1981


Abdulrhman I. Alhumaid

Louisiana State University and Agricultural & Mechanical College

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AN EMPIRICAL STUDY OF THE CHARACTERISTICS OF THE GOVERNMENTAL BUDGETARY PROCESS IN RICH AND UNCERTAIN ENVIRONMENTS: THE CASE OF SAUDI ARABIA

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AN EMPIRICAL STUDY OF THE
CHARACTERISTICS OF THE GOVERNMENTAL
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UNCERTAIN ENVIRONMENTS:
THE CASE OF SAUDI ARABIA

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Accounting

by
Abdulrhman I. Alhumaid
B.S. Accounting, Riyadh University, 1973
M.B.A., Central Missouri State University, 1976
August 1981
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I also express my appreciation to my wife, Bandri, and my little boy, Matuz, for their patience and encouragement.

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ABSTRACT

As reflected by the literature, the environment of each country influences the characteristics of the budgetary process in that country. Often-cited factors which shape this environment are: economic wealth, financial predictability, political institutions, elite values, and size. Economic wealth and financial predictability are considered the most powerful.

Economic wealth and financial predictability permit four classifications of budgetary environments, namely: rich and certain, poor and certain, poor and uncertain, and rich and uncertain environments. Each of the first three classes of budgetary environments has been investigated in the existing literature. However, the rich and uncertain environment remains more elusive to the investigator.

This author believes that a government exists with sufficient wealth and environmental uncertainty to be classified in the fourth category. Namely, such government exists in Saudi Arabia. Therefore, the purpose of this study was to examine empirically the characteristics of the governmental budgetary process in which the environment is uncertain but where the government is rich.

A combination of different research methods were used to gather the data for this study. This combination included library research, interviews, and empirical testing of the quantitative budgetary data.

The findings, based on both research tools, are summarized as follows:
(1) Saudi Arabian governmental budgetary process can be characterized as a non-incremental process. Specifically, the interview results showed that complexity in calculations was a common attribute throughout the budgetary process. This complexity led most of the government agencies to either over- or underestimate their requests, thus compelling the Ministry of Finance to review the entire agency's requests instead of concentrating on the changes or the increments from the previous year's appropriation. The evidence from the quantitative budgetary data also supported this conclusion. The magnitude of changes in budgetary allocations and actual expenditures for most of the cases studied were in the range of "non-incremental" process.

(2) Supplemental budgeting was one of the major attributes of the Saudi Arabian governmental budgetary process.

(3) Lack of qualified personnel, lack of well defined decision criteria, and the absence of modern data gathering techniques were observed through the budgetary process.

(4) The budgetary participants showed a high level of strategizing. Spending agencies tend to exaggerate their estimates knowing that the Ministry of Finance would alter these estimates.

(5) The spending agencies and the Ministry of Finance played major roles in the budgetary decisions. However, the Ministry of Finance seemed to influence those decisions more than did the individual agencies. In particular, the majority of the agencies' budget directors viewed their role as "coordinator" among the agencies' departments in the formulation of both the agencies plans and annual requests as more than "decision maker." In contrast, the role of the senior staff of
the Ministry of Finance budget department could be viewed as "cutter"
more than "efficiency economizer."

The quantitative budgetary data seemed to support the interviews
results, concerning the relationships between the budgetary partici-
pants. Significant positive correlations were found between budget
expansion and both agency acquisitiveness and Ministry of Finance sup-
port. The correlations between budget expansion and Ministry of
Finance support was stronger than the correlations between budget
expansion and agency acquisitiveness. Moreover, there were no signifi-
cant correlations among budget expansion and estimated revenue expan-
sion, actual revenue expansion, and spending efficiency. Since the
Ministry of Planning has a major influence on agency acquisitiveness,
the simple correlation indicated that these three organizations effected
the final budgetary output. However, the multiple regressions analysis
showed that the Ministry of Finance support was the most dominant
independent variable that explained most of the variation in budget
expansion.
CHAPTER I

INTRODUCTION

Purpose of the Study

Governmental budgeting involves processing a complex series of social and political factors. Those who create budgets assume that a direct link will exist between the users of the funds as enumerated in the budget and future events. Hence, the budget might be conceived of as a model of intended behavior: a prediction. The budget thus becomes a means of integrating financial resources and human behavior to accomplish policy objectives.

The governmental budgetary process throughout the world evokes theoretical and empirical questions such as: Theoretically, what behavioral and organizational theory(s) might explain the budgetary process? Empirically, what are the major characteristics of the process? How do the process participants formulate the budget? And what roles and strategies will they assume?

Government budgets result from a plan of action in which different groups play different roles according to each group's position within the organization. This notion suggests the plausibility of adopting the theory of Role Behavior which the behaviorists define as:

...."The recurring actions of an individual, appropriately interrelated with the repetitive activities of others so as to yield a predictable outcome. The set of independent behaviors comprises a social system or subsystems....or
a stable collective pattern in which people play their parts."

The role behavior theory provides a theoretical foundation from which to explain and to predict the behavior of the participants in governmental budgetary processes. On the basis of the role behavior theory, Wildavsky postulated a general pattern of behavior in governmental budgetary process no matter where it is practiced. This general pattern of behavior consists of:

1. **General Strategic Behavior**

   Strategic behavior refers to the methods which the major budgetary participants utilize to get their ways. Apart from environmental or political differences, any governmental budgetary process includes two groups or participants:

   a. **The administrative agencies** advocate increased expenditures and object budget to cut, or at least struggle to maintain the budget base. Since any administrative agency struggles to have more money in order to survive and expand, this pattern of behavior exists in any budgetary environment.

   b. **The central control organs** act as guardians of the public treasury. Since these groups know that the administrative agencies will continue to press for increased expenditures and that government sources are limited, they cut and trim in order to keep spending within boundaries of revenues. This general

---


pattern of behavior is widespread in any environment.

