage
- Figure 2: The Relationship between the Economic/Investment Plan, Project Cycle, Project Feasibility Study and Project Evaluation
- Figure 3: The Framework for Project Evaluation in Mainstream Economics
- Figure 4: The Integration of *Maşlahah* Analysis into the Project Evaluation
- Figure 5: An Integrative Islamic Framework for Project Evaluation

LIST OF ABBREVIATIONS

etc.	Et cetera (= and so on)
IDB	Islamic Development Bank
IDCAS	Industrial Development Centre for Arab States
IIIE	International Institute of Islamic Economics
IIUM	International Islamic Institute Malaysia
IKIM	Institut Kefahaman Islam Malaysia
IRR	Internal Rate of Return
IRTI	Islamic Research and Training Institute
KLIA	Kuala Lumpur International Airport
MSC	Multimedia Supercorridor
n.d.	No date/year of publication
n.pb.	No publisher
NPV	Net Present Value
OECD	The Organisation for Economic Co-operation and Development
PBUH	Peace Be Upon Him
SCBA	Social Cost-Benefit Analysis
SRD	Social Rate of Discount
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNIDO	United Nations Industrial Developments Organisation
USA	United States of America

ABSTRACT

Total dependence on the mainstream project evaluation framework may not be able to lead Muslims to the most preferable project under the light of the *Sharī'ah*. There are several major issues pertaining to the mainstream framework that need reconsideration from the Islamic standpoint. Moreover, the mainstream framework has been developed over the years in isolation from Islamic input. In carrying out this study, the researcher has followed the descriptive method to illustrate the project evaluation framework in mainstream economics. The researcher has also applied both the inductive and deductive methods as well as the analytical method to thoroughly examine and analyse the literature of the Muslim scholars. This study has reconsidered the Islamic stance towards the main issues pertaining to the mainstream project evaluation framework. The study also found that the concept of *maṣlaḥah* (*Sharī'ah* objectives) has a significant role to play in an Islamic framework for project evaluation and would to a great extent distinguish the Islamic framework from the conventional one. Besides that, the decision makers and project analysts in an Islamic framework should be guided by Islamic values in carrying out their judgments. Finally, an integrative Islamic framework for project evaluation should take into consideration the best elements of both Islamic and mainstream economics.

CHAPTER ONE

INTRODUCTION

1.1 Problem Statement

Governments and individuals¹ are faced with the problem of resource limitations in attaining their respective objectives. Project evaluation procedure would help them in rationalising the allocation of their resources among the competing alternatives. In another way, it is a sort of justification for the use of resources in realising specific objectives. The framework for project evaluation offered today in mainstream economics *per se* may not be able to lead authorities, managers and investors to the most preferable project (or investment) from the Islamic standpoint. There are several main principles pertaining to the subject that need reinterpretation and reconsideration to clarify the Islamic position on such issues². This is vital as the project evaluation procedure is highly influenced by the attitudes and beliefs of the project analysts and decision-makers towards the commercial, social and national outputs (costs and benefits) of the project. The correct Islamic understanding of these principles may have an impact on the judgment of the project analysts and decision makers during the process.

¹ In economic and business discussions, the term “individuals” applies to both individual men and firms, in conjunction with the pursuit of their interests reflected in profit maximisation (Muqorobin, 1998).

² The principles that are related to the topic (as recognised by the researcher) and which will be examined under this study are: (1) the need to accommodate *Shari'ah* objectives, (2) the principle of cost benefit analysis, (3) the rationale for discounting future cost and benefit and (4) the notion of (commercial) profit maximisation for private projects.

In addition to the methodological and technical tools that have been developed in mainstream economics which are very helpful in this process, there are several matters that are of considerable importance in an Islamic framework and worth further discussion; amongst them are the concept of *maṣlaḥah* and Islamic values. The uniqueness of the concept of *maṣlaḥah* (or *Sharīʿah* objectives) as put forward predominantly by *Al-Ghazālī* and *Al-Shāḫibī* will have a great impact on the project evaluation procedure in an Islamic framework. Moreover, as the Islamic economy is a value-loaded or value-based system, there are several Islamic values that may have relevance in this process. The importance of these values is hardly ever discussed in the mainstream framework. However, this aspect of the project evaluation topic should not be ignored in an Islamic framework.

1.2 Objectives of the Study

The objectives of this study are as below:

- i) To review the main principles in the mainstream framework for project evaluation from the Islamic point of view.
- ii) To suggest the incorporation of *Sharīʿah* objectives or the concept of *maṣlaḥah* into the project appraisal framework.
- iii) To identify Islamic values that have relevance to the topic and their importance in the procedure.

- iv) To suggest the essential stages of an integrative Islamic framework for project evaluation which suits the spirit of the *Sharī'ah* and current practice.

1.3 Significance of the Study

The significance of this study is as follows:

- a) This study suggests the Islamic standpoint on the essential principles of the project evaluation framework in mainstream economics. It is expected that project analysts and decision makers (in an Islamic framework) should have a clear Islamic understanding of these principles which would affect their judgment later.
- b) The study also provides a different perspective on the project evaluation field by incorporating the concept of *maṣlaḥah* (*Sharī'ah* objectives) and introducing Islamic values into the process that are peculiar to the current practice.
- c) This study could contribute to the development and growth of Islamic finance and economics by exploring some *fiqh* sources by Muslim jurists to find their relevance in the field of modern economics.

1.4 Research Methodology

This study comprises library based research. Hence, it is academic and theoretical in nature. The research methodology of this study is based on secondary data available in the literature both in conventional and Islamic economics. This literature comprises published journals, periodicals, books, theses, unpublished articles and internet resources, in either English or Arabic. This research involves the following methods:

(i) Descriptive methods

This method is used to explain the project concept and the project evaluation framework in mainstream economics.

(ii) Inductive and deductive methods

The researcher applies both the inductive and deductive methods that help to thoroughly examine the views and arguments of the Muslim scholars, as recorded in their writings.

(iii) Analytical method

This method is used to analyse relevant views in this study and give preference to some over others. The researcher may also present his own suggestions.

The last two methods are involved in clarifying the Islamic standpoint on the main principles of the project evaluation framework in mainstream economics, the concept of *maṣlaḥah* (*Sharī'ah* objectives) and its incorporation in the procedure, and the importance of the Islamic values in the process.

1.5 Limitations of the Study

The limitations of this study are:

- a) There is not much material in Islamic economics pertaining directly to the project evaluation framework as discussions on such topic are still relatively scarce.
- b) In addition to that, the researcher confines himself to the resources available in the library of International Islamic University Malaysia (IIUM), his personal collections and the Internet.
- c) This study concentrates on the framework for project evaluation rather than on the technical and methodological issues of the subject matter to give the study focus, conciseness and persistent direction.
- d) Hence, this study is not an exhaustive discussion of the project evaluation procedure as the technical and methodological matters of the subject are not within the scope of this study. The discussion of such matters requires

massive illustrations and hundreds of pages. Moreover, they are well explained in the literature and reiteration would be redundant.

1.6 Organisation of the Project Paper

This paper consists of five chapters. In Chapter one, the introduction of this research paper is presented. The problem statement, objectives, significance, research methodology and limitations of this study are briefly stated in this chapter. Chapter two is divided into two main parts. The first part provides the readers with the concept of the project evaluation framework in mainstream economics. The second part is devoted to the review and discussion of the main selected principles of the mainstream project evaluation framework from the Islamic point of view. The concept of the *maṣlaḥah* (*Sharī'ah* objectives) and its incorporation in the project evaluation are discussed and suggested in Chapter three. In Chapter four, the Islamic values that have relevance to the project and investment choice are identified and their importance in the project evaluation procedure is expounded. The conclusions of this study and the recommendations for the essential stages of an Islamic framework for project evaluation are then presented in Chapter five.

CHAPTER TWO

PART ONE

PROJECT EVALUATION FRAMEWORK IN MAINSTREAM ECONOMICS

2.1 Definition of Project

In general, a project means a plan, a design or scheme for doing something and it is relatively new when the development practitioners and academics use the term to denote the investment or productive activity with the use of resources (Baum & Tolbert, 1985). A project can be defined as a proposal for future investment which aims to create, expand and/or develop specific facilities to increase the production of goods and/or services in a community or place within a determined period of time (Sang, 1995; UNIDO & IDCAS, 1980). Baum & Tolbert (1985) suggest the definition of a project as “*a discrete package of investments, policy measures, and institutional and other actions designed to achieve a specific development objective (or set of objectives) within a designated period*”.

A project often forms part of an economic or investment plan. An economic or investment plan may consist of a single project or projects that are strongly or weakly inter-related (Little & Mirrless, 1974). Investment decision-making includes the

consideration for embarking on a new project (Palm & Qayum, 1985). Project evaluation then forms a fraction of the complete phases of a project (project cycle).

The further splitting-up of a project into several parts or units is possible for reasonable consideration. Each of those parts is can then be defined as a separate project. However, this requires that the sub-project can be analysed and evaluated technically, commercially and economically as an independent and separable unit of investment (Little & Mirrless, 1974; Sang, 1995; UNIDO & IDCAS, 1980). If two or more activities are theoretically separable but practically indivisible, they should be treated as one single subject for evaluation purposes (Palm & Qayum, 1985). An example of separable sub-projects in a project given by Muqorobin (1998) is the RM20 billion high-tech scheme of the Multimedia Supercorridor (MSC). The MSC project can be separated and evaluated into several separable independent projects such as the Kuala Lumpur International Airport (KLIA). This fact suggests that an enormous project may consist of several projects that can be evaluated separately at different levels.

2.2 Project Evaluation Definition and Function

Project *evaluation* or *analysis* or *appraisal*³, in the general sense, is basically an examination between a project's costs and benefits over its lifetime to determine the net worth of the project from the *commercial* and *national* point of view. In this sense,

³ These three terms are used in the literature to connote the same meaning. However, the use of a particular term may have some logical grounds as well as practical advantages (Sang, 1995).

Sang (1995) defines project evaluation as “*a studied judgment on the balance of all the positive and negative effects of a project and its relative merits among the alternatives for achieving government or private enterprise objectives*”⁴. It is an analysis of the project’s expected future events in order to determine the current attractiveness of the project (Palm & Qayum, 1985). There are several other closely related terms which are used interchangeably to denote this meaning of project evaluation such as cost-benefit analysis, cost-effectiveness analysis and capital budgeting. However, each of these terms may reveal a specific meaning.

Cost-benefit analysis⁵ and cost-effectiveness analysis, in most situations, refer to the evaluation of public projects only. The former concerns the net result between the project’s quantifiable costs and benefits whilst the latter deals with the project’s non-quantifiable benefits in determining the least expensive project’s cost from its alternatives that would provide the targeted outcome. On the other hand, the term ‘capital budgeting’ is often used to denote project evaluation by private individuals concerning the sources and types of financing (Sang, 1995; Zarqa’, 1982).

Project evaluation is involved in three main situations where the decision is to accept or reject a single project; to choose one single project amongst a range of projects; or to decide on a certain number of projects within a range of proposed

⁴ His other definition of project evaluation is “*an assessment of the net benefit expected of a project in comparison with its alternatives for achieving national or private business goals*”. This definition is very similar to the first one.

⁵ Cost-Benefit Analysis (CBA) is also known as Social Cost-Benefit Analysis (SCBA) as it attempts to consider all of the project’s pros and cons to the society as a whole (Boardman, Greenberg, Vining & Weimer, 2001).

projects (Zarqa', 1982) Hence, it does have several critical functions. They are (Sang, 1995):

- a) Provision of necessary information on a project.
- b) Establishment of an order of priority among competing projects.
- c) Assessment of the profitability of a project.
- d) Rationalisation of the allocation of resources among the various sectors and projects at the macroeconomic and microeconomic levels.

2.3 Project Evaluation vis-à-vis the Project Cycle

The various stages of information gathering and decision making that take place between a project's inception and completion are known by economists as the "project cycle" (Irvin, 1978). In other words, a project cycle refers to the step-by-step process by which a project is formulated, identified, evaluated, implemented and completed (World Bank, n.d.). These various stages are conveniently known as the 'project cycle' to denote that they are closely linked to each other and follow a logical progression (Baum & Tolbert, 1985). This concept of project cycle was first introduced by the World Bank in describing the working procedures of its financing in developing countries⁶. A slightly different framework concerning educational

⁶ The project cycle as conceived by the World Bank comprises (1) identification, (2) preparation, (3) appraisal, (4) negotiations and board, (5) implementation and supervision, (6) implementation completion, (7) evaluation and lastly (8) country assistance strategies. See www.worldbank.org

projects was suggested by UNESCO⁷. Different authors provide different detailed explanations of the stages a project should follow and each project has its own distinctiveness and no two projects are alike (Sang, 1995). Indeed, the divisions of the project cycle are somewhat artificial in practice but do illustrate the whole concept of a continuous decision-making task (Irvin, 1978).

However, there is a general evolutionary pattern amongst projects comprising several common stages (Sang, 1995). Muqorobin (1998) observes at least five major stages of a project cycle. It appears to the researcher that the sequence of stages of the project cycle as observed by him is the most explicable for summarising a typical project cycle⁸. The sequence of the project cycle is as follows:

1. Project Formulation
2. Feasibility Study
3. Investment Decision
4. Implementation
5. *Ex-post* Evaluation

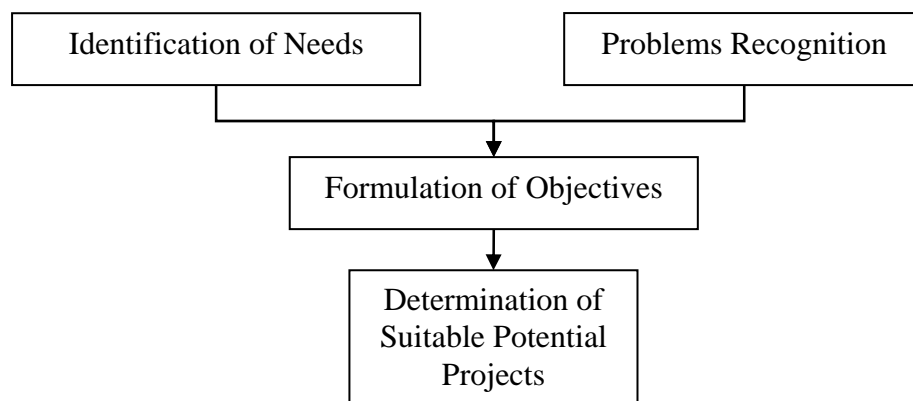
⁷ UNESCO's suggestion is as follows: (1) evaluation of a system's performance and needs; (2) formulation of program objectives and project goals; (3) design of alternative projects; (4) pilot project and experimentation; (5) project implementation; (6) project operation; and (7) outcome evaluation.