(2) The Degree of Complexity in the Calculations

Complexity exists in any governmental budgetary process, and budget participants in any environment adapt what is referred to as "aids to calculations" in order to overcome this complexity. They simplify decision making by proceeding from a historical base in order to concentrate on proposed new increments. Also, padding, across the board cuts, and increasing spending at the end of the year are general patterns of behavior in any governmental budgetary process.³

Wildavsky pointed out that the environment of each country influences the characteristics of budgetary process in that country and hence, alters the behavior of the major participants in that process from the general pattern. The most important factors which shape this environment are: political institutions, size, elite values, economic wealth, and financial predictability.⁴

Although the differences in sizes, political institutions, and elite values among countries might alter the behavior of budgetary participants, these differences are considered relatively small in comparison with the effect of economic wealth and financial predictability. In this context, Wildavsky argued that the combination of economic wealth and financial predictability control all other variables. This argument is based on the assumption that wealth and predictability, as well as poverty and uncertainty, homogenize behavior.⁵ For example,

³Ibid., p. 9.
⁴Ibid., p. 10.
⁵Ibid., p. 11.
there are common budgetary characteristics in the United Kingdom and in the United States, even though these two countries differ in their size, in their political institutions, and in their elite values. On the other hand, there are sharp differences in the characteristics of the budgetary processes in the United States and in India.

In another example, Wildavsky argued that the characteristics of the budget process in the Soviet Union at macro level are similar to those in rich, Western nations even though there are extremely sharp differences in their political institutions. He based this argument on the fact that wealth and predictability determine the main features of the budgetary process in the Soviet Union and in other Western nations. This assertion does not mean that the budgetary processes are identical in the same environment. As a matter of fact, when comparing the budgetary processes of nations having the same degree of economic wealth and financial predictability, one finds that differences in size, political institutions, and elite values have a major effect. So, economic wealth and financial predictability are considered the most powerful variables only for the purpose of comparing the characteristics of budgetary process in different budgetary environments.

Economic wealth refers to the availability of resources with which to finance the budgetary goals. Rich countries are those with economic wealth sufficient to finance needed programs. Poor countries have precisely the opposite conditions.

Financial predictability refers to the ability to anticipate

---

6 Ibid., p. 18.
7 Ibid., p. 10.
flows of available resources in relation to spending commitments. Certain countries have the ability to calculate the flow of expenditures and revenues, or both, in the immediate past and to project them into the near future. Uncertain nations have precisely the opposite conditions.8

In order to draw a line between rich and poor, and certain and uncertain countries, one must define operationally the economic wealth and financial predictability factors. The per capita gross national product has been used in economics as a leading indicator of the degree of economic wealth in a given nation. So, a poor country is simply one with a per capita gross national product that is low relative to the present-day per capita national product of such nations as the United States, the United Kingdom, and the nations of most of Western Europe. Thus, economic wealth is a relative concept, and in order to define a given country as rich or poor, this country's per capita must be compared with a pre-determined scale for rich and poor countries. Wildavsky defined poor countries as those with per capita income of less than $900.00.9

Trying to distinguish between certain and uncertain budgetary environments is also difficult because of uncertain world conditions, and there is no pure budgetary system where future revenues and/or expenditures are consistently and accurately forecasted. But, in general, the certain budgetary environments are those where future revenues and/or expenditures are projected with a high probability of

8 Ibid., p. 10.

9 Ibid., 136.
occurrence. The uncertain budgetary environments are those where future revenues and/or expenditures are projected with a low probability of occurrence. A given high and low probability of occurrence is a relative concept, and in order to determine whether a given budgetary environment is certain or uncertain, one must compare the forecasting ability of the system to project the revenues and/or expenditures with a predetermined certain environment, such as the United States. The uncertain budgetary environments have common attributes, such as lack of sufficient information, lack of educated and trained personnel, lack of political stability, lack of diversification of sources of revenues, and lack of administrative capability. 10

Under this wealth and predictability model, four categories of budgeting environments can occur:

1. Rich and certain environments (RCE)
2. Poor and certain environments (PCE)
3. Poor and uncertain environments (PUE)
4. Rich and uncertain environments (RUE)

The existing theoretical and empirical research in the governmental budgetary process concludes that each budgetary environment has common characteristics. 11 RCE refers to a budgetary system which has the ability to mobilize sufficient resources or to control expenditures, or both, and which has the ability to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into

10 Ibid., p. 138.
11 Ibid., pp. 9-12.
the near future. The budgetary processes in the United States, the United Kingdom, France, Germany and other Western nations are examples of this budgetary environment. According to Wildavsky, the budgetary process in these countries classified as rich and certain is incremental. Past decisions serve as bases from which future expenditures are determined, and the budgetary processes are concerned with adding or subtracting a small percentage (increment) to or from the existing base.

PCE refers to a budgetary system which is unable to mobilize sufficient resources, but which has the ability to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary process in most American city governments is the best example of this budgetary environment. Most American cities are in a poor resource position, but they have sufficient financial predictability. The budgetary process in this environment becomes a whole revenue control - orientation due to the poor resource position. City officials are aware of the needs of the city, but they must compromise their needs considerably in the fact of limited resources. So, the budgeting process in the poor and certain environment is revenue oriented because income determines expenditures.

PUE refers to a budgetary system which is unable to mobilize sufficient resources (because of the lack of resources) or to control expenditures, or both, and which is unable to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary process in India, Pakistan,
Egypt, and other poor countries is an example of this budgetary environment. The poor and uncertain nations employ a budgetary process of repetition. Poverty leads them to delay expenditures to insure that their financial resources are not depleted, whereas uncertainty causes them to reprogram funds repeatedly in order to adjust to rapidly changing conditions. So, the budgetary process in poor and uncertain environments can be characterized as repetitive budgeting.

Figure 1 summarizes the characteristics of the budgetary process of the three classes.\(^\text{12}\)

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However, the fourth class, those countries with rich and uncertain environments, remains more elusive to the investigator. As one authority on governmental budgeting states:

"Budgetary processes falling in the rich and uncertain box will not be discussed....because I have not been able to find accounts of contemporary governments with those characteristics."\textsuperscript{13}

This author contends that a government exists with sufficient wealth and environmental uncertainty to be classified in the fourth category. Namely, such a government exists in Saudi Arabia, where the oil revenues available to the government are abundant, but the predictability of future funds is uncertain. Saudi Arabia does not possess the productive factors of manufacturing, agriculture, and banking which make the United States, the United Kingdom, and France wealthy countries. However, Saudi Arabia has a high current income, which categorizes it as a wealthy nation. But this wealth is generated mainly from one source, namely: the oil industry. So, Saudi Arabia possesses the financial resources (per capita income of \$15,700), but does not have the ability to calculate the flow of expenditures in the immediate past nor to project them into the near future. Therefore, the characteristics of the budgetary process in Saudi Arabia differ from those in poor countries (those without money) and in rich countries which are certain about their budgets.

The purpose of the study is to examine empirically the characteristics of the governmental budgeting process in which the environment is uncertain but where the government is rich.

\textsuperscript{13}Ibid., p. 11.
Statement of the Problem

What are the characteristics of the governmental budgeting process when the government is rich but the environment is uncertain? To facilitate the investigation of this question, the study is organized into the following four phases.

Phase I

The existing theoretical explanations of the governmental budgetary process in any country regardless of the existing environment within that country are examined.

Phase II

Those empirical works are reviewed that deal with the characteristics of budgetary processes in the first three classes of budgetary environments, namely: RCE, PCE and PUE.

Phase III

The characteristics of the budgetary process in rich and uncertain environment are examined empirically. This phase involves the following stages:

Stage 1

A description and analysis of the role of the major participants in the Saudi Arabian governmental budgetary process;

Stage 2

An empirical examination of the characteristics of Saudi Arabian governmental budgetary process;

Stage 3

The development of preliminary recommendations for the
improvement of the Saudi Arabian governmental budgetary process.

Phase IV

The characteristics of the budgetary processes in rich and uncertain environment are compared with the other three classes of budgetary environments.

As shown in Figure 2, some of these phases have been investigated by previous researchers. Others will be examined by this study.

Justifications and Contributions of the Study

The last decade has witnessed an increasing interest in the accounting for not-for-profit (NFP) organizations. The American Accounting Association (AAA), through its difference committees, has issued several reports related to NFP accounting theory. The American Institute of Certified Public Accountants (AICPA), through the Financial Accounting Standard Board (FASB) and the Auditing Committees, has issued sundry NFP accounting and auditing guides. Furthermore, FASB, with the cooperation of the National Committee on Governmental Accounting, has moved toward establishing pragmatic accounting standards for NFP organizations. In spite of the developments in the last decade,

Figure 2.

Illustration of the Four Phases of the Study

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the accounting for NFP organizations is still a neglected area in accounting literature.

Accounting for NFP organizations could be categorized as "business-type" or "government-type." The activities of these types have been defined by AAA Committee on Accounting for not-for-profit organizations as:

"Business type activities are those that are intended to be self-supporting (or largely so) through time. Though the capital required to establish or expand such activities may be provided in various manners; e.g., by donation, grant, general debt issue, or intraunit transfer - their routine operations, at least are financed through consumer or user charges....government-type activities are those typically associated with the "general government" or other not-for-profit purposes and objectives of the unit."\(^{15}\)

The Accounting for Business type is more fully developed than the government type. This phenomenon could be attributable to the resemblance of the business type to profit-oriented organizations. Traditionally, budgets or budgeting has been investigated in accounting literature within the business environment. This practice could be based on the assumption that generalizations about budgeting can be formulated to apply to both public and private spheres. Dahl and Lindblom have maintained the position that there is a continuum or continuums between public and private agencies.\(^{16}\) This study takes the position that budgeting in the governmental sphere should be studied separately for

\(^{15}\) Committee on Accounting for Not-For-Profit Organizations (1972-1973), p. 225.

the following reasons:

First, the environment of the business would contain elements that have no counterparts in the environment of most public sectors.

Second, the pervasive notion in the existing literature is that budgeting or budgets play a greater role in the public sphere than in the private sphere. This notion is attributable to the nature of government environment. The amount of resources available for government is bound only by the sum of all resources in the society. On the other hand, the private sector is constrained by a relatively fixed set of available resources. Also, private sector activities are characterized by the profit motive, while government activities are not. Therefore, governmental budgets have become a method to communicate government endeavors to all citizens.

Third, understanding the governmental budget is essential to government accountants in order to provide public administrators with the relevant information for decision making. This point could be illustrated by Ball's recent article on government accounting:

"...'The government accountant is providing information for public administrators within a political context. Adequate functioning in this area presupposes a knowledge of the conduct of public administration and some understanding of political behavior. There is, for instance, a substantial body of literature explaining the behavior of various groups within the budgetary process in government. This examines alternative strategies adapted by departments and the response of the Treasury and of the Government. If an accountant is to be involved in the budgetary process in government, such knowledge would seem to be essential to him as is literature which examines
the mentioned aspects of standard-setting in the private sector."\textsuperscript{17}

\textbf{Fourth}, budgetary practices are clearly accounting and must be performed by the profession; otherwise the quality and credibility of the data accumulated, analyzed, and used suffer.\textsuperscript{18}

The study of governmental budgeting is a study in behavioral and governmental accounting. The economy of a country is greatly influenced by the budgetary actions of that country's government. Governmental budgeting is the major process through which the planning and controlling of public resources are determined. Comprehensive planning provides guidance for the allocation of economic resources. Budgetary activity enables the plan for the public sector to be directly implemented, while through a system of incentives and disincentives, budgetary activities indirectly influence private consumption, savings, and investments. Written budget proposals are essential to communications, discussions, revisions, and documentation of plans by those concerned with and responsible for the planning. Also, governmental budgeting is widely used as a control device. The budget enables the departments and chief executives to keep the expenditures within the limitations imposed by the Legislatures. Finally, the budget is used for the purpose of the evaluation of the effectiveness of governmental programs.\textsuperscript{19}

\textsuperscript{17}Lan Ball, "Government Accounting," \textit{Accountants Journal}, February 1979, pp. 12-14.


step in fulfilling these functions is to understand the budgetary process itself and to apply its characteristics in order to make it function effectively.

Since the purpose of this study is to investigate the characteristics of the budgetary process in rich and uncertain environments and to compare the characteristics of this process with those of the other three classes, the results of this study should contribute toward constructing a theory of governmental budgeting. Moreover, it is hoped that this study will fill a gap in the literature of governmental accounting.