⁸ His suggestions for this project cycle are mostly excerpted from the works of George Irvin (1978), Baum & Tolbert (1985), Axel Sell (1991) and Heng-Keng Sang (1995).

2.3.1 Project Formulation

At this stage, there are three main steps that should take place. The first step is the identification of needs and problem recognition. This will entail the second step i.e., the formulation of objectives that projects should aim at. The third one is the identification of suitable projects whose desirability and suitability should conform to the established objectives. In this sense, projects are actually designed to solve specific problems and/or to meet the particular needs of a society, a country or an individual (Sang, 1995). These steps can be depicted by Figure 1.

Figure 1: Steps Involved at the Project Formulation Stage



2.3.2 Feasibility Study

After the potential projects have been recognised, a feasibility study for each of them will be carried out. A feasibility study can be defined as the examination of the viability of the proposed projects in an exhaustive and comprehensive investigation to

resolve the most sound project (s) in terms of the technical, financial, economic and social aspects (Sang, 1995). A typical feasibility study of a project includes quantitative and qualitative analysis considering the direct and indirect effects in comparison to other alternatives, if any. This stage can be divided into the *pre-feasibility study* and the *detailed feasibility study* (Irvin, 1978; Muqorobin, 1998). The former differs essentially from the latter as it requires less workload and a more simple analysis (Irvin, 1978). The pre-feasibility study provides the basis for choosing one project or a small number of alternative projects for a more detailed feasibility study (Sang, 1995). The result of the pre-feasibility study is less accurate in nature than the detailed one. However, this is justifiable as a detailed feasibility study on all proposed projects will cost a lot in terms of everything, and yet would find them to be unacceptable. Therefore, if the results of the pre-feasibility studies are promising, then, a more detailed feasibility study should be undertaken (Zarqa', 1994).

A good feasibility study will provide answers on the project's conformity with the objectives and priorities of a country, demand for the output of the project, its technical and environmental soundness, economic and financial profitability, administrative workability, and its compatibility with the customs and traditions of the beneficiaries (Baum & Tolbert, 1985). In reality, the scope and duration of feasibility studies can differ as widely as the projects themselves. UNIDO (1978) identifies nine critical aspects of a feasibility study. The financial and economic evaluation of an industrial project takes place at the end of a feasibility study. The nine aspects are as follows:

1. Project background and history
2. Market and plant capacity
3. Materials and input
4. Location and site
5. Project engineering
6. Plant organisation and overhead costs
7. Manpower
8. Implementation scheduling
9. Financial and economic evaluation

Irvin (1978) and Sell (1991) envisage the feasibility studies as having three different sections, namely techno-economic, financial and economic analyses. On the other hand, Sang (1995) enumerates the essential parts of a typical feasibility study in the following points:

1. A general description of the project including the background, salient features, configuration, and social and economic environment of the project.
2. A cost-benefit analysis of the project and its overall feasibility.
3. The formulation of the project's plans and design for implementation.
4. Financial plans and projections.

Project evaluation - as explained in most of the literature under this study – constitutes a part of the feasibility study of a project (Irvin, 1978; Muqorobin, 1998).

It refers to the analysis of the soundness and benefits of the projects in comparison with other competing alternatives to attain commercial and national (social and economic) objectives (Sang, 1995). However, it is observed that financial and economic evaluations of projects are the two major aspects that have been emphasised and discussed in most of the literature pertaining to project evaluation.

2.3.3 Investment Decision

With the results of the feasibility study, the decision-makers - not the analysts - make decisions based on certain investment criteria that are important to them. The decision-makers could be local or international financial institutions, planning authorities, individual or institutional investors etc. Each of the decision makers has his own investment criteria and a project is acceptable if it can meet the respective criteria. If the decision makers are financial institutions, the project's financial viability, its liquidity and capital plan are of crucial importance. If they are planning authorities, the project's contribution to national development is their primary concern. The presentation of investment or project justifications according to the stipulations and requirements of the international investors is necessary to obtain their resources. And if the projects are privately or publicly owned, for the commercial activities, the commercial profitability is the major concern (Sang, 1995).

2.3.4 Implementation

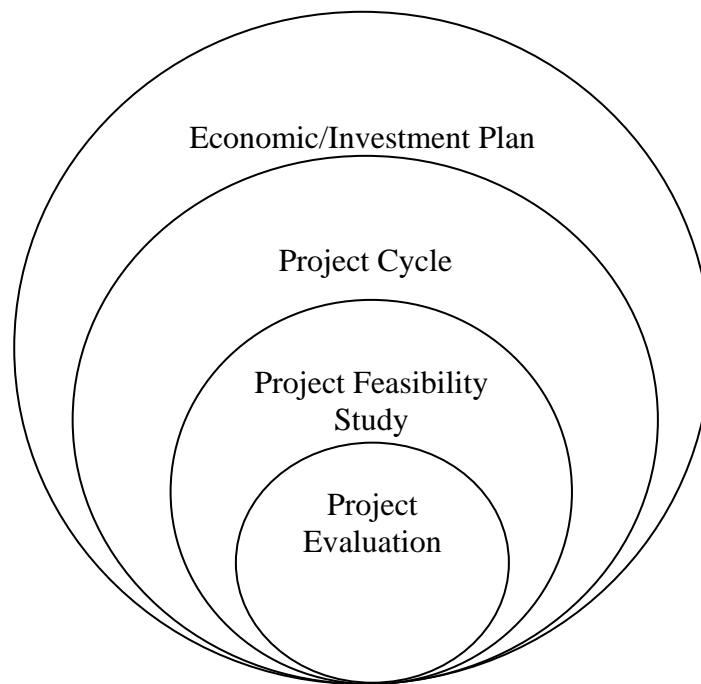
This stage is about making the project a reality. The earlier stages are directed toward the successful implementation of the project (Baum & Tolbert, 1985). At this stage, there are two things that constitute the main focus. The first one is the mobilisation of physical and financial resources. Secondly is the recruitment and training of personnel for the successful implementation and operation of the projects. Close monitoring and supervision to ensure the project's adherence to the plan are essential during this stage (Irvin, 1978; Sang, 1995).

2.3.5 *Ex-Post* Evaluation

The *ex-ante* evaluation involves many forecasts and estimates of the project's viability. On the other hand, the *ex-post* evaluation of a project finds out its actual incomes and makes comparisons with anticipations in hindsight (Sang, 1995). An important purpose of this stage is to ascertain the reason for the project's success or failure, in order to pinpoint the pitfalls that should be avoided or the successful features that deserve replication in the future (Baum & Tolbert, 1985). This is an audit process to assess the extent of achievement or possible deviation from the objectives for which the project is undertaken. The result of *ex-post* evaluation would be the lessons learned from the experience of planning and implementation of the project (Sang, 1995). The *ex-post* evaluation also unveils the errors in forecast, measurement and evaluation during the pre-investment stages (Boardman, Greenberg, Vining & Weimer, 2001).

As a summary of the foregoing discussions, Figure 2 illustrates the position of project evaluation and its relationship with other relevant terms that have a broader meaning and scope.

Figure 2: The Relationship between the Economic/Investment Plan, Project Cycle, Project Feasibility Study and Project Evaluation



2.4 Overview on the Major Developments of the Project Evaluation Framework in Mainstream Economics

The practice of private project evaluation can be traced back to the early days of Capitalism where the profit motive was the emphasis of mainstream economics. The focus of analysis was on the microeconomics of a firm and the social significance of

the private project was seldom raised. The role of government (and public projects) during those days was believed to be limited to the maintenance of law and order and the provision of certain public facilities and services. However, the situation has seen changes after two great events, namely the Great Depression and the Second World War. The emergence of welfare economics, the increased government involvement in the mobilisation of resources and socio-economic affairs, and the influence of Keynesian economics have provided bases and a theoretical background for the development of project evaluation foundations and techniques (Sang, 1995).

The development of social cost-benefit analysis (hereafter cited as SCBA) can be considered as the cornerstone of the project evaluation framework in mainstream economics, particularly for public projects. The earliest idea of comparison between projects' costs and benefits can be found in Benjamin Franklin's advice in 1772 for making personal decision where he named it as "*Moral or Prudential Algebra*" (Boardman *et al*, 2001; Sang, 1995). In 1808, Albert Gallatin - U.S. Secretary of the Treasury - recommended the comparison of costs and benefits in water-related projects (Hanley & Spash, 1993). However, the modern methods of SCBA are accredited to the work of Jules Dupuit, a French engineer, in his paper entitled "On the Measurement of the Utility of Public Works" in 1844 (Anand, 1993; Sang, 1995).

In terms of the practice of SCBA, it was first put into practice with the enunciation of the Flood Control Act 1936 in the USA. According to the Act, flood-control projects should be approved if the benefits to whomsoever they accrue are in excess of the estimated costs (Anand, 1993; Campen, 1986; Pearce, 1983; Sang, 1995). In

1950, the U.S. Federal Inter-Agency River Basin Committee issued a manual entitled “Proposed Practice for Economic Analysis of River Basin Projects” in an attempt to instill some agreed set of rules for comparing costs and benefits. The manual was later replaced by Budget Circular A-47 issued by the U.S. Bureau of Budget (Campen, 1986; Hanley & Spash, 1993; Pearce, 1983; Sang, 1995). In the 1950s, there was a number of significant writings⁹ that further advanced the theory and practice of SCBA. The advent of development economics and the increase of project aid flows to the Third World countries within the same period aroused great interest in the application of SCBA in developing countries. During the 1960s, SCBA became increasingly accepted as the analytical tool for project evaluation. It is observed that the practice of SCBA made its first move in the USA, particularly in water-related projects, before being extended to Europe and the developing countries (Anand, 1993; Irvin, 1978; Sang, 1995).

With regard to the framework and methodologies of project evaluation, the international co-operation for development, particularly OECD, UNIDO and IDCAS have played a prominent role in this area. The OECD introduced its *Manual of Industrial Project Analysis in Developing Countries* in 1968. The OECD *Manual* was published in two volumes. The first volume is mainly concerned with project evaluation from a firm’s point of view. The second volume deals with the examination of projects from the social point of view i.e. SCBA (OECD, 1972)¹⁰. Then, in 1974, the same authors of the OECD *Manual* i.e., Little & Mirrlees, revised

⁹ Three highly important publications are the works of Otto Eclstein (*Water Resource Management*), John Krutilla and Eckstein (*Multiple Purpose River Development*), and Roland N. Mckean. All of their works were published in 1958 (Anand, 1993; Pearce, 1983; Sang, 1995).

¹⁰ The revised edition of the *Manual* was published in 1972.

their previous approach and provided a more systematic exposition in a new book entitled “*Project Appraisal and Planning for Developing Countries*” (Anand, 1993; Sang, 1995).

On the other hand, UNIDO has also published two main works on project evaluation framework and methodologies. The first one was published in 1972 under the title *Guidelines for Project Evaluation*. The authors of the *Guidelines* were Dasgupta, Sen and Marglin. In 1975, Squire and van der Tak reconciled the differences between the OECD and UNIDO approaches. The OECD *Manual* and UNIDO *Guidelines* insist on the superiority of the national profitability of a project and the need for CBA. The second one by UNIDO was the *Manual for Evaluation of Industrial Projects*. The *Manual* was prepared in collaboration with IDCAS in 1980. The UNIDO & IDCAS *Manual* differs conceptually from the UNIDO *Guidelines*, OECD *Manual* and Little & Mirrlees (1974) in its simplicity and operational step-by-step approach. The UNIDO & IDCAS *Manual* suggests the use of net-value added criteria which judge the merits of a project based on its contribution to the national income (Anand, 1993; Sang, 1995; UNIDO & IDCAS, 1980). The works of the OECD (Little & Mirrlees), UNIDO and IDCAS are known as the “New Methodologies” of SCBA. In spite of several technical and methodological differences with the traditional SCBA, these “New Methodologies” have the same framework as the traditional one (Sang, 1995).