Because of the continuous and rapid increase in Saudi Arabian governmental activities, the decision-making process has become very complex. Consequently, relevant information is more essential now than ever before for anticipating the most desirable results of any decision. Such information is not generated by the traditional Saudi Arabian budgetary process. So, an auxiliary contribution of this study is to evolve recommendations which may help in improving the governmental budgetary process in Saudi Arabia. Furthermore, the results of this study will be useful to accounting practitioners and educators in rich and uncertain countries in general and in Saudi Arabia in particular.

Limitations of the Study

Although the purpose of this study is to investigate the characteristics of the governmental budgetary processes in rich and uncertain

environments, the study will be limited to the Saudi Arabian governmental budgetary process. The reason for this limitation is because of the unavailability of data except for data available from the records of the Saudi Arabian government.

This study will be limited to the opinions of those interviewed in the study sample, the various budget participants. The study was made possible through the cooperation of the Ministry of Finance and other government organizations of the Saudi Arabian government.

Scope and Organization of the Study

This study contains five chapters - Introduction, Literature Review, Methodology, Results, Summary and Conclusion. The first chapter - The Introduction - includes the purpose of the study, the statement of the problem, the justification and the contributions of the study, limitations of the study, and the organization of the study.

In order to furnish a background for this study, the second chapter provides a review of the related literature. In particular, this chapter discusses the theory that explains the governmental budgetary process in any country regardless of the existing environment within that country, summarizes the major budgetary reforms in governmental budgetary process with emphasis on the rich and certain environments, and reviews the major empirical contributions in the three classes of budgetary process.

The third chapter states the research hypotheses and outlines the methodology. The fourth chapter details the empirical research. The Summary, conclusions, and recommendations are stated in the final chapter.
CHAPTER II

REVIEW OF LITERATURE

Governmental Budgetary Process: Historical Development

The main objectives of reviewing the historical development of the governmental budget are twofold:

1. To provide the accounting profession and academia with a synopsis review of the recent development in governmental budgetary process with emphasis on the major reforms in rich and certain environments.

2. To compare the governmental budgetary reforms in Saudi Arabia with other reforms in other countries as well as to furnish a basis for the study recommendations.

A substantial part of governmental budget literature is concerned with reforms. The need for better budgeting is the principal reason for this concentration. Governmental budget reforms in the United States of America - resembling RCE have passed through three different stages of development: control-oriented, management-oriented, and planning-oriented. In the first stage, dating roughly from 1920-1935, the dominant emphasis was on accountability. In the second stage, dating roughly between the 1930's and the 1960's, the emphasis was on efficiency in the government. The final stage, which occurred during the 60's and 70's, emphasized the multipurpose budget system.

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(1) The Era of Fiscal Control (Input Cost)

Traditionally, governmental budgeting all over the world begins with indispensable efforts to promote "accountability" by emphasizing the control over administrative spending abuses. In other words, the budget has been considered primarily a financial and accounting device, in which input cost is the major feature of the budget. The means of achieving tight control over input costs was to appropriate by line item, or object of expenditure, rather than upon the accomplishments of governmental activities.¹

A unified national budget was the first major reform in this era. In the United States, the first decade of the twentieth century witnessed the struggle to establish a unified national budget. Up to that time, the United States budget was simply a compilation of departmental requests for funds. Most writers credited the changes in economic conditions for this reform. Others believe that the success of local governmental experiences with a unified budget, such as in New York and Ohio, was the major factor for prompting the national unified budget idea. The Taft Commission (1912) recommended the need for a national budget, but it was not until the Budget and Accounting Act of 1921 that the new federal system was established. This system involves establishing a national unified budget with new forms of auditing and control. Also, the system involves a standard periodic budget cycle.² The unified national budget was also the major reform in other countries.

For example, the English Consolidated Fund Act of 1787 established a complete account of revenue and expenditure. In France, the budgetary system was established in 1831.  

The second major reform in this era was the "balanced budget," Balanced budget was considered to be the core principle in good fiscal policy. Gross stated that the reason for this belief is that it provides a "hard-nosed" criterion for decision making by budget rationalists.  

The other reforms in this era can be categorized as additions to the financial audit activities and to the centralization of budget preparation. Those reforms were used to insure that money had in fact been spent for the item authorized in the budget.

Theoretically, the majority of the writers in the early part of this century criticized the budgetary system which focuses on input cost. They regarded input cost as subsidiary data, to be included for informational purposes only. Instead, they promoted the budgetary system which is based on functional classifications. This system would focus on the work to be accomplished. The Taft Commission in Economy and Efficiency (1912) is the best example of a proponent of the functional classification system which focuses on program results instead of fiscal control. Other examples of the proponents of program results can be seen in the writings of Fredrick A. Cleveland (1910), Paul T.  

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5 Allen Walker Steiss, Budgeting and Management (Lexington: Massachusetts, Lexington, 1972), p. 150.
According to Steiss, most of the early efforts to develop functional classification were relatively unsuccessful. The reason for their failure was that functional classification did not provide adequate protection against administrative improprieties.

(2) The Management Orientation (Input related to Output)

The second stage of budget reforms was initiated to affect the problems of fiscal control reforms. This stage is characterized as management orientation. The major emphasis was on the efficiency with which ongoing activities were conducted. In other words, this stage was concerned with efficiency instead of fiscal control in the government. According to Gross, the idea behind this movement was that any government agency should know what it has done, is doing, or wants to do with the inputs it uses.

In the United States, the management orientation stage was officially inaugurated by the 1949 Commission on Organization of the Executive Branch of the Government, known as the First Hoover Commission. The Commission recommended that the federal budget be "based upon function, activities, and projects." This recommendation is best known as "performance budget." The Commission report stated:

"...We recommend that the whole budgetary concept of the federal government should be refashioned by the adoption of a budget based upon functions, activities, and projects; this we designate a performance budget. Such an approach would focus attention upon

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6 Lee and Johnson, Public Budgeting System, p. 103.
7 Steiss, Budgeting and Management, p. 151.
the general character and relative importance of the work to be done, or upon the service to be rendered, rather than upon the things to be acquired, such as personal services, supplies, equipment, etc. These latter objects are, after all, only the means to an end. The all important thing in budgeting is the work or the service to be accomplished, and what the work or service will cost.⁹

Although performance budget had numerous theoretical appeals, practically it faced numerous problems. And by the early sixties, the performance budget movement had begun to slow down. Some authors believe that performance budget failed because it required a large amount of data without establishing an adequate information system. Others attribute its failure to the negligence of middle management. Gross attributed the failure of performance budget to the following reasons:¹⁰

(a) The Hoover Commission failed to recognize the greater ease of output, identification, measurement, and costing in programs associated with hard goods.
(b) Governmental budget areas failed to focus on the problem of intangible output.
(c) Costing was both incomplete and clumsy.

(3) Mulipurpose Budget Systems

The 1960's and 1970's witnessed significant budgetary reforms. Planning-Programming-Budgeting System (PPBS) caught the attention of the reformers, but by the early 1970's it lost much of its luster.

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¹⁰Gross, "The New System Budgeting," p. 120.
Then Management by Objectives (MBO) and Zero-Base Budgeting (ZBB) were introduced as alternatives to the controversial PPB System.

(A) PPB System

Much has been written about PPBS, but there is no complete agreement in the literature as to what PPBS is. This could be attributed to the circumstances surrounding the PPB development and implementation process in a real and specific organization.\(^{11}\) Wildavsky defines PPBS as:

"...Program budgeting has no standard definition. The general idea is that budgetary decision should be made by focusing on output categories like governmental goals, objectives, and products or programs instead of inputs like personnel, equipment, and maintenance. As in cost-benefit analysis, to which it owes a great deal, program budgeting lays stress on estimating the total financial cost of accomplishing objectives."\(^{12}\)

David Novick, as the father of PPBS, considers PPBS to be a management system with the following features:\(^{13}\)

1. Definition of objectives
2. Determination of programs
3. Assignment of activities to programs
4. Establishment of plan/program budget role
5. Development of cost/benefit methods
6. Identification and evaluation of alternatives

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(7) Development and application of criteria
(8) Use of existing reporting system
(9) Updating of programs

Gross pointed out that most proponents and defenders of PPB are in agreement about what PPBS is not:

- It is not dependent upon right mathematical models of computed calculation.
- It is not a system for replacing human judgment.
- It does not deal directly with such sector-proportion questions as the relative emphasis placed upon health vs. education, transportation vs. communications, or military vs. civilian expenditures.\(^{14}\)

In summary, the main thrust of the PPB System is to introduce analysis in the governmental budgetary process and thereby to improve policy making. The majority of the industrial nations have experienced the PPB System in one form or another. In the United States, the experience with planning in budgeting goes back to the first of this century. Planning in budgeting was first implemented in the Borough of Richman, New York City, for the period 1912 – 1915. The concepts were also tried for a short period of time in the Agricultural Department during the 1930's.\(^{15}\)

PPB System was implemented officially in the civilian agencies in August 1965, when President Johnson announced that all federal agencies should implement program budgeting (PB). The Program and Financial Plan (PFP) is the major component of the civilian system. Changes in the PFP were made through Program Memoranda (PMs) and special


\(^{15}\)Lee and Johnson, Public Budgeting System, p. 106.
Analytical Studies (SASs). By June 21, 1971, the PPB System in
civilian agencies was officially abandoned. The PPB System was also
tried in some state and local governments, but few states have achiev­
ed considerable progress.  

Schick in his famous article "Death in the Bureaucracy" out­
lined the causes of the PPB System failures in the United States as:  

(1) The manner in which they were introduced, across-the-board
and without much preparation.

(2) The insensitivity of new men of power to budgetary tradi­
tions, institutional loyalties, and personal relations.

(3) Inadequate support and leadership.

(4) Inadequate supply of good analysts and data.

Schick observed that:

"Even if the leadership, data, analytical
 capability, resources and support, interpersonal
 and institutional sensitivity, and all of the
 factors which worked against PPB had been
 favorable, there still would have been the
 anti-analytical thrust of the budgetary process
to contend with."  

The roots of the PPB System in the United Kingdom go back to the
middle 1950's. But it was not until October, 1970, that the Reorgan­
zation of Central Government declared the establishment of PPB in
governmental budgetary process.

The English system consists of three documents.

(1) The Public Expenditure Survey (PES) provides broad alloca­
tion of the public resources and established priorities within

16 Ibid., pp. 12-47.
17 Allen Schick, "Death in the Bureaucracy: The Demise of Federal
18 Ibid., p. 148.
these resources in a systematic and comprehensive manner.

(2) Program Analyses and Review (PAR) provides a penetrating analysis of the purposes intended to be served by the programs and of their effectiveness in the light of alternatives.

(3) Central Policy Review Statement (CPRS) assures an overall coherence with government policy.\(^{19}\)

In France, the "rationalization of budget choices," "rationalization des choix budgetaires" (RCP), was officially adopted at the beginning of 1968. The RCP meant the adoption within the administration of a coherent approach to the preparation, execution, and control of decisions at each level of responsibility.\(^{20}\)

Australia, Canada, Belgium, Japan, New Zealand, and Austria have incorporated some features of PPBS into the budgetary process, but in general these efforts have faced the same problems as in the United States.\(^{21}\)

(B) Other Budget Reforms

By the mid 1970's, the PPB System movement was sluggish, and other systems were introduced in order to improve the governmental budgetary process. In the United States, Management by Objectives (MBO) and Zero-Base Budgeting (ZBB) were the major contemporary budget reforms.

The main theme of MBO is the setting out of specific objectives

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for agencies and requiring high level periodic reports on the progress toward achieving these objectives. MBO was first introduced at the beginning of the second term of the Nixon administration. MBO, unlike PPBS, was not done through regulations, but it was encouraged strongly by the Office of Management and Budget (OMB). Even though the MBO was short-lived and died with the Nixon administration, it improved many departmental budget procedures. 22

Zero-Base Budgeting (ZBB) has its roots in the private and public sector. Much of the literature dealing with ZBB focuses on defining it and describing its procedures. In general, the main theme of ZBB is constructing a budget without any reference to what has gone before. In other words, the current spending level is not regarded as an inviolate base.