2.5 The Framework for Project Evaluation

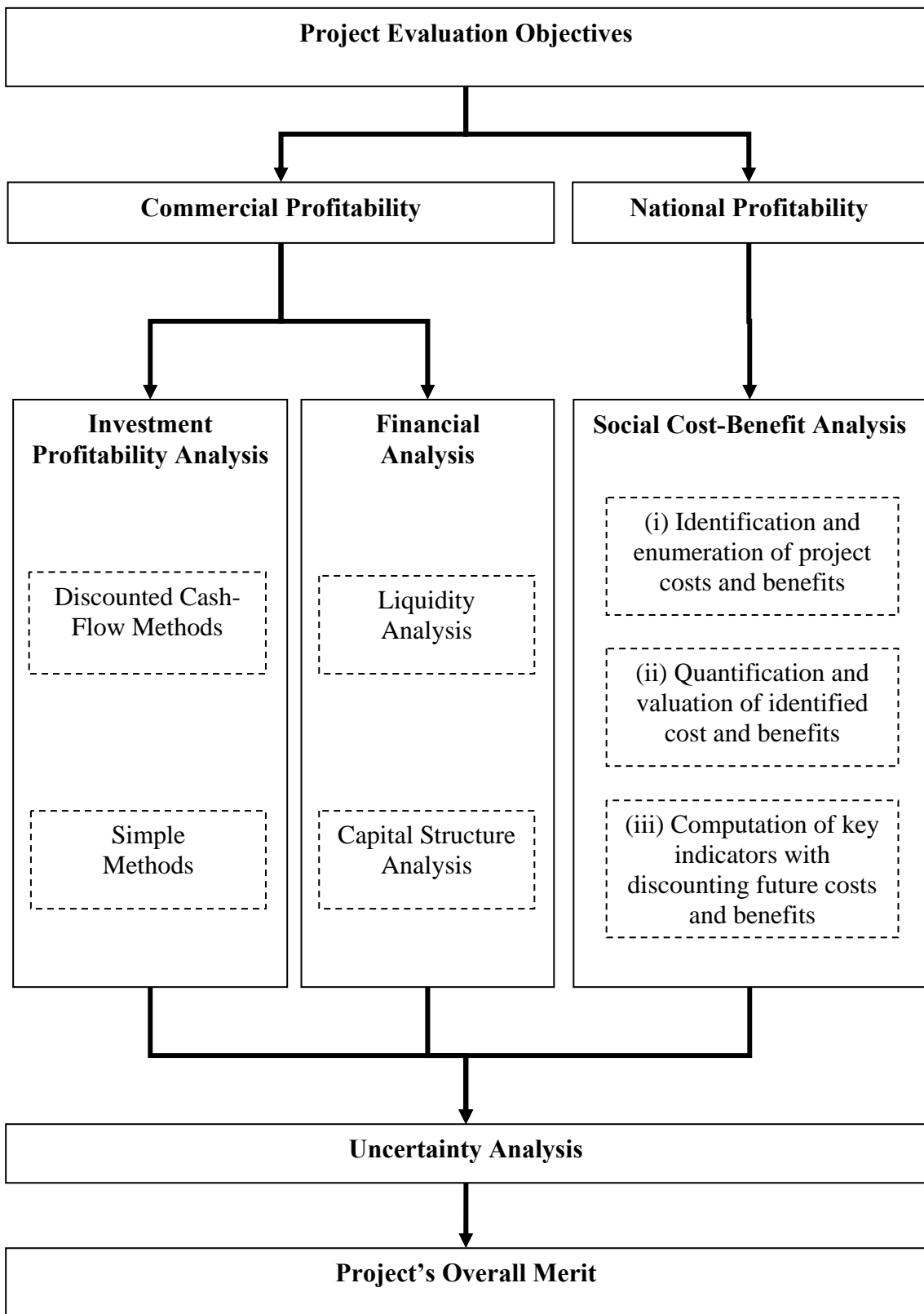
The structure (or approach) of project evaluation is somewhat different amongst the literature in mainstream economics. However, there are two aspects of a project's profitability which have been the focus in the evaluation of projects. The first aspect is the project's commercial profitability and the second one is the national profitability¹¹ of the project. Whilst the former is the main concern of individuals, the latter has been emphasised in public project evaluation. The two aspects of the project's profitability mainly make up the objectives which a particular project is intended to satisfy¹². Thus, the project evaluation framework necessarily examines the project's contribution to the attaining of commercial and national objectives. The basic framework for project evaluation in mainstream economics¹³ is depicted in Figure 3.

¹¹ The national profitability basically represents the social profitability of the project. The net social gains may usefully be called national profits, when the society is identified with the nation. This should include the economic and non-economic costs and benefits of a project that would affect national or social welfare (UNIDO, 1972).

¹² Some authors suggest a more detailed division of project objectives. For example, Aḥmad (1999) gives four aspects of project objectives namely, economic, technological, social and political.

¹³ The main references the researcher refers to in constructing this framework are: UNIDO & IDCAS (1980), UNIDO (1972) and Sang (1995).

Figure 3: The Framework for Project Evaluation in Mainstream Economics



2.5.1 Commercial Profitability

Commercial profitability analysis is concerned with the feasibility of the project from the financial point of view. At this stage, the project's costs and benefits are calculated in pecuniary terms at the prevailing market prices (UNIDO & IDCAS, 1980). The cash flow (inflows and outflows) estimation is the basis for the commercial profitability analysis. Thus, constructing relevant cash flows is of great importance to assure reliable results from the analysis (Sell, 1991). The commercial profitability analysis is composed of:

- a) *Investment Profitability Analysis*
- b) *Financial Analysis*

Each type of analysis deals with different aspects of the project. Hence, they are not complementary and not substitutable (UNIDO & IDCAS, 1980).

2.5.1.1 Investment Profitability Analysis

Investment profitability analysis measures the return on the capital put into the projects regardless of the sources of the financing. In other words, it analyses the expected earning power of the resources committed to a project without taking into consideration the financial transactions which occur over the project's lifetime (UNIDO & IDCAS, 1980). The main methods for this analysis are divided into two groups:

- 1) *Discounted Cash-Flow Methods*

2) *Simple Methods*

Discounted cash-flow methods comprise the two most important and regularly used methods i.e. *Net Present Value* (NPV) and *Internal Rate of Return* (IRR). These two methods are classified under this category as they take into consideration the economic life of the project as a whole by discounting future cash inflows and outflows to their present values. The NPV method determines the divergence between the present values of a project's cash inflows and outflows. The cash flows are discounted by an appropriate discount rate to determine their present value (Sang, 1995; UNIDO & IDCAS, 1980).

The IRR, by definition, is the rate of discount that equates the present value of its cash inflows to the present value of its costs (Brigham & Houston, 2001). In another sense, it is the rate that equates the NPV of the project to zero (Levy & Alderson, 1988; Sang, 1955; UNIDO & IDCAS, 1980). The IRR is then being compared to the cut-off rate (or hurdle rate) that represents the minimum acceptable rate at which the capital invested should be compounded. The project is acceptable if the IRR is bigger than the cut-off rate. It seems that the IRR has a somewhat a "breakeven" feature that makes it really useful in project evaluation. This method is helpful if the project analysts find it difficult to attain the appropriate discount rate for calculating the NPV of the project (Brigham & Houston, 2001; UNIDO & IDCAS).

The *simple methods* consist of two simple and straightforward methods. The methods do not take into account the present value of the project's future cash flows

or the whole life span of the project. They rely on one model period, usually one year. The methods are the *simple rate of return* and *payback period*. The *simple rate of return* is the ratio of the project's net profit to the total investment – both fixed and working capital (Sang, 1995; UNIDO & IDCAS, 1980). The *pay-back period* method calculates the expected number of years required to recover the original investment. The result of this method will then be compared to the cut-off payback period set by the decision-makers to decide on its acceptance or rejection (Brigham & Houston, 2001; Irvin, 1978).

2.5.1.2 Financial Analysis

Financial analysis consists of *liquidity* and *capital structure analysis*. *Liquidity analysis* checks the possibilities of cash deficiency in the years of a project's life (Sang, 1995). It concerns the financial transactions affecting a project's cash balance which are not highlighted in the investment profitability analysis. It is done on a year-by-year basis and, hence, the cash flows are calculated at their nominal values (UNIDO & IDCAS, 1980).

The question of capital sufficiency is analysed in the *capital structure analysis*. It is performed to ensure that each type of investment (fixed or working capital) is covered by a suitable type of finance. The most commonly used as the indicator of an enterprise's capital structure is the *debt equity ratio*. It is simply the ratio of long-term loans to equity capital. There is no specific favourable debt equity ratio. It depends upon the earnings of the project, the nature of the enterprise and the uncertainties of

the future. However, a low debt equity ratio reflects a lower risk of solvency or heavy financial obligations and vice-versa (Sang, 1995; UNIDO & IDCAS, 1980).

2.5.2 National Profitability

The *national profitability analysis* is seen necessary due to several limitations of commercial profitability analysis. For example, the use of market price in commercial profitability analysis could be misleading and it is not a good guide to social gains. Additionally, a project may have effects outside the market which have not been treated in commercial profitability analysis (UNIDO, 1972). Thus, international agencies such as UNIDO, the OECD and the World Bank have repeatedly emphasised the need for SCBA, particularly for public projects, in their various publications to account for the national profitability of a project (Anand, 1993). The methodology of SCBA, its conceptual foundations, valuation and measurement issues are massive topics and they are not within the scope of the study. However, the researcher describes here its main framework. The framework of SCBA is worthy of explanation as “*various techniques have been developed for project studies within the framework of cost-benefit analysis*” (Sang, 1995).

2.5.2.1 Social Cost-Benefit Analysis

The basic framework of SCBA can be summarised in the following points (Sang, 1995; Boardman *et al*, 2001):

1) Identification and enumeration of project costs and benefits

The relevant costs and benefits are defined by type, region, recipient or other criteria. This includes the effects of the project in the realm of production and distribution, positive and negative, direct and indirect, internal and external, measurable and immeasurable effects.

2) Quantification and valuation of identified costs and benefits

In order to determine precisely the net balance between the project's costs and benefits, the individual items have to be quantified and valued. The project analysts should quantify as many items as possible and attach a value or a degree of significance to each of the remaining items so that the overall merit or demerit of the project can be determined.

3) Computation of key indicators with discounting future costs and benefits

Selected indicators are computed on the basis of available data and valuations. The most commonly applied indicators for public project are the NPV and IRR. Next, these indicators will undergo uncertainty analysis and then, the advantages and disadvantages of the project are weighed against each other to arrive at the project's overall merit.

2.5.3 Uncertainty Analysis

The previous stages of the framework are carried out under the assumption of certainty of the future. In reality, there is always uncertainty about the future, and with uncertainty, there is likely a conflict between what is theoretically correct and practically feasible (Bierman & Smidt, 1993). The outcome of the project may turn out to be slightly or considerably different from the initial expectations. Managers in a firm might tend to be optimistic in their forecasts as they have to compete for internally rationed funds (Meera, n.d.). Unfortunately, reality seems to prove that an underestimation of cost is more usual than vice-versa. In other words, it is always the case that the analysts seem to overestimate the benefit and the potential danger is underestimated (Sell, 1991).

Therefore, it is obvious that the uncertainty analysis is indispensable and it has been discussed, in short or great detail, by almost all the literature pertaining to project evaluation. Each variable needed for uncertainty analysis could be a source of uncertainty that affects the outcome of the project. Some of the common variables are the size of investment, operating costs and sales revenue - cash flow estimation (UNIDO & IDCAS, 1980). The uncertainties might also be caused by inadequate data, insufficient money and time and poor performance by the project analysts. Uncertainties are either internal or external. Internal uncertainties are related to the project itself that constitute the elements and structure of the project. On the other hand, external uncertainties relate to the surrounding environment of the project in

which it operates such as political, social and economic changes during the lifetime of project¹⁴ (Sang, 1995; UNIDO & IDCAS, 1980).

There are several methods for project analysts to carry out uncertainty analysis. The simplest one is the *break-even analysis*. A more systematic approach for uncertainty analysis is the *sensitivity analysis*. *Sensitivity analysis* shows how the value of the crucial indicators (the NPV, IRR or any other criteria) changes with a given change in an input variable, sometimes more than one variable, with other things held constant. This technique is used to determine how sensitive the results of project evaluation would be in relation to changes in crucial variables or key parameters. Where there are great uncertainties in the future or each variable has a significant chance of occurrence, *probability analysis* is recommended. This method identifies the possible range of each key variable, if not all, and does not restrict the judgment to a single optimistic, pessimistic or realistic estimation (Brigham & Houston, 2001; UNIDO & IDCAS, 1980).

2.5.4 Project's Overall Merit

Based on the uncertainty analysis results, the project's overall attractiveness from the commercial and national points of view is presented. This framework for project evaluation is basically a quantitative analysis of a project to arrive at the present attractiveness of the project. The analytical quantitative methods and criteria

¹⁴ Some examples of external uncertainties are (1) civil wars might occur; (2) national economy falls into recession; (3) governments change their policies and priorities; and (4) new laws are imposed.

described here are not exhaustive; rather it is a list of main examples for each stage of the analysis. The choice of methods and criteria depends on the objectives of project evaluation, the decision makers, the economic environment, and the availability of relevant data (Sang, 1995; UNIDO & IDCAS, 1980).

CHAPTER TWO

PART TWO

REVIEW OF THE FRAMEWORK: ISLAMIC POINT OF VIEW

Credit and recognitions should be given to mainstream economics for its contributions to the birth and development of the existing framework for project evaluation that takes into consideration the national or social interest, especially in SCBA. Nevertheless, the framework and methodology have been developed in isolation from Islamic input during the last one and half centuries. Consequently, there is a need to review the existing framework and methodology for project evaluation from the Islamic point of view.

Having presented the project concept and the framework for project evaluation in mainstream economics, we now turn to the second part of Chapter two: Review of the principles of project evaluation framework from the Islamic point of view. This section starts with the *raison d'être* for conducting *ex-ante* project evaluation from the Islamic point of view. Following that is the discussion on the main selected issues pertaining to the framework for project evaluation from the Islamic standpoint. The focus of the researcher in this review is on the principles of the mainstream framework and not on methodological and technical matters. The methodological and technical issues of project evaluation are not within the scope of the present study.

2.6 The *Raison D'être* for *Ex-ante* Project Evaluation from the Islamic Standpoint

A project is a way of using resources, and the decision to undertake a particular project or not is a choice between alternative ways of using resources (Sugden & Williams, 1978). Resources, in Islam, are envisaged as trusts of Allah. Man, as His vicegerent and servant, is entrusted to utilise these resources in the right way within the *Shari'ah* boundaries (Haneef, 1997). Appraisal of a project prior to its execution in order to determine the optimal use of the resources is in line with the spirit of Islam as manifested in the following points:

- a) Project evaluation is about rationalising the use of resources for specific purposes. Likewise, Islam calls on its followers to rationalise the use of resources. The irrational and unjustified use of resources is highly condemned in Islam as evident in a *ḥadīth* narrated by *Aḥmad* and *al-Nasā'ī* where a bird which was killed for no useful purpose will claim to Allah in the hereafter and say: “*Oh God! This man has killed me for no purpose and not for any benefit*” (Al-Maṣrī, 1999; Al-Qarḍāwī, 1999).
- b) Islam also favours efficiency and in this context, encourages *ex-ante* evaluation of a project before it could be undertaken to achieve its goal of prevention of *israf* - wanton use of resources, either in production or consumption (Choudhury & Malik, 1992; Zarqa', 1983). It is crystal clear that the prevention of *israf* is a founding trait of Islamic economics. This is evident in the *Qur'an*'s condemnation on *israf* (Muqtader, n.d.).

c) Project evaluation also involves prioritisation of potential competing projects for limited resources. Likewise, the prioritisation of actions and deeds is embedded in Islam since the *Sharī'ah* assigns different weights/values to different actions and deeds. With the right status, each matter could be ordered and prioritised according to its importance and urgency from the viewpoint of the *Sharī'ah* (Al-Qardāwī, 2000). In a way, *fiqh* (Islamic Jurisprudence) itself is all about prioritisation as each matter (including projects) can be categorised into one of the main five values, namely obligatory (*wājib*), recommended (*mandūb*), permissible (*mubāḥ*), reprehensible (*makrūh*), and forbidden (*ḥarām*).

2.7 The Mainstream Framework for Project Evaluation: Review of the Main Issues from the Islamic Standpoint

In view of the vastness of the subject and the limitations of this study, the researcher has selected several main issues that are particularly significant in theory for reconsideration from the Islamic point of view. The major issues pertaining to the principles of the project evaluation framework in mainstream economics (as recognised by the researcher) and which will be discussed in this section can be itemised into four main points. They are:

1. The need to accommodate *Sharī'ah* objectives
2. The principle of cost benefit analysis
3. The rationale for discounting project's cost and benefit

4. The notion of (commercial) profit maximisation for private project

2.7.1 The Need to Accommodate *Sharī'ah* Objectives

A project is designed to achieve specific objectives. In the mainstream framework, the commercial and national profitability objectives cover the “dual dimension” of a project’s overall objectives. An Islamic framework for project evaluation should classify and prioritise projects according to the extent of their contribution to the realisation of *Sharī'ah* objectives. The *Sharī'ah* aims at the welfare (*maṣlaḥah*) of people in this life and in the hereafter (Khan & Ghifari, 1992). *Maṣlaḥah* can be classified further into three categories. The three categories are (‘Afar, 1992; Kamali, 1989; Zarqa’, 1984):

- (1) *Ḍarūriyyāt* (Necessities): These Necessities are defined as those activities and things that are essential to the preservation of the five foundations of individual and social life according to Islam i.e. Religion, Life, Mind, Offspring and Wealth. Their neglect leads to total disruption and chaos in life. Khan and Ghifari (1992) assert that one foundation i.e. freedom should be added to the list. They see freedom as the sixth element that should be promoted along with the five elements.
- (2) *Hājiyyāt* (Conveniences): This category comprises all activities and things that are not vital to the preservation of the five foundations, but are necessary to relieve or remove impediments and difficulties

in life. Conveniences promote and supplement the Necessities and their neglect leads to hardship but not to the total disruption of normal life.

(3) *Taḥsīmīyyāt* (Refinements): The Refinements refer to activities and things that go beyond the limits of Conveniences and whose realisation leads to the improvement and attainment of that which is desirable such as jewellery, innocent hobbies, politeness in behaviour and speech, Islamic etiquette in cleanliness, moderation or avoiding extravagance and etc. Going beyond Refinements into prodigality and self-indulgence is perceived by Islam as a disutility for both individuals and society, and is strongly disapproved.

As a general rule, a project that falls under the category of Necessities should be preferred to that of Conveniences in an Islamic framework. Similarly, a project that is considered as a Convenience must be preferred to that of Refinements (Khan & Ghifari, 1992; Meera, n.d.). The significance of this concept of *maṣlaḥah* or *Shari‘ah* objectives in an Islamic framework for project evaluation will be further discussed in Chapter Three.

2.7.2 The Principle of Cost Benefit Analysis

The Flood Control Act 1936 in the USA, which is considered as the earliest application of SCBA, states that “...*projects should be approved if the benefits to*

whomsoever they accrue are in excess of the estimated costs” (Anand, 1993; Campen, 1986; Pearce, 1983; Sang, 1995). The idea of comparing between cost and benefit to select the best project is not peculiar in Islam. A similar statement has been recorded hundreds years ago from Abū Yūsuf where he states that, “If its benefit (project of excavation of canal) is greater, then he (the decision-maker) would leave as it is (e.g. it should go ahead); and if its harm is greater, than he would order to demolish it (i.e. should abandon it),” (Meera & Ahsan, 1992).

There is evidence from the Holy *Qur’ān* of analysis between the cost and benefit of a matter. For example, the comparison between the advantage and disadvantage of wine before it is being strictly forbidden in verse 2:219¹⁵. In the end, the wine or any intoxicating liquid is forbidden in Islam as it contradicts one of the *Shari’ah* objectives i.e. protection of the mind. Another example is the story of Mūsā and Khidr from 18:61 to 18:82. Khidr has shown Mūsā that he scuttled the boat, slew the young man and set up the wall on the point of falling down without asking for recompense as the benefits of doing those things are greater than their evils (Al-Qardāwī, 2000).

Cost and benefit, in Islam, are generally denoted as *mafsadah* and *maṣlaḥah* respectively¹⁶ (Muqorobin, 1998). Analysis between cost and benefit is thought necessary as all *maṣāliḥ* (plural of *maṣlaḥah*) and *mafāsīd* (plural of *mafsadah*) are not equal. Some are more important than others and some are less important (Khan &

¹⁵ “They ask thee concerning wine and gambling. Say: In them is great sin, and some profit, for men; but the sin is greater than profit.”

¹⁶ However, a cost does not necessarily stand for *mafsadah* in the context of project evaluation.

Ghifari, 1992). Al-Qarḍāwī (2000) mentioned three situations where the analysis of *maṣlaḥah* and *mafsadah* could take place. The situations are:

- a) Analysis between *maṣāliḥ*, one to another
- b) Analysis between *maḥāsib*, one to another
- c) Analysis between *maṣāliḥ* and *maḥāsib*

When there are trade-offs between the *maṣāliḥ*, we choose the greater *maṣlaḥah* over the lower one, public *maṣlaḥah* over the private one¹⁷, permanent *maṣlaḥah* over the temporary one, actual *maṣlaḥah* over the potential one and so forth. In the second situation, the principle of choosing the lesser evil would be applied. And as there are contradictions between *maṣlaḥah* and *mafsadah*, they should be evaluated against each other to find the final resolution (Al-Qarḍāwī, 2000). It is evident that cost-benefit analysis is indispensable in an Islamic framework for project evaluation and the application of SCBA, in principle, is in line with the spirit of Islam.

2.7.3 The Rationale for Discounting Project's Cost and Benefit

Discounting¹⁸ a project's benefit and cost is essential in both commercial and national profitability analyses in the mainstream framework. The two most regularly used and superior methods in investment profitability analysis i.e. the NPV and IRR

¹⁷ If the rights or property of an individual have to be removed, he or she should be compensated fairly.

¹⁸ Discounting is a procedure to convert future values of costs and benefits into present worth through the application of a discount rate (Sang, 1995).

are based on this technique¹⁹. In SCBA, the cost and benefit are quantified, valued and discounted to determine their present value. The discounting technique revalues all the project's costs and benefits that occur at different times throughout the lifetime of project to make them comparable to the present costs and benefits. Discounting explicitly takes into consideration the role of time in the flow of a project's cost and benefit (Little & Mirrlees, 1974; Palm & Qayum, 1985; Sang, 1995; UNIDO & IDCAS, 1980).

The discussions concerning the practice of discounting in Islamic economics center around two main issues, namely the justifications for the validity or invalidity of positive time preference (or time value of money) and the alternative discount rate that is different from the interest rate. The discussions are very important as they are related with the most superior and widely used technique in project evaluation in mainstream economics. The following subsections reviews this concept from the Islamic point of view.

2.7.3.1 Positive Time Preference

Time preference indicates the extent of an individual's preference for current consumption over future consumption, and positive time preference generally means that people think present consumption of an amount is superior to future consumption of the same amount (Rosly, 2003). Zarqa'

¹⁹ On the theoretical ground, most of the literature, in both conventional and Islamic economics, asserts the superiority of NPV over IRR (Bierman & Smidt, 1993; Brigham & Houston, 2001; Levy & Alderson, 1998; Zarqa', 1982 & 1983).

(1983) does not recognise this concept as either a principle of rationality or an empirically prime tendency amongst the economic agents. According to him, it is only one of the three patterns of inter-temporal choice²⁰. Similarly, Khan (1994) argues that “*the utility of money in the present is greater than the utility of same money in the future*” is conceptually a faulty assumption. He adds that the concept would lead to legitimacy of interest on capital lent. Others with similar stands are Iqbal & Khan (1981). Muqorobin (1998) believes its rationality in production rather than in consumption.

On the other hand, a number of Islamic scholars believe in its acceptability and validity in Islam. Amongst them are Khan (1991), Azhar (1992), Saadallah (1994), Al-Maṣrī (1999) and Rosly (2003). According to them, there is nothing against positive time preference or against realising a time value of money in the Islamic framework, as long as the time value of money is not claimed as a predetermined value (Khan, 1991). Additionally, the *Shari'ah* admits that time has a value and recognises the innate human preference of what is in hand to what is loaned and of the immediate to the deferred (Saadallah, 1994). The prohibition of any conditional increase in the principal of a loan in return for deferred repayment does not indicate the invalidity of the concept of the time value of money in Islam (Saadallah, 1994; Al-Maṣrī, 1999; Rosly, 2003).

²⁰ The other two are zero and negative time preference. According to him, each of them is valid and rational under its own conditions (Zarqa', 1983).

Indeed, Islam does recognise positive time preference, as evident in the sayings of the Prophet PBUH. The Prophet PBUH said: “Virtuous are they who pay back their debts well.” On another occasion, Mujāhid reported that ‘Abd Allah Ibn ‘Umar took some dirhams as a loan and paid back better dirhams²¹ (Rosly, 2003). It is encouraged, in Islam, for the debtor to pay his debt well to manifest his gratitude towards the creditor. It is true, as the creditor has forgone his current consumption of the loaned money and relinquished the potential for income opportunities that may be obtained through putting the money to use in an economic activity. The potential profit of the economic activity is the economic cost borne by the creditor and is the indirect value of time from the perspective of the creditor. However, the potential for generating income is an unknown factor as it is subject to business risk. Thus, Islam does not allow any form of contractual reward (determined up-front) given in exchange for a loan (Rosly, 2003; Saadallah, 1994).

Moreover, the loan contract is also seen as a charitable contract from the Islamic point of view. The creditor (perceived as a donor) actually donates his potential opportunity of using the money to the debtor, and thus, the creditor deserves the (spiritual) reward from Allah as stated in a saying of the Prophet PBUH (Saadallah, 1994). From the above explanation, it is observed that the concept of the time value of money has justifications from the Islamic perspective. Therefore, it is acceptable to accept the concept of positive time

²¹ See Appendix 2 for full texts of the *hadith*. It should be noted that giving extra or addition in repayment of debt is a matter of choice and not a general ruling in the *Shari’ah*.

preference or the time value of money in an Islamic framework, particularly in matters pertaining to investment activities such as project evaluation²². This also entails that economic agents in an Islamic economy would have positive time preference, except in certain circumstances as highlighted by Zarqa' (1983), and there will be indicators (which are different from the interest rate) available in the economy to approximate the rate of their time preferences (Khan, 1991).

2.7.3.2 Discounting Future Costs and Benefits

In spite of the differences between Islamic scholars on the preceding issue, there is a general agreement that discounting is allowed irrespective of the agreement, whether or not the concept of positive time preference is valid in Islam (Iqbal & Khan, 1981). Those who hold the invalidity of positive time preference amongst the economic agents argue that discounting future values is necessitated by considerations of inter-temporal economic efficiency as well as the avoidance of *isrāf* in consumption or production (Zarqa', 1983; Sattar, 1991). Additionally, the fact that Muslims are permitted to choose several *ḥalāl* (legitimate or lawful) investment opportunities in the society for a quite likely positive return makes the money now in hand more valuable than money in future (Iqbal & Khan, 1981; Sattar, 1991).

²² The validity of the concept of the time value of money in Islam as a justification for discounting is still a matter of debate amongst the Muslim scholars and there is no authoritative opinion in this issue. Yet, most of them agree on the legitimacy of discounting technique for project evaluation.

2.7.3.3 Discount Rate

Interest is a form of *ribā* and the elimination of *ribā* is one of the important features of Islamic economics. This requires other alternative rates that are acceptable and appropriate in an Islamic framework. It is unanimously agreed in the literature on Islamic economics that the rate of return on capital (or equivalent profit rate) should replace the interest rate as the discounting factor in an Islamic framework (Choudhry, 1983; Zarqa', 1983; Khan, 1991; Sattar, 1991; Muqorobin, 1998). The use of the profit rate or rate of return on capital is based on the principle of opportunity cost. The rate of return in projects of comparable risks may be taken as the discount rate to reflect properly the true opportunity cost of project cash flows. The rate of discount for public projects, Social Rate of Discount (SRD), should properly represent the social opportunity cost (Zarqa', 1983). The fact that the profit rate and interest rate could perform as discount rates in the discounting technique does not justify that both could be used in an Islamic framework. The legitimacy of the former in an Islamic economy precludes the use of latter. Moreover, the profit rate in an Islamic economy is a completely different concept from the interest rate in mainstream economics (Iqbal & Khan, 1981).

2.7.3.4 Time as an Element in Contract of Exchange and Project Evaluation

Islam sees time as not a mere consumption phenomenon, but also one of production. Work or activity (or to be more specific investment or production) is given priority over consumption, as consumption constitutes a means and production is an end (Muqorobin, 1998). Time is considered a subsidiary factor (not primary) of production in Islamic economics (Al-Maṣrī, 1999)²³. It is true as time alone neither gives a yield nor produces by itself, unless it is joined to property – be it cash or any kind -, it acquires an indirect value (Saadallah, 1994). A labourer increases his output with time, land produces its crops with work and time, and a leased item is used during the leasing period (or time) and its rental is higher with a longer leasing time. In a way, rents and wages basically include a fixed reward for the time element (Khan, 1991). All these testify that time is an indispensable element for economic consideration as each economic process takes place within a period of time.

In addition to that, the jurists assert that time is a portion of price (Al-Maṣrī, 1999). This is evident from the juristic consensus that the price of an item may be increased in case of deferred payment as in *bay' al-mu'ajjal*²⁴. This is permitted, as the time element is involved in the process of exchange, to offset the delayed payment (Khan, 1991; Saadallah, 1994). The proponents of the validity of the time value of money concept in the Islamic framework

²³ There are five factors of production in Islamic economics, three of them are primary and the last two are subsidiary factors. The primary factors are land, work, and property, whilst the subsidiary factors consist of risk and time elements. Risk and time are considered as subsidiary factors because these two elements could not generate output by themselves, as they need to be joined to land or work or property to generate output.

²⁴ *Bay' al-mu'ajjal* is a sale on deferred payment, i.e. the goods are delivered not but the price is delayed to the future. In this contract, the price may be different from the prevailing market price (Khan, 1991).

maintain that the legitimacy of this type of sale gives more support to the validity of such concept in Islam. In terms of the involvement of the time element in project evaluation, the project that yields returns earlier is preferable to one that requires a longer period, provided all the income and other things related to both projects are the same (Al-Masri, 1999).