ZBB is considered a new budget reform but its spirit goes back to the industrial revolution. The U. S. Department of Agriculture used ZBB in 1964 for a short period of time. The application of such budgeting was abandoned because it was considered expensive and time consuming. The concept was resurrected in the private sector at the beginning of the 1970's. Peter A. Pyhrr used it successfully in Texas Instruments. Since then, the popularity of the concept has been widespread. According to Barton and Waldron, over one hundred companies have embraced the concept of ZBB including Allied Van Lines, Westinghouse, and Zerox. 23

The main purpose of the adoption of the concept in the private sector

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23 Frank Barton, Jr., and Darryl G. Waldron, "Zero-Based Budgeting: Is It New, or Unique?," "The Woman CPA" (January 1979), pp. 15-16.
was to control overhead activities. In the public sector, the concept was also resurrected by Jimmy Carter in the State of Georgia, and his example was followed by other states. In the federal government, ZBB was implemented by President Carter in the fiscal 1979 budget.

The Theory of Governmental Budgetary Process

Since the early part of this century, scholars in governmental budget have called for a general budget theory or a normative theory regardless of the budgetary environment. Writing in 1940, V. O. Key saw the basic budgetary problem focused around the question of: "On what basis shall it be decided to allocate X dollars to activity A instead of B?" Key continued, "The completed budgetary document represents a judgement upon how scarce means should be allocated to bring the maximum return in social utility."24 The main thrust of Key's article was to call for a general theory that would help in deciding the merits of various requests for scarce resources. Since this article, several attempts have been made to meet Key's challenge. Examples of these attempts can be found in the writings of Verne B. Lewis, Arther Simithies, Paul A. Samuelson, Herbert S. Mitchell, Harry Hardy and John Callon.25


Verne B. Lewis (1952) agreed with Key's notion and attempted the construction of a normative economic theory of budgeting. He suggested three propositions:

(1) The economic test, which specifies that the return from every expenditure must be worth its cost in terms of sacrificed alternatives, must be applied in choosing among comparative alternatives.

(2) When additional expenditure for any purpose yields the same return, incremental analysis becomes necessary and useful in budget decision making.

(3) The relative merit of different programs can be compared in terms of relative effectiveness in achieving common objectives.

Another attempt to construct normative budgetary theory can be found in the suggestions of Hardy and Callon (1967). They stressed the need to compare alternative programs and their costs and the use of marginal utility as a tool in comparing comparative programs.

Although the above scholars' attempts to construct a normative budgetary theory have significant logical justifications, their attempts have been unsuccessful so far. The reason for this failure is the emphasis on the development of ideal criteria for optimum resource allocation without consideration of the real environments. In this context, Wildavsky argued that trying to develop a normative theory which emphasizes how to allocate scarce resources to alternative

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purposes, is "a tantamount" to a theory of how the government should act in every particular situation. Wildavsky observed

"...A theory that contains criteria for determining what ought to be in the budget is nothing less than a theory stating what the government ought to do, it becomes clear that a normative theory of budgeting would be a comprehensive and specific political theory detailing what the government activities ought to be at a particular time. A normative theory of budgeting, its accomplishment and acceptance would mean the end of conflict over the government's role in society."28

As an alternative to the normative theory, Wildavsky suggested the development of a descriptive budgetary theory. Such a theory involves empirical research in how budgeting actually happens in a specific environment. Wildavsky argued:

"...The point is that until we develop more adequate descriptive theory about budgeting, until we know something about existing situations in which the participants find themselves under our political system, proposals for major reform must be based on awfully inadequate understanding."29

Wildavsky's view has promoted empirical research in the reality of doing the budget. The major contribution of this body of research has been the development of descriptive models to guide the decision making process in a given budgetary environment.30 Theoretically, the

29Aaron Wildavsky, "Political Implications of Budgeting Reforms," Public Administration Reviews
manner in which budget decisions are made, or "should be" made
(The budget decision models), has created a substantial controversy
in budget literature. At one extreme is the rational comprehensive
model; at the other extreme is the incremental model. Between the two
extremes are the sacrificing and stages problem-solving models. These
models can be visualized in Figure 3.

Figure 3.

Continuum of Budget Decision Making Models

The rational comprehensive model

The incremental change model

The stage problem solving model

The sacrificing model

1. Rational Comprehensive Model

The decision making models vary according to their assumptions
about the objectives of decision making and the capacity to utilize
information. The underlying assumption of the comprehensive model, as
the name implies, is the utilization of scientific procedures in budget
decision making. The scientific procedures involve performing a series
of ordered and logical steps in making a particular decision. Often-
cited steps are: 31

(1) Specify a complete set of an organization's goals.

(2) Rank those goals in priority order.

(3) Identify all possible alternatives.
(4) Determine the cost and benefit of each alternative.
(5) Calculate the probability of occurrence of each action.
(6) Compare the possible alternatives on the basis of cost/benefit and their probability of occurrence.

The rational model requires a perfect determination of goals, the optimum knowledge of all alternatives, the calculation of specific costs and benefits, and scientific processes in selecting among competing alternatives. Even though these requirements appear to be ideal and logical procedures for decision making, their applicability in governmental budgeting is limited. In fact, the capability to meet even one of these requirements is non-existent in any government. So, the comprehensive model is based on an ideal environment and ignores the real world situation. This shortcoming is the core criticism of the comprehensive model. In this context, Lindblom criticized the comprehensive model of decision making on the grounds that it involves many problems, namely:

(1) Impossibility of specifying the goals of society.
(2) Impracticability of researching all possible alternatives.
(3) Nonfeasibility of choosing the appropriate criterion for selecting the "best" alternative.