From the above discussion, the researcher reasserts that the mainstream discounting technique for project evaluation can be modified to suit the Islamic concepts and principles. Thus, the use of the discounting technique to get the present value of a project's cost and benefit is possible in an Islamic framework with the rate of return as the discount rate.

2.7.4 The Notion of (Commercial) Profit Maximisation for Private Projects

The project evaluation framework in mainstream economics involves two broad categories of project profitability as described earlier. They are *commercial* and *national* profitability. The former relates mainly to private projects and the latter relates to public ones (Muqorobin, 1998). Private individuals are acceptably assumed to make decisions on the basis of the commercial profitability of a project. This entails that individuals should decide on projects that maximise their commercial

profitability. This is considered as the nature of the private business environment. The impact of the project on the national and social profitability is mainly the concern of the public authorities (Sang, 1995). The notion of (commercial) profit maximisation still stands as the basic assumption even though many have argued that individuals have objectives other than profit maximisation (Amin & Yusof, 2002). The emphasis on the consideration of the national and social impact of a project in the mainstream literature is mainly meant for public projects (Sugden & Williams, 1978). However, the notion of profit maximisation has received objections from some Islamic scholars.

The Islamic standpoint on this issue should be clear for the project analysts of private projects. The understanding of this issue will have an impact on their judgment later. Zarqa' (1982) asserts that the notion of profit maximisation is not in line with the spirit of Islam, except in certain circumstances. However, he supports this notion for *awqāf* projects. According to him, *awqāf* administration should choose a project which maximises the present value of net profits from an investment. His argument is that *awqāf* administration in most Muslim countries lacks sufficient income to properly carry out their major functions in society and burdening them with the objectives other than profitability would adversely affect the ability of *awqāf* to fulfill its other social responsibilities (Zarqa', 1994). On the other hand, Faridi (1983) observes *awqāf* institutions as examples of the voluntary sector in the Islamic economy which is not by intent or design, undertaken to attain any economic or material benefit for the doer (s) but could cause wide ranging economic ramifications. Hence, the profit maximisation notion does not suit the *awqāf* institutions. Amongst the examples of such voluntary activities are the provision of shelter and meals to

wayfarers, the cash disbursement of *Ṣadaqāt* and charitable contribution to the state's defence needs (Faridi, 1983).

Arief (1982) conceives profit maximisation as irrelevant as money income ceases to be the primary objective in Islam. Nevertheless, profit must be maximised in order to survive in a situation of perfect competition since the profits so maximised are by definition 'normal' profit. Profit maximisation *per se* in this limiting case does not apparently violate the Islamic principles. But, profit maximisation in situations of monopolistic competition, oligopoly, monopoly etc., resulting in abnormal profits is certainly not in conformity with the Islamic economic order (Arief, 1982). Islamic individual behaviour should be guided by the pursuit of *falāḥ* (success). This concept considers the individual as a maximiser of *falāḥ* in this present life as well as in the hereafter. This attitude rules the Islamic rationality, as opposed to the Smithian notion of individual self-interest (Hallaq, 1994; Sattar, 1991).

On the other hand, Amin & Yusof (2002) conclude that the notion of profit maximisation can still be applied in an Islamic framework. All together, they stress the incorporation of Islamic values, particularly the concept of *maṣlaḥah*, in the determination of the cost of production in an Islamic framework. Similarly, Hassan (1992) maintains that profit maximisation in an Islamic economy is likely to be different from that in mainstream economics. This is due to several reasons. For examples, the abolition of interest and the profit-sharing system with labour in the Islamic economy would promote growth and distributive justice at the same time. In addition to that, Islam also envisages business as a *farḍ al-kifāyah* where social

obligation takes precedence over self-enrichment. Thus, the application of profit maximisation should not violate any of these values (Hassan, 1992).

It appears to the researcher that the notion of profit maximisation is acceptable in Islam, provided that individuals do not violate any Islamic principles in applying the concept. As a general principle in Islam, individuals are permanently recognised as having the right to own and decide on economic activities of their choice within the *Shari'ah* boundaries and Islam allows ample scope for individuals to move and manoeuvre their economic activities (Hassan, 1995). It should also be understood that the notion of profit maximisation should be comprehended and applied in line with the objectives of Man's existence i.e. to achieve well-being in this world and the hereafter and the approval of Allah (Amin & Yusof, 2002).

CHAPTER THREE

THE CONCEPT OF *MAŞLAḤAH* (*SHARĪ'AH* OBJECTIVES) IN PROJECT EVALUATION

3.1 Introduction

The need to accommodate *Shari'ah* objectives or the concept of *maşlahah* into the project evaluation framework entails further discussion in this separate chapter. This

chapter starts with a brief explanation of the concept of *maṣlaḥah* as the *Sharīʿah* objectives. Then, the classifications of project according to the *maṣlaḥah* concept into the categories of Necessities, Conveniences and Refinements are delineated. Following that are the rules governing the relationship amongst the three categories of *maṣlaḥah*. Next, the researcher explains what is beyond and beneath the *maṣlaḥah*. After that, the integration of the *maṣlaḥah* concept into project evaluation and its significance is expounded. The chapter ends with a discussion of the need for continuous judgment for defining the *maṣlaḥah*. Towards the end of this chapter, it is hoped that the reader will be able to appreciate the significance of the incorporation of the *maṣlaḥah* concept into the framework of project evaluation.

3.2 The Concept of *Maṣlaḥah*: *Sharīʿah* Objectives

The concept of *maṣlaḥah* has been discussed at length by several jurists. However, the two most prominent of them, as cited in the literature, are Al-Ghazālī and Al-Shāṭibī. The former is considered as the one who first gave the original formulation of the concept from its rudimentary form, whilst the latter developed and refined the concept (Khan, 1997; Zarqa', 1984). Al-Shāṭibī is also considered as the first jurist to write on the subject as a new independent theory, particularly in his book “Al-Muwāfaqāt Fī Uṣūl Al-Sharīʿah” (Shibīr, 2000). Other jurists who have discussed the same subject are, for example, Al-Juwaynī, Al-ʿIzz Ibn ʿAbd Al-Salām, Ibn Khaldūn and Ibn Al-Qayyim Al-Jawziyyah (Al-Masri, 1999; Khan & Ghifari, 1992). The institution of *maṣlaḥah* is derived from the survey and scrutiny of all Islamic teachings and injunctions available in the *Qurʿan* and *Hadith* (Zarqa', 1984). This

means that the *Sharī'ah* in all its teaching aims at the attainment of good, welfare, advantage, benefits, *etcetera*, and the warding off of evil, injury, loss, *etcetera*, for creatures (Khan & Ghifari, 1992).

It is generally held that the *Sharī'ah* in all its parts aims at securing a benefit for the people or protecting them against corruption and evil in various degrees. The *wājib* (obligatory), *mandūb* (recommended) and *mubāh* (permissible) aim at realising the benefit and welfare and the *makrūh* (reprehensible) and *ḥarām* (forbidden) aim at preventing corruption and evil (Kamali, 1989). As a principle, each matter that increases the welfare of people from the *Sharī'ah* point of view is considered as *maṣlaḥah* or utility. Similarly, each matter that decreases the welfare of people from the *Sharī'ah* point of view is considered as *mafsadah* or disutility. This meaning is observed in Al-Ghazālī's definition of *maṣlaḥah* i.e., "...*Preservation of Sharī'ah objectives, and the Sharī'ah objectives for the (welfare of) creation is five matters. They are preservation of the religion, life, mind, offspring and wealth. And everything that leads to the preservation of these five elements is considered maṣlaḥah, and everything that leads to the disruption of these foundations is mafadah, and its removal is maṣlaḥah,*" (Al-Maṣrī, 1999; Hasān, 1993).

3.3 Classification of Projects according to the Concept of *Maṣlaḥah*

The classification of projects in an Islamic framework into either *ḥalāl* (lawful) or *ḥarām* (unlawful) is not enough to determine an order of priorities for the projects. Thus, bringing the concept of *maṣlaḥah* into the framework is necessary. The concept

can determine the order of priorities in an Islamic framework and thus, entails ranking of projects into three main categories. They are:

1. Necessities (*Darūriyyāt*)
2. Conveniences (*Hājiyyāt*)
3. Refinements (*Taḥsīmiyyāt*).

The classification of projects based on the concept of *maṣlaḥah* has been suggested by Zarqa' (1982) and 'Afar (1992). However, 'Afar (1992) suggests the division of projects into six categories to have a more detailed classification of projects. The divisions are:

1. Necessities
2. Complementarities (*Mukammilāt*) of Necessities
3. Conveniences
4. Complementarities (*Mukammilāt*) of Conveniences
5. Refinements
6. Complementarities (*Mukammilāt*) of Refinements

According to 'Afar (1992), Complementarity projects can be defined as projects that will realise the lower level of *maṣlaḥah*, but simultaneously have importance for the higher level of *maṣlaḥah*. In dealing with the project evaluation topic, the researcher is in favour of the established three categories of *maṣlaḥah* as recognised by the Islamic jurists.

Based on the concept of *maṣlaḥah*, projects, additionally, could also be classified into five categories. These five categories are related to the protection, improvement and amelioration of Man's five basic elements namely, religion, life, mind, offspring and wealth (Al-Maṣrī, 1999). However, these five elements are not equal in importance. Some are more important than others, but each of them is essential. The elements, in order of priority according to the *Mālikiyyah* and the *Shāfi'iyyah*, are (Al-Zuḥaylī, 1998):

- i. Religion (*Dīn*)
- ii. Life (*Nafs*)
- iii. Mind (*'Aql*)
- iv. Offspring (*Nasab*)
- v. Wealth (*Māl*)

The prioritisation of these five elements by the *Ḥanafīyyah* is as follows (Al-Zuḥaylī, 1998):

- i. Religion (*Dīn*)
- ii. Life (*Nafs*)
- iii. Offspring (*Nasab*)
- iv. Mind (*'Aql*)
- v. Wealth (*Māl*)

‘Afar (1992) describes the same order as the *Mālikiyyah* and the *Shāfi‘iyyah* and classifies projects into one of these five essential elements. On the other hand, Zarqa’ (1982) equates all the five elements in terms of importance as their maintenance and preservation are all compulsory in Islam. This is another important difference between both of them. It seems to the researcher that the *Shari‘ah* does assign different weight to these five elements. Al-Qardāwī (2000) provides a good explanation of the issue and he is of the opinion of the *Mālikiyyah* and the *Shāfi‘iyyah*²⁵.

3.3.1 Necessities (*Ḍarūriyyāt*)

Under this category are those projects that are required for bringing into existence and maintaining the very existence of man’s five essential elements i.e., Religion, Life, Mind, Offspring and Wealth. This includes projects that are necessary for protecting these elements from destruction (Khan & Ghifari, 1992). It also includes projects that are necessary for the achievement of the maintenance and protection of these five elements. This is due to an established Islamic legal maxim: *Whatever is indispensable for the performance of an obligation is also obligatory* (Zarqa’, 1984).

We could summarise the Necessities projects into nine main areas as identified by ‘Afar (1992)²⁶. The nine areas are:

²⁵ *Al-Shāfi‘ī* is one of the *Mālikiyyah* and *Al-Ghazālī* is one of the *Shāfi‘iyyah*. They also describe the same order as the *Mālikiyyah* and the *Shāfi‘iyyah* (Al-Mays, 1987).

²⁶ These nine areas are not exhaustive but ‘Afar’s (1992) explanation of this topic is very much more detailed compared to the works of Zarqa’ (1982).

1. *Provision of staple foods and what are necessary for their existence and continuity.* This includes production of fertilizer, basic agricultural instruments and machines and distribution services.
2. *Provision of clean water and basic public utilities.* This includes establishment of institutions and organisations responsible for this job.
3. *Basic education.* It is obligatory for the government and society to ensure that both knowledge of *farḍ al-‘ayn* (individual obligation) and *farḍ al-kifāyah* (social obligation) in each discipline is adequately provided. This will also entail the establishment of relevant institutions such as schools, mosques, universities and other educational centers.
4. *Production of basic apparel to protect Man’s well-being.* This includes summer and winter clothes and costumes for specific work that ensure the safety of the workers.
5. *Accommodation* that are suitable for the local environment and provide protection and rest for the households (family institution). This also includes the production of basic home appliances and furniture.
6. *Basic transportation and communication means.* They are essential for the people to carry out their work and obligations towards themselves, their families and communities.

7. *Health services* to protect and preserve two essential elements of Man i.e., Life and Mind. The protection of the environment falls under this category.
8. *Institutions for maintaining and preserving Islamic laws, justice and order in the society.* Some of the examples are law councils, courts, police stations, and *zakāh* institutions.
9. *National safety and defence.* It is obligatory for Muslims to protect their very existence by making preparation in terms of military weapons and instruments. This should be done up to the level that they have the ability to ensure their sovereignty and furthermore, exercise their rights in Islam.

It is worth mentioning here that projects that fall under this category of *maṣlaḥah* are considered obligatory to be undertaken in Islam ('Afar, 1992; Zarqa', 1982).

3.3.2 Conveniences (*Ḥājiyyā*)

Projects that are not vital to the preservation of the five essential elements, but rather, are needed *to relieve or remove impediments and hardship* (facing the five elements) in life should fall under this category of *maṣlaḥah*. In the real world situation, most projects, crafts, industries and economic activities are included here (Meera, n.d.; Zarqa', 1984). The execution of such projects is strongly recommended

in Islam up to the extent sufficient to remove difficulties or achieve conveniences in life ('Afar, 1992; Zarqa', 1982 & 1984).

As a general principle, projects that contribute to the advancement of the essential areas and make Man's activities easier and remove the difficulties facing them are Conveniences projects. Examples of such projects are numerous, but some of them are listed here for illustration ('Afar, 1992; Zarqa, 1984):

1. Promotion of physical education to strengthen the body and enhance one's health (Notice that protection of life and mind is a Necessity).
2. Production of quality foods and good clothes.
3. Comfortable houses and cars.
4. Improvement in transportation and communications.
5. Advancement in educational level, etc.

3.3.3 Refinements (*Taḥṣīniyyā*)

Projects that do not remove or relieve difficulties but rather, those that adorn life and put comfort into it fall under the category of refinements. In other words, projects which go beyond the limits of Conveniences fall under this category - on condition that they are carried out moderately (Zarqa', 1984). Such projects should be given least priority, particularly if the first two categories have not been satisfied (Meera, n.d.). The discharge of projects under this category is either recommended or permissible in Islam (Zarqa', 1982). Examples of projects under this category are as follows:

1. Objects of enjoyment and ornamentation e.g., flower, perfumes, luxurious items and jewellery.
2. Building and house decorations
3. Recreation centres
4. Landscaping etc.

3.4 The Rules Governing the Relationships amongst the Three Categories of *Maṣālah*

There are several rules governing the relationships amongst the three project categories i.e., Necessities, Conveniences and Refinements. The rules are (Meera, n.d.; Khan & Ghifari, 1992):

1. “Necessities” are fundamental to “Conveniences” and “Refinements”. Thus, projects under “Necessities” should be preferred to those of “Conveniences” and “Refinements”. Recommended and permissible projects could not be perceived as having precedence, in any situation, over obligatory projects.
2. Deficiency in “Necessities” causes deficiency in “Conveniences” and “Refinements” in an immutable manner.
3. Deficiency in “Conveniences” and “Refinements” does not necessarily affect “Necessities”.

4. An absolute deficiency in “Conveniences” and “Refinements” may cause deficiency to some extent to “Necessities”.
5. Society should keep up “Conveniences” and “Refinements” for the proper maintenance of “Necessities”.
6. “Refinements” are the complement of “Conveniences” whilst “Conveniences” are the complement of “Necessities”.
7. If “Refinements” are chosen over “Conveniences”, this practice may be *makrūh* (reprehensible) or *khilāf al-awlā* (opposite to what is better or greater)²⁷. Nonetheless, “Conveniences” should be given more weight than “Refinements” for evaluation purposes.

3.5 Beyond the *Maṣlaḥah*: *Al-Isrāf* and *Al-Tabdhīr*

Another aspect of the significance of this concept (which is peculiar to mainstream practice) is that only projects that fall under the three categories of *maṣlaḥah* should be pursued in an Islamic framework. A project that is beyond the category of *maṣlaḥah* can be classified into two main categories which are unacceptable in the *Shari‘ah* (‘Afar, 1992). The categories are:

²⁷ Some of the Shafi‘ite jurists divide *makrūh* (reprehensible) value into two categories: (1) *makrūh*: If the evidence of prohibition is not decisive but specific to a particular matter and (2) *khilāf al-awlā*: If the evidence of prohibition is not decisive and not specific to any particular matter (Al-‘Īṭah, 1989).

1. *Al-Isrāf*: This refers to the act of spending or investment in permissible (*ḥalāl*) activities but more than what is required. Self-indulgence (*al-taraf*) or living in great unnecessary luxury also falls under this category (‘Afar, 1992).
2. *Al-Tabdhīr*: This can be defined as any disbursement on unlawful (*ḥarām*) or unjustifiable activities. Similarly, the fulfillment of lower-level needs in the presence of higher-level needs that are not being satisfied is perceived as an act of *al-tabdhīr* (‘Afar, 1992).²⁸

Projects that fall under these two categories can be either reprehensible (*makrūh*) or forbidden (*ḥarām*) from the Islamic point of view. Examples of projects under these two categories are those that involve forbidden activities such as the provision of *ribāʿ*, gambling, non-*ḥalāl* goods or services.

3.6 Beneath the *Maṣlaḥah*: *Al-Taqtīr*

If the government or individuals underutilise the available resources to fulfil the *maṣlaḥah* or they decide not to carry out projects whilst the *maṣlaḥah* or welfare of the people is deficient, this could be considered as an act of *al-taqtīr*. *Al-Taqtīr* is a

²⁸ Al-Maṣrī (1999) gives a slightly different definition of *al-isrāf* and *al-tabdhīr*. According to him, *al-isrāf* is spending in *ḥarām* even in a small amount or spending in *ḥalāl* but excessive. *Al-tabdhīr* is a situation worse than *al-isrāf*, e.g., spending in *ḥarām* in a big amount.

sort of niggardliness (*bukhl*) which is condemned by the Prophet PBUH (Al-Maṣrī, 1999). Moreover, Islam requires Man to use these resources to the extent necessary for the production of individually or socially useful goods and services and employ the means that justify their use for the end product (Pomeranz, 1995; Ahmad, 1991). This requirement is observed, for example, in the *Qur'ānīc* verse 57: 7²⁹. Additionally, Al-Ghazālī and Al-Shāṭibī assert that it is society's obligation to steer their system, capacity and resources towards the realisation of the *maṣlaḥah* ('Afar, 1992).

3.7 The Incorporation of the *Maṣlaḥah* Concept into the Project Evaluation

The incorporation of the concept of *maṣlaḥah* will greatly distinguish an Islamic framework for project evaluation from the conventional one. The purpose of incorporating this concept into the framework is to ensure the adherence of the selected project to the *Sharī'ah*'s objectives and the Islamic system as a whole. From the foregoing discussions, the researcher has proposed Table 1 and Table 2 to illustrate the priority and values of projects according to the concept of *maṣlaḥah*.

Table 1: Classification and Priority of Projects According to the Concept of *Maṣlaḥah*

²⁹ "Believe in God and His Messenger, and spend (in charity) out of the (substance) whereof He has made you heirs. For, those of you who believe and spend (in charity), - for them is a great reward."

Main Categories Essential Elements of Man	Beneath the <i>Maṣlaḥah</i>	Necessities	Conveniences	Refinements	Beyond the <i>Maṣlaḥah</i>
	Unacceptable	1 st	6 th	11 th	Unacceptable
		2 nd	7 th	12 th	
		3 rd	8 th	13 th	
		4 th	9 th	14 th	
		5 th	10 th	15 th	
Religion					
Life					
Mind					
Offspring					
Wealth					

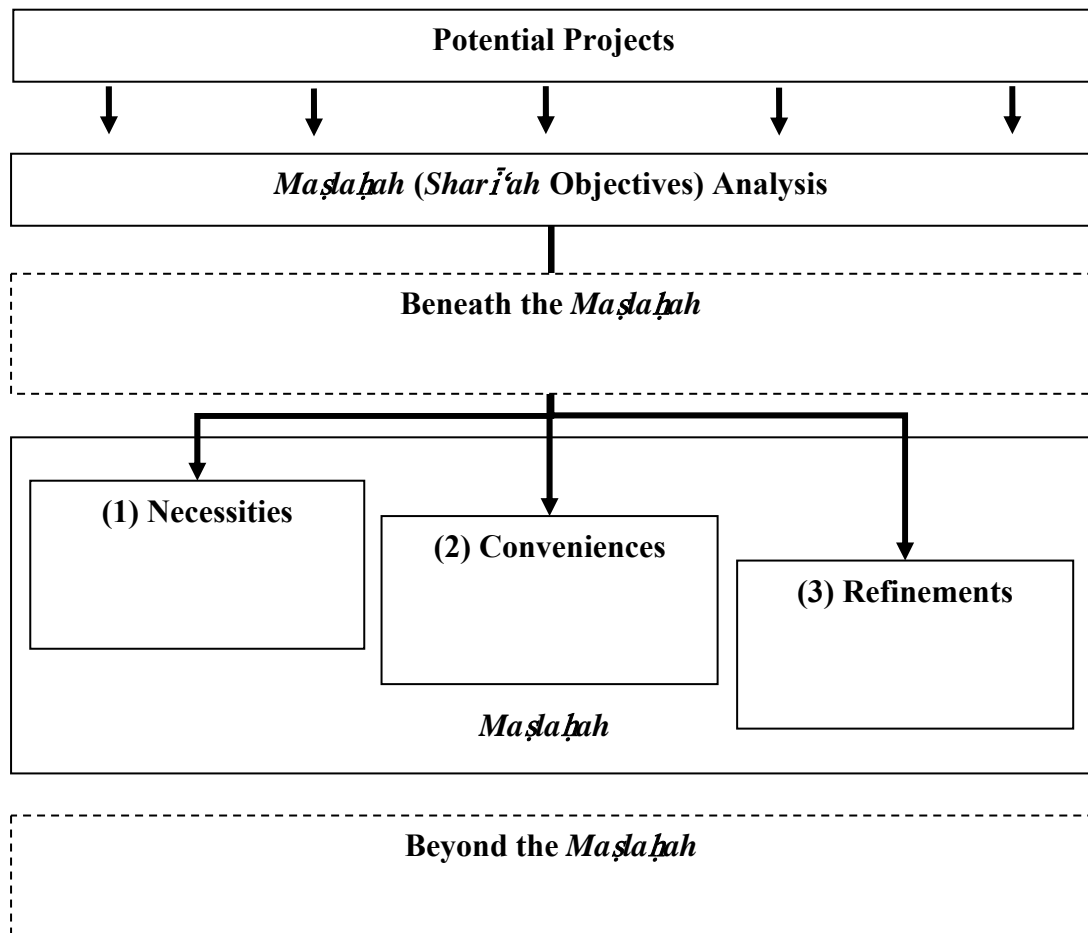
Each number represents the rank of the project from the *Shari‘ah* point of view. Projects that receive the highest priority in an Islamic framework are those which have the Religion element of the Necessities category.

Table 2: Project’s Category, Status and Value According to the Concept of *Maṣlaḥah*

PROJECT			
NO.	CATEGORY	STATUS	VALUE
1	Beneath the <i>Maṣlaḥah</i>	Prohibited & Unacceptable	Reprehensible or Forbidden
2	Necessities	Required & Acceptable	Obligatory
3	Conveniences		<i>Mandūb</i>
4	Refinements		<i>Mubāḥ</i>
5	Beyond the <i>Maṣlaḥah</i>	Prohibited & Unacceptable	Reprehensible or Forbidden

Figure 4 illustrates the framework for the *maṣlaḥah* analysis of projects in an Islamic framework.

Figure 4: The Integration of *Maṣlaḥah* Analysis into the Project Evaluation



The *maṣlaḥah* analysis could serve as the qualitative analysis in an Islamic framework for project evaluation. The *maṣlaḥah* analysis will reject projects that involve forbidden activities such as the provision of *ribā'*, gambling, non-*ḥalal* goods or services e.g. liquor, pork etc. Hence, unlawful (*ḥarām*) projects will have no place for consideration in an Islamic framework for project evaluation. The *maṣlaḥah* analysis will also include the spiritual and moral effects of the project which are ignored in the mainstream project evaluation process. A disco project might be attractive commercially, but its contradiction with the *Sharī'ah* objectives and immoral effects make it rejected in the *maṣlaḥah* analysis. Similarly, projects that

involve caring for others e.g. looking after orphans, widows, needy persons, old parents or even animals, or building facilities for pilgrims or wayfarers, or expanding *awqāf* institutions may not be attractive commercially, yet they are favourable according to *maṣlaḥah* analysis.

Another important impact of integrating *maṣlaḥah* analysis into the framework is that it would mitigate the conflicts between individual (private) and government (public) preferences. The concept of *maṣlaḥah* would put the individual *maṣlaḥah* in line with the social *maṣlaḥah*. This is because the promotion of the five basic elements is desirable from both the individual and social points of view (Khan & Ghifari, 1992). Last but not least, *maṣlaḥah* analysis will facilitate the subsequent procedures in the framework. In terms of quantification and valuation, a project that falls under the category of Necessities should be given more weight than Conveniences and Refinements projects. The hurdle rate for Necessities projects should also be made to be lower than the hurdle rate for Conveniences and Refinements projects. This adjustment of the hurdle rate, as suggested by Meera (n.d.), could make socially favourable projects commercially attractive.

3.8 The Need for Continuous Judgement

The interpretation of what is a Necessity or Convenience or Refinement in certain areas is somewhat subjective as the situation becomes more sophisticated with differences in time period, lifestyle, standard of living and level of technological development between countries and states or between urban and rural areas. This is

not peculiar in Islam, as difference in opinions is very much welcomed as proven in the differences between the schools of *fiqh* in Islamic jurisprudence. Different opinions would lead to different rulings between states or countries as the Islamic scholars always take into consideration local customary practices (*Urf*) and public interest in carrying out their judgements. There is a well-known Islamic legal maxim which states that “*Rulings could change according to changes in time.*” This is evidence of the flexibility of the concept of *maṣlaḥah* in Islam.

Continuous change in Man’s life may move certain activities or things from one category of *maṣlaḥah* into another (Zarqa’, 1984). What is a Refinement in one place may appear to be a Convenience in another. What fell under the category of Convenience one decade ago might be considered as a Necessity nowadays. Some of the examples are (Zarqa’, 1984):

1. Sewerage and sanitation were considered Conveniences or Refinements in rural communities where the population was dispersed some years ago. However, in heavily populated urban communities, they become Necessities for without them significant difficulties and perils, including health hazards, are faced.
2. Public transportation in small communities in small areas is a Refinement although it may be perceived as a Convenience for them simultaneously for the purpose of travel amongst such communities. On the other hand,

people in urban centres extending over a relatively large area will definitely see public transportation as a Convenience.

Thus, there is a real need for continuous judgment and interpretations to define a clear-cut line between all these three categories. What falls beyond and beneath the *maṣlaḥah* should also be defined. Authorities could set up a committee which comprises economists, academicians, professionals, Islamic scholars and practitioners of every single discipline to continuously carrying out judgement on this particular issue. This committee could draw the guidelines for this purpose and it is possible from the researcher's point of view to have different guidelines for different areas to really respond to the social needs and public interest of each area.

CHAPTER FOUR

ISLAMIC VALUES IN PROJECT EVALUATION

4.1 Introduction

The Islamic economy is a value-loaded or value-based system which has several Islamic values that may have relevance to the subject of project evaluation. These values should not be ignored in the discussion of the project evaluation topic as they

will guide and influence the judgment of project analysts and decision-makers in an Islamic framework. The significant Islamic values pertaining to the topic of project evaluation as recognised by the researcher and which will be further discussed in this chapter are³⁰:

1. Preservation of future generation's welfare
2. Environmental balance
3. Public interest is given priority over individual interest
4. Balance between physical and spiritual development
5. Avoidance of both extravagance and niggardliness
6. Promotion of cooperation and partnership

4.2 Islamic Value 1: Preservation of Future Generations' Welfare

Consideration of the welfare of future generations is required in Islam. It is the responsibility of the present generation to consider the welfare of future generations in their decision making process. This requirement is illustrated in a *ḥadīth* where the Prophet PBUH says: "It is better that you leave behind you your relatives well-off rather than obliged to beg for alms from others," (Akhtar, 1996; Al-Qarḍāwī, 1999). Moreover, the *Qur'ānic* depiction of believers' (*Mu'minūn*) characteristics where each

³⁰ These values are not exhaustive; rather they are the significant ones on the topic of project evaluation from the researcher's point of view.

generation of believers is concerned with other generations (by praying for each other) indicates that consideration of future generations' welfare is indispensable in Islam (Zarqa', 1982). The *Qur'ānic* verse 59:10 mentions that:

“And those who came after them say: Our Lord! Forgive us, and our brethren who came before us into faith, and leave not, in our hearts, rancour (or sense of injury) against those who have believed. Our Lord! Thou art indeed Full of Kindness, Most Merciful.”