Lindblom attributed the existence of these problems to the limits of human intellectual capacities and to a scarcity of available information. These limits lessen man's capacity to be comprehensive. Also, politics limit the power of the decision maker. Furthermore, the cost of generating perfect information and of determining scientific
analysis is tremendous. Finally, the limitations of time hinder comprehensive analysis. 32

In the same line of thought, Wildavsky attacked the comprehensive model on the grounds that it does not represent the real environment of budget decision making. He stressed that most budget decisions are politically motivated and that they are not based on pure rationalization like the comprehensive model. 33

2. Increment Model

At the other extreme of the budgetary decision making continuum is the incremental model or "muddling through." This model was introduced by the critics of the comprehensive model, such as Lindblom, Dahl, Wildavsky, and others. Dahl and Lindblom define incrementalism as:

"...a method of social action that takes existing reality as one alternative and compares the probable gains and losses of closely related alternatives by making relatively small adjustments about whose consequences approximately as much is known as about the consequences of the existing reality." 34

Wildavsky defines the incremental model as follows:

"...Budgeting is incremental, not comprehensive. The beginning of wisdom about an agency budget is that it is almost never actively reviewed as a whole every year in the sense of reconsidering the value of all existing programs as compared to all possible alternatives. Instead, it is based on


last year's budget with special attention given to a narrow range of increases or decreases. Thus, the men who make the budget are concerned with relatively small increments to an existing base. Their attention is focused on a small number of items over which the budgetary battle is fought.35

The main feature of the incremental model, as these two definitions illustrate, is the assumption that budgetary decisions are political. These decisions are not made in a comprehensive and rational manner, but rather by a succession of incremental changes, "political bargain." The incremental model involves two important concepts: the base and the increment. The base or status quo means the present or the initial condition prior to the decision, while the increment means the portion that is only slightly different from the initial situation as a result of the decision. So, the decision maker, according to the incrementalism view, focuses only on marginal or incremental values. The justification for this assumption is based on the reality of budget decision making. Since the decision making involves various interest groups with conflicting goals and values, these groups are expected to bargain for changes or at least to maintain the existing situation.

The advocates of the incremental model stress the advantages of the model as a tool for budget decision making. Often-cited advantages are:36

1. Marginal adjustment can be judged on the basis of experience and reasonable prediction.

2. The decision making process is simplified.


(3) Social values will not be neglected since the decisions are normally agreed upon among interested parties.

There are major differences between the comprehensive and incremental models. While the comprehensive model involves the process of optimization, the decisions in the incremental model are based only on the interest group's satisfaction. Also, all possible alternatives in the first model must be well identified; the alternatives in the second model are only marginally different from unsatisfactory situations. Moreover, the decisions in the first model are based to some degree on a consensus of all interested parties.  

3. Satisficing Model

The satisficing and the stages of the problem-solving model are rarely discussed in the literature. The satisficing model involves the following steps, namely:

(1) Developing a criterion to judge acceptable policy alternatives for a given problem.

(2) Searching for the available alternatives.

(3) Selecting the first discovered acceptable alternative.

The major feature of the satisficing model is that it recognizes the time limitation which imposes upon the decision maker in the comprehensive model. So, as a practical solution, the decision maker chooses the first acceptable alternative. The main obstacle to this model is that the satisfaction stage is subject to judgment and difficult to achieve.

37 Wanat, "Introduction to Budgeting," p. 115.
4. **A Stage Problem Solving Model**

The stage problem-solving model follows the same steps as scientific research methodology.  

1. Recognizing the existence of specific problem. 
2. Defining the problem. 
3. Identifying all the possible alternatives. 
4. Collecting the information 
5. Testing the proposals. 
6. Taking action and evaluating outcomes. 

The main difference between this model and the comprehensive model is that the comprehensive model is limited to deciding on a given matter based upon maximizing goals, while the stage of the problem-solving model is aimed toward solving a specific problem.  

**Empirical Studies of the Governmental Budgetary Processes in a Given Environment**

A substantial part of the empirical researches in the governmental budgetary process are concerned with constructing a descriptive model of the decision making in a given budgetary environment at a given period of time. In other words, the emphasis was on the description of empirical reality rather than on the theoretical or normative concerns. The purpose of this section is to review the major empirical studies in each of the three budgetary environments (rich/certain, poor/certain and poor/uncertain). Paramount emphasis will be placed on those studies which

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38 Ibid., p. 22.

introduced a new methodology or modified an existing one.

1. Rich and Certain Environments (RCE)

Wildavsky (1964) has studied, in detail, the governmental budgetary process in the United States at the federal level (resembling RCE). The main focus of this study was to analyze the behavior of the major participants in the budgetary process. By utilizing unstructured interviews, Wildavsky found that the budget officials need to simplify, satisfy, and rely on feedback to cope with the budget. He also found that the attitudes of the major participants are fairly stable across time. He supported this notion with examples of "the fair share" and "base" attitudes toward budgeting which are widely held and perhaps often utilized in the budgetary process. The "fair share" of a budget to an agency is that portion of the total departmental budget it should normally be expected to receive. An agency's "base" is that level of expenditure which is not only currently received but can reasonably be expected to be received in the future.

Wildavsky argued that not only a limited number of alternatives are considered in the agency's budget, but normally this budget involves relatively small adjustments from an existing base. To illustrate this argument, Wildavsky analyzed the range of variation on the percentage of increase or decrease of appropriations as compared to previous years (or the magnitude of change in budgetary appropriation) for 37 federal agencies over a 12-year period. He found that almost a third of these cases (149 out of 444) show modifications of 5 percent or less. Slightly more than half of the cases (233) are in the 10 percent bracket, and just under three quarters of the cases (326) occur within 30 percent. By using 0 - 30 percent as a criteria
a criteria to define increment process, Wildavsky concluded that the budgetary process in the United States at the federal level is incremental and not a comprehensive process. Thus the budget participants are mainly concerned with relatively small increments to an existing base. 40

Wildavsky's study has opened the door to the contemporary behavioral budgetary research in the public sector. Since this important contribution, a number of empirical studies have been conducted in the federal, state, and municipal budgets in the United States and other countries. During the 1960's and 1970's, Davis, Dempster, and Wildavsky published a series of studies which formalized, extended and empirically examined the incremental concept in the governmental budgetary processes in the United States at the federal level. 41 In these series of studies, (1965, 1966, 1971, 1974) Davis, Dempster, and Wildavsky explained federal budget behavior through linear regression models. Specifically, they constructed a series of mathematical models which represents several decision rules for both the requestors group and givers group. For each series of requests or appropriations, they selected that rule which most closely represented actual behavior. The purpose of choosing


the best model is to provide a theory which describes the actual methods used in making budgetary decisions in certain kinds of organizations. Three decision models were proposed as representative of the behavioral rules for agency requests. One must be selected on the basis of which model accurately represents the behavior of the request group.

\[
X_t = B_0 Y_{t-1} + \xi_t \quad (1)
\]

\[
X_t = B_1 Y_{t-1} - B_2 (Y_{t-1} - X_{t-1}) + \xi_t \quad (2)
\]

\[
X_t = B_3 X_{t-1} + \xi_t \quad (3)
\]

Where \( Y_t \) represents the appropriation granted by the appropriation committees for any given agency for Year \( t \); \( X_t \) is the appropriation requested by any given agency for Year \( t \); the averages or mean percentage are represented by \( B_0, B_1, B_2 \), respectively; and \( \xi_t \) is the increment or decrement due to circumstances.

The first model (Equation #1) views the agency request for a certain year as a fixed mean percentage of the committee's appropriation for that agency in the previous year plus a random variable (normally distributed with mean of zero and unknown but finite variance) for that year. The random variable \( \xi_t \) represents the sum of the effects of all events, that is an increment or decrement to the usual percentage of the previous year's appropriation. This model is based on the assumption that the agency does not consider it desirable to make extraordinary requests which might be viewed with suspicion by the giver group. The second model (Equation #2) specifies that the agency request for a certain year is a fixed mean percentage of the committee's appropriation and the agency request for the previous year plus a
stochastic disturbance. This model is based on the assumption that the agency desires to smooth out its stream of appropriations by taking into account the difference between its request and appropriations for the previous year. The final model (Equation #3) specifies that the agency request for a certain year is a fixed mean percentage of the agency's request for the previous year plus a random variable. This model is based on the assumption that the appropriation committee has so much confidence in the agency that it tends to give an appropriation which is almost identical to the request.

Also three models were proposed as representative to the behavioral rules for the appropriations committee. Again one must be selected on the basis of which model most accurately represents the behavior of the givers group in response to any agency request.

\[
Y_t = A_0 X_t + \xi_t \tag{4}
\]

\[
Y_t = A_1 X_t + A_2 Y_{t-1} + \epsilon_t \tag{5}
\]

\[
Y_t = A_3 X_t + A_4 + \lambda_t + \zeta_t \tag{6}
\]

Where \(A_0, A_1, A_2, A_3, A_4\) are the fixed average percentages; \(\xi_t\) is the stochastic disturbance; \(\zeta_t\) is a stochastic disturbance representing that part of the appropriations attributed to the special circumstances; \(\lambda_t\) is a dummy variable which in year \(t\) represents: \(\zeta_t\) if equation (1) obtains, \(B_2 (Y_{t-1} - X_{t-1})\) if equation (2) obtains, and \(\zeta_t\) if equation (3) obtains.

The first model (Equation #4) specifies that the giver appropriation for an agency in a certain year is a fixed mean percentage of the agency's request in that year plus a stochastic disturbance. This
model is based on the assumption that an agency's request is relatively a stable index of the funds needed by the agency to carry out its program. The second model (Equation #5) specifies that the giver group appropriation for an agency is a fixed mean percentage of the agency's request for that year plus a stochastic disturbance representing a deviation from the usual relationship between the giver and the agency in the previous year plus a random variable for current year. This model is based on the assumption that the giver group denotes from the fixed mean (usual percentage) due to the suspicion that the agency is padding the current year request. The third model (Equation #6) specifies that the giver group appropriation for an agency is a fixed mean percentage of the agency's request for a certain year plus a fixed mean percentage of the agency's request for a certain year plus a fixed mean percentage of dummy variable plus random variable. This model is based on the assumption that some members of the giver group have intimate knowledge of the budgetary process of the agency.

In order to choose the best model which resembles the behavior of the requestor and giver groups, Davis, Dempster, and Wildavsky studied times series data for the period 1947-1963 for fifty-six non-defense agencies of the United States government. The major findings of these studies show that:

(1) The budgetary process of the United States government is equivalent to a set of temporarily stable decision rules.

(2) The most popular combinations of behavior are the simple ones represented by Equation #1 for the requestor group and #4 for the giver group.
(3) When the giver group was a sophisticated strategy such as Equation #5 or #6, the requestor group tends to use the simple strategy represented by Equation #1.

(4) When the giver group grants exactly the amount requested, the requestor group tends to use more sophisticated strategy represented by Equation #3.

Obviously these findings show that the budgetary process in the United States government can be characterized as an incremental process where this year's decisions basically rely on last year's decisions. In addition, the budget participants use simple original maneuvers; furthermore, these findings show that the behavior of the budgetary process follows quite a simple law despite the agreement on complexity.

Sharkansky (1965) studied the budgetary processes of the agencies of the United States Department of Health, Education and Welfare. He observed the variations in the agencies' budget strategies in this Department. So, he developed a model to explain these strategic differentiations. Although this study ruled out the plausibility of common strategical behavior among the different agencies, it confirmed the previous studies' conclusion that the budgetary process at the United States federal level is incremental in nature.42

Fenno (1966) analyzed 576 congressional appropriations for the period 1947-1962. He used two measures of change in the federal budget: (1) the relationships between agencies requests and Congressional

appropriations, and (2) the change in appropriations granted to a given agency from one year to the next. The findings of this study supported Davis, Dempster, and Wildavsky's conclusion, and stressed the fact that budgetary process at the federal level could be characterized as an incremental process.43

Natchez and Bupp (1973) investigated the governmental budgetary process of the Atomic Energy Commission. The unit of analysis was the program level instead of the whole agency budget. While they concurred with the previous researchers that the budgetary process is incremental for the entire agency's budget, they noticed the disappearance of incrementalism at the program level.44

Wanat (1974) drew a line between descriptive and explanatory incrementalism. He pointed out that for a phenomenon to be descriptively incremental, changes in the system have only to be marginally different from status quo. But for a phenomenon to be explained by incrementalism, reasons must be given for the marginality of change. So, he criticized the Davis, Dempster, and Wildavsky models on the grounds that the models concentrated on the descriptive rather than explanatory incrementalism. In order to explain the incremental increase on budget requests and the restriction of cuts to those requested increments, Wanat examined all general fund line-items in the regular Labor Department budget for the period 1968-1972. He found that the distinction between mandatory and incremental requests and the differential treatment

43Fenno, The Power of the Purse.

of those two kinds of requests by Congress was a good explanation of
the incremental changes in requests and appropriations. In a later
study, Wanat (1976) showed that the use of personnel in studying budget
relations yielded results different from those obtained