This value is also manifested in Caliph ‘Umar Al-Khaṭṭāb’s decision on land management in southern Iraq where he decides not to undertake the project of distribution of the conquered lands of southern Iraq amongst the Muslim soldiers. In doing that, he argues that the distribution of lands would result in the creation of a class of feudal lords and there will be nothing for the next generations. He also decides that the conquered lands are the property of the entire Muslim *ummah* and the existing owners would cultivate the lands as before but with the payment of a tax known as *kharāj* (Khan, 1997). His decision has been supported by Mu‘ādh Ibn Jabal and ‘Alī Ibn Abī Ṭālib (Al-Qarḍāwī, 1999; Zarqa', 1982).

A project was rejected by ‘Umar Al-Khaṭṭāb in consideration of the future generations' welfare. This Islamic value extends the time horizon of project evaluation in an Islamic framework. The consideration of the effects and consequences of a project on future generations is evidently imperative. Hence,

project analysts in an Islamic framework should recognise the impact of a project not only on the present generation but also on the future ones.

4.3 Islamic Value 2: Environmental Balance and Protection

The Islamic perspective on the environment rests on the belief that Allah is the Creator and Sustainer of the universe. Nature is not seen as something that must be overcome or conquered in Man's pursuit of development in this world. It is actually a bounty from Allah that must be utilised in the best way possible for all, in accordance with Allah's will, considering that it is part of Allah's creation (Akhtar, 1996; Haneef, 1997). Islam places great importance on the issue of environmental balance. This is evident in a *ḥadīth* which encourages the growing of crops, planting of trees and cultivating of gardens for the benefit of living things. The Prophet PBUH is reported to have said:

“There is no Muslim who plants a tree or sows a field, and a human, bird or animals eat from it, but it shall be reckoned as charity from him.”

In addition to that, Abū Bakr's instruction to Yazīd Ibn Abī Sufyān to preserve the environmental values, even in enemy territory, also proves the importance of environmental balance and protection in Islam. He writes to him, *“Do not cut down a tree, do not abuse a river, do not harm crops and animals, and always be kind and humane to Allah's creation, even to your enemies,”* (Akhtar, 1996).

Husaini (as cited in Akhtar, 1996) maintains that the environmental disruption of any kind must be avoided for two reasons. First, it is an ethical command of the *Shari'ah* and second, it is essential for protecting the public interest and universal common good of all mankind and other creations of Allah. Moreover, environmental degradation harms both the present and future generations, people and other living things. Thus, it is an obligation of each individual and society to protect it (Chapra, 1993). Akhtar (1996) asserts that there exists environmental balance in the universe and this concept implies two constraints:

- (1) Human and non-human beings can not demand resources more than the natural ecosystem is capable of providing them on a sustainable basis.
- (2) They cannot discharge their waste products into the system in greater quantities than the system is capable of recycling without impairing its productivity.

It is apparent that the issue of environmental balance and protection should be looked into in the process of project evaluation in an Islamic framework. Externalities of the project are one of the major causes of the pollution problem (Akhtar, 1996). Thus, project analysts and decision makers in an Islamic framework should internalise the potential cause of pollution from a project and any project opted for under the Islamic framework should not lead to unreasonable disorder or unjustifiable destruction of the environment.

4.4 Islamic Value 3: Public Interest is Given Priority over Private Interest

Islam seeks to have a balance between public and private interests (Al-‘Anānī, 1983). However, if there is a conflict between public and private interest, the public interest should be given priority over the private one. There is an Islamic legal maxim that states, “*Individual loss (or damage) is tolerated to ward off public loss (or damage)*,” (Al-Maṣrī, 1999). In such a case, the individual interest should be duly compensated and should not be ignored (Mannan, 1978). However, a public interest for which the sacrifice of individual interest is tolerable should be certain, indispensable and could only be attained via the sacrifice of individual interest (Kahf, 1994).

This value also implies that the project that could provide the livelihood (*rizq*) to the greatest number of people and other living things should be given preference in an Islamic framework (Zarqa’, 1982). It is obligatory in Islam for each capable person to provide his own livelihood and that of his dependents. Hence, the project that helps the greatest number of people to carry out their obligations towards themselves and their dependents should be preferred in an Islamic framework. Similarly, if the resources are limited and there is a trade-off between public and private interests, the former should be given preference over the latter.

4.5 Islamic Value 4: Balance between Physical and Spiritual Development

Balance between physical and spiritual development is one of the distinctive traits of Islamic economics (Al-'Anānī, 1983). The utilisation of resources in Islam does not only take into consideration the economic aspect, but also other aspects such as the religious, social and moral aspects (Chowdhury, 1999). Mainstream economics disregards the spiritual and moral externalities of a project. For example, the production of alcohol or musical instruments or gambling gadgets may be economically desirable but it is morally undesirable (Khan, 1985).

Therefore, in principle, Islam rejects projects that could produce bad spiritual and moral externalities and makes it unlawful to undertake them. Hence, projects that would generate immoral consequences such as liquor production, pub or disco hub, unlawful entertainment, prostitution and gambling are strictly forbidden. This value emphasises the need for project analysts and decision makers in an Islamic framework to take into consideration the spiritual and moral externalities of the project in the project appraisal process.

4.6 Islamic Value 5: Avoidance of Both Extravagance and Niggardliness

Resources in Islam are considered as trusts from Allah. The nature of this trusteeship of resources entails efficient use of the resources and avoidance of

extravagant/ excessive/ wasteful use of them. This is manifested in the following *Qur'anic* verses:

1. “...eat and drink, but waste not by excess, for God loveth not the wasters,” (7:31).
2. “Verily spendthrifts are brothers of the Evil Ones; and the Evil One is to his Lord (himself) ungrateful,” (17:27).

Similarly, leaving the resources idle without being utilised for productive purposes due to niggardliness is also condemned in Islam (Khawjah, 1994). The condemnation is observed in the following *Qur'anic* verses:

1. “...And there are those who bury gold and silver and spend it not in the Way of God; announce unto them a most grievous penalty,” (9:34).
2. “And what burden were it on them if they had faith in God and in the Last Day, and they spent out of what God hath given them for sustenance? For God hath full knowledge of them,” (4:39).

This value reemphasises the responsibility of project analysts and decision makers not to support or approve a project that falls beyond or beneath the areas of *maṣlaḥah* i.e. Necessities, Conveniences and Refinements. The use of resources for a project that goes beyond the *maṣlaḥah* is considered as extravagance and their underutilisation to meet the *maṣlaḥah* is niggardliness which is heavily condemned in Islam.

4.7 Islamic Value 6: Promotion of Cooperation and Partnership

The Islamic teachings emphasise the value of cooperation and collective work for the purpose of doing good deeds as evident in the *Qur'ānic* verse 5:3³¹. Cooperation is encouraged in Islam whether in respect to spiritual matters, economic affairs or social activities (Kahf, 1978). The underlying principle of brotherhood in Islam calls for cooperation amongst people, particularly Muslims. There are a lot of *ḥadīths* which emphasise the nature of this brotherhood. Amongst them are (Akhtar, 1996; Kahf, 1978):

- a) *“A Muslim is a brother of another Muslim; he neither wrongs him, nor leaves him without help.”*
- b) *“I swear by Allah, one cannot become fully Muslim until he (or she) likes for others whatever he (or she) likes for himself (or herself).”*
- c) *“You find the Believers in respect to their mutual love, mercy and compassion as one single body, that if a part of it is in pain, all the body falls ill with restlessness and fever.”*

Similarly, Islam encourages Muslims to participate in a partnership as it is a form of cooperation and collaboration between individuals. Moreover, it leads to more efficient and better use of resources (Al-Maṣri, 1999). Therefore, we can see that a number of partnership projects have been established and discussed in the area of

³¹ “...help ye one another in righteousness and piety, but help ye not one another in sin and rancour...”

Islamic jurisprudence. Partnership projects for commercial purposes in Islamic jurisprudence (*fiqh*) basically can be divided into two major categories and can take place in several forms. The divisions can be illustrated by the following points (Al-Maṣri, 1999; Nyazee, 2002):

- 1) Agricultural Partnerships (*Al-Sharikāt Al-Zirā'īyyah*). This category has three forms:
 - a. *Muzāra'ah* (Share-cropping): It is a type of agricultural partnership with land contributed by one party and work by another. The land is cultivated and the yield is shared between them.
 - b. *Musāqāh* (Share-watering): It is a type of agricultural partnership whereby the trees and land are contributed by one party and their care (watering) is undertaken by another with their fruit being divided between the parties.
 - c. *Mughārasah* (Share-planting): It is a type of agricultural partnership where the land and plants are contributed by one party and the work of planting is provided by another party with a portion of plants being given to him.
- 2) Trading Partnerships (*Al-Sharikāt Al-Tijāriyyah*). This type of partnership is different from the previous one as the partners share the profit, neither

crops nor plants, between them. This can be further divided into two categories. This category has two forms:

- a. *Muḍārabah*: It is a type of trading partnership in which capital is contributed by the capital provider (*rabb al-māl*) and labour from the entrepreneur (*muḍārib*). The profit is shared between them. In case of loss, it is born by the capital provider. The entrepreneur only suffers from the fruitless efforts.

- b. *Shirkah*: It is a profit and loss sharing partnership and takes three major forms.
 - i. *Shirkat al-Amwāl*: It is a partnership in which participation is based on the contribution of capital by all partners.

 - ii. *Shirkat al-Abdān*: It is a partnership in which participation by the partners is based on labour or skill.

 - iii. *Shirkat al-Wujūh*: It is a partnership based on the credit-worthiness of the partners. The ratio of loss is based on the liability borne whereby the ratio of profit could be based on either the liability borne by each partner or mutual agreement between them.

These three types of trading partnerships could be based on either *'inān* or *mufāwāḍah* partnership³².

We can see from the above classifications that a project entails the combination of resources. Some individuals only have resources but they do not have the expertise or even the time to manage the resources. Hence, partnership projects are necessary to make use of the resources and put them in more productive and beneficial activities. With the combination of the resources and expertise, the resources would be used more efficiently and not left idle. Accordingly, project analysts and decision makers should consider cooperation with other parties if the cooperation could lead to the better use of resources and generate bigger benefits to the beneficiaries of the project.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

³² A *mufāwāḍah* partnership is based on *wakālah* (agency) and *kafālah* (surety) that entails full commitment from the partners. To achieve this purpose, all partners should maintain equality in capital, labour, liability and legal capacity. It declares each partner to be an agent of and surety for the other. In an *'inān* partnership, the equality of legal capacity and contribution by each partner is not necessary (Nyazee, 2002).

The topic of project evaluation is an enormous and vast topic covering a lot of issues. This study, however, concentrates only on the framework for project evaluation to give the study focus, conciseness and persistent direction. The methodological and technical issues are not within the scope of the present study. Firstly, we have seen that the framework for project evaluation offered today in mainstream economics, with its complexity and thoroughness, has been developed in isolation from Islamic input. The active participation from international organisations such as the World Bank, UNIDO, IDCAS and the OECD has further developed and advanced the framework for project evaluation in mainstream economics. With due acknowledgements to the contributions of mainstream economics towards the birth and development of the existing methodology and framework for project evaluation, the study insists on its deficiency and inability to serve the Muslim governments and individuals to opt for the most preferable project under the light of *Shari'ah*.

Reconsidering the main principles of the mainstream project evaluation framework from the Islamic point of view, this study found that most of the mainstream framework is Islamically acceptable in principle. The technical tools that have been developed in mainstream economics are very helpful and valuable in the profitability analysis of projects in an Islamic framework. Nonetheless, the detailed justification and structure of an Islamic framework for project evaluation might differ from the mainstream one. For example, the role of interest should be abolished in an Islamic framework and be replaced with the rate of return or equivalent profit rate.

The study also found that the concept of *maṣlaḥah* or *Sharī'ah* objectives has a significant impact on an Islamic framework for project evaluation and would greatly distinguish the Islamic framework from the mainstream one. The significance of this *maṣlaḥah* concept is to ensure the coherence of the selected project with the *Sharī'ah*'s objectives and the Islamic system as a whole. Furthermore, the *maṣlaḥah* concept could rationalise the choice of a project in an Islamic framework eventhough the selected project seems to be irrational from the mainstream economics point of view.

Project analysts and decision makers in an Islamic framework for project evaluation should also be guided by Islamic values in making their judgments. This is imperative to ensure that decisions made will not contradict the established values in Islam. The values could also influence the attitude of the project analysts and decision makers towards several important issues in an Islamic framework and could be used as a basis for giving preference for some projects over others.

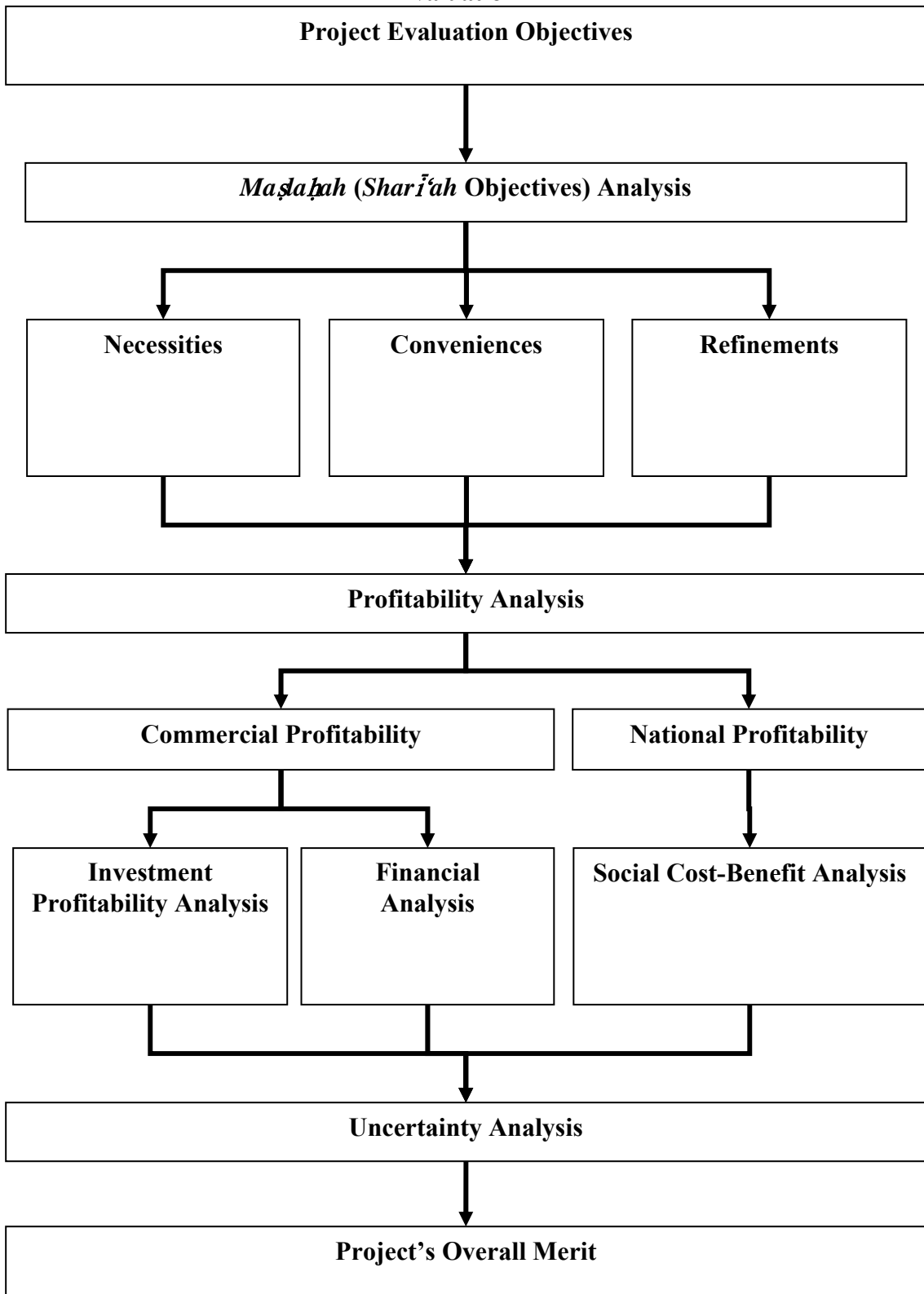
In carrying out this study, the researcher also found that there are a lot of traditional Islamic sources, particularly in *fiqh* (Islamic jurisprudence) and *uṣūl al-fiqh* (foundations of Islamic jurisprudence) that might seem, at a first glance, to be unlikely sources for project evaluation in an Islamic framework. Indeed, they are not only intellectual heritages but, more importantly, they could also have their own relevant contributions and role in the topic. Some of the relevant literature for further investigation is that pertaining to the *Siyāsah Shar'īyyah* (Islamic political science), *Maqāṣid al-Sharī'ah* (Objectives of *Sharī'ah*) and *Qawā'id Fiqhiyyah* (Islamic legal

maxims) fields. These areas are very closely related to decision making criteria, the skill of judgment as well as the qualitative evaluation of the subject matter.

5.2 An Islamic Framework for Project Evaluation

Having discussed the framework for project evaluation and the significance of the concept of *maṣlaḥah* in project evaluation, the researcher suggests an integrative Islamic framework for project evaluation as illustrated in Figure 5. The suggested framework simply integrates the best elements of both Islamic and mainstream economics. The description of each stage of the Islamic framework can be found in the earlier chapters and reiteration in this chapter is unnecessary. It is hoped that the international Islamic organisations such as the Islamic Development Bank (IDB) and the Islamic *Fiqh* Academy could collaborate and provide detailed guidelines for project evaluation from the Islamic perspective that are theoretically Islamic and practically viable as they have the expertise, data and experience to perform such a task. Cooperation between Islamic countries at the international level is also needed to accelerate the initiative of the preparation of the guidelines and such cooperation would give birth to a detailed Islamic framework for project evaluation.

Figure 5: An Integrative Islamic Framework for Project Evaluation



5.3 Suggestions for Further Research

The researcher suggests that future research should be carried out on the technical study (or quantitative analysis) of the *maṣlaḥah* concept in project evaluation. This concept has the potential to be further developed and would be the main distinctive trait of an Islamic framework. Another important area is the correlation between project evaluation and project financing. Mainstream economics, in its discussions of project evaluation - particularly in SCBA of public projects, dichotomises between the investment criteria and project financing. This is due to its acceptance of interest-based financing. However, it seems that this dichotomy should be mitigated in an Islamic economics as interest-based financing is illegitimate. Additionally, the practice of interest-based financing would cause the selected projects to generate negative consequences and externalities, directly or indirectly, on society which are unacceptable from the Islamic point of view. Hence, future research should also concern this issue. The combination of quantitative and qualitative analyses should also be taken into consideration as this will provide balance in giving justifications for undertaking selected projects in an Islamic framework.

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GLOSSARY

<i>‘Aql</i>	Mind; Intellect
<i>Awqāf</i>	Plural of <i>waqf</i>
<i>Bay ‘ al-Mu ‘ajjal</i>	Sale on deferred payment i.e. the good is delivered but the price is delayed to the future
<i>Bukhl</i>	Niggardliness
<i>Ḍar ūriyyāt</i>	Necessities
<i>Dīn</i>	Religion
<i>Falāḥ</i>	Success in this world as well as in the hereafter
<i>Farḍ al- ‘Ayn</i>	Individual obligation
<i>Farḍ al-Kifāyah</i>	Social obligation
<i>Fiqh</i>	Literally means “the true understanding of what is intended” Theoretically, it refers to “Islamic Law deduced from the sources of Islamic Law” or “Islamic jurisprudence”
<i>Ḥadīth</i>	The traditions of the Prophet Muhammad used as an exegesis of the Qur’anic message
<i>Ḥājiyyāt</i>	Conveniences
<i>Halal</i>	Lawful; Legitimate
<i>Ḥanafīyyah</i>	Hanafite jurists
<i>Ḥarām</i>	Forbidden; Unlawful; Illegitimate
<i>Isrāf</i>	Wanton waste in production or consumption
<i>Kharāj</i>	Land tax in the Islamic state
<i>Khilāf al-Awlā</i>	Opposite to what is better or greater
<i>Mafāsīd</i>	Plural of <i>mafsadah</i>
<i>Mafsadah</i>	Loss; Evil; Disadvantage; Disruption; Damage

<i>Makrūh</i>	Reprehensible
<i>Māl</i>	Wealth; Capital
<i>Mālikiyyah</i>	Malikite jurists
<i>Mandūb</i>	Recommended
<i>Maqāṣid al-Sharī'ah</i>	Objectives of the <i>Sharī'ah</i>
<i>Maṣāliḥ</i>	Plural of <i>maṣlaḥah</i>
<i>Maṣlaḥah</i>	Utility; Welfare; Benefit; Advantage
<i>Mu'minūn</i>	Believers
<i>Mubāḥ</i>	Permissible
<i>Muḍārabah</i>	Profit sharing partnership; It is a type of trading partnership in which capital is contributed by the one party and labour from the other party
<i>Muḍārib</i>	Entrepreneur in a <i>muḍārabah</i> partnership
<i>Mughārasah</i>	Share-planting partnership
<i>Mukammilāt</i>	Complementarities
<i>Musāqāḥ</i>	Share-watering partnership
<i>Muzāra'ah</i>	Share-cropping partnership
<i>Nafs</i>	Life
<i>Nasab</i>	Offspring
<i>Qawā'id Fiqhiyyah</i>	Islamic legal maxims
<i>Qur'ān</i>	The holy book revealed by God to the Prophet Muḥammad as a continuation and completion of the Divine message to mankind that was revealed to the earlier prophets of antiquity
<i>Rabb al-Māl</i>	Capital provider in a <i>muḍārabah</i> partnership
<i>Ribā</i>	Interest or usury (literally means increase or addition)
<i>Rizq</i>	Livelihood; Sustenance

<i>Ṣadaqāt</i>	Donations; Alms
<i>Shāfi'īyyah</i>	Shafi'ite jurists
<i>Sharī'ah</i>	(1) Islamic Divine Laws as available in <i>Qur'ān</i> and <i>Ḥadīth</i> (2) Used regularly interchangeably with Islam itself (3) One of the three elements of Islam that deals with all forms of practical actions of human beings
<i>Sharikāt Tijāriyyah</i>	Trading partnership
<i>Sharikāt Zirā'īyyah</i>	Agricultural partnership
<i>Shirkah</i>	Partnership
<i>Shirkat al-Amwāl</i>	Capital-based partnership
<i>Shirkat al-Abdān</i>	Labour/skill-based partnership
<i>Shirkat al-Wujūh</i>	Creditworthiness-based partnership
<i>Siyāsah Shar'īyyah</i>	Islamic political science
<i>Tabdhīr</i>	Worst type of wasteful production or consumption
<i>Tāhṣīniyyāt</i>	Refinements
<i>Taqtīr</i>	A sort of niggardliness
<i>Ummah</i>	World nation of Islam
<i>'Urf</i>	Local customary practice
<i>Uṣūl al-Fiqh</i>	Foundations of Islamic jurisprudence
<i>Wājib</i>	Obligatory
<i>Waqf</i>	Endowments and trusts assets donated for use in Islamic education or charities
<i>Zakāh</i>	Wealth tax in Islam and one of the five pillars of Islamic belief

APPENDICES

APPENDIX 1

TRANSLITERATION TABLE³³

A. Table 1: Consonants

’	z	q
b	s	k
t	sh	l
th	ş	m
j	đ	n
ḥ	ţ	h
kh	ẓ	h
d	‘	w
dh	gh	y
r	f	

B. Table 2: Vocalisation Signs (Representing Arabic Vowels)

a	_____	i	_____	u	_____
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i. Short vowels illustrated with consonant “d” / “ ”

da		di		du	
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ii. Long vowels illustrated with consonant “d” / “ ”

dā		dī		dū	
----	--	----	--	----	--

C. Table 3: Diphthongs

aw	—	ay	—
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Examples: *qawm* *shaykh*

D. Words Containing *Shaddah* (—)

³³ This transliteration is based on the paper, entitled “Transliteration”, presented by Asst. Prof. Dr. Badri Najib Bin Zubir – IRKHS - in Research Methodology Course (SLAB) held by Research Center, IIUM from 31st March to 8th April 2003 & from 10th to 18th June 2002.

i. *Shaddah* involving consonants other than *sh* and *dh* : Double the letter

Examples:

<i>bashshara</i>	
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<i>qarra</i>	
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ii. *Shaddah* involving consonants *ww* and *yy* :

a. Double the letter when the *shaddah* is in the middle

Examples:

<i>khawwafa</i>	
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<i>hayyara</i>	
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b. Double the letter when the *shaddah* is in the end and the letter before is assigned *fatḥah* (—)

Examples:

<i>jaww</i>	
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<i>tayy</i>	
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c. Represent *ū* as “ū” and *ī* as “ī” when the letter before each is assigned *ḍammah* () and *kasrah* () respectively

Examples:

<i>matlū</i>	
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<i>nabī</i>	
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E. Words Containing the Prefix “ al ”

The prefix “ al ” is always transliterated “al” regardless of whether it is *shamsiyyah* or *qamariyyah* and a hyphen is used after “al” to indicate that it is a prefix.

Examples:

<i>al-khayr</i>	
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<i>al-sharr</i>	
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E. Words Containing *Hamzah* “ ʾ ”

Hamzah “ ʾ ” in the initial position, whether it is preceded by the prefix “ al ” or not, is not represented in transliteration but how it is vocalized is indicated. This rule applies to both *hamzat qatʿ* and *hamzat wasl*.

Examples:

<i>al-insān</i>	
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<i>idrāk</i>	
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F. Words Containing *Tāʾ Marbūṭah* “ ۃ ”

Tā' Marbūṭah “ ” at the end of nouns is transliterated “*h*”.

Examples:

<i>madrasah</i>	
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<i>ḥasanah</i>	
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Notwithstanding the above rule, *Tā' Marbūṭah* “ ” is transliterated “*t*” when it is present in the first word of a construct pair (*iḍāfah*).

Examples:

<i>Kulliyat al-Iqtisad</i>	
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<i>Majallat al-Da'wah</i>	
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G. More Examples

<i>Sharī'ah</i>	<i>Makrūh</i>	<i>al-Taḥsīniyyāt</i>
<i>Maṣlaḥah</i>	<i>Ḥarām</i>	<i>Mukammilāt</i>
<i>Bay'</i>	<i>al-Awqāf</i>	<i>'Ibādāt</i>
<i>Wājib</i>	<i>al-Mashrū'āt</i>	<i>Mu'āmalāt</i>
<i>Mandūb</i>	<i>al-Darūriyyāt</i>	<i>al-Muwāzanāt</i>
<i>Mubāḥ</i>	<i>al-Hājiyyāt</i>	<i>al-Awlawiyyāt</i>
<i>al-Taqtīr</i>	<i>al-Isrāf</i>	<i>al-Tabdhīr</i>

Note: Other rules of application of the transliteration are not mentioned here for brevity.

APPENDIX 2

THE VALIDITY OF THE CONCEPT OF TIME VALUE OF MONEY AS DERIVED FROM THE SAYINGS OF THE PROPHET MUHAMMAD AND HIS COMPANIONS

1. ‘Aṭā’ Ibn Yasīr reported Rafī’ said: “The Apostle of Allah (PBUH) took on credit a small camel. When Camels of *ṣadaqah* (donation) arrived, and he asked me to pay back a like camel, I said: Apostle of Allah, the camels are all big and four years old. The Apostle of Allah (PBUH) said: Give from them. Virtuous are they who pay back their debts well.”³⁴
2. Mujāhid reported that ‘Abd Allah Ibn ‘Umar took some dirhams as a loan and paid back better dirhams. He said: “O Abu ‘Abd Al-Rahmān, these are better than the dirhams I loaned out to you.” ‘Abd Allah Ibn ‘Umar replied: “Yes I know, but I paid out of my own goodwill and pleasure.”³⁵

³⁴ Source: Muwaṭṭa’ Al-Imām Mālik as quoted by Rosly (2003).

³⁵ Ibid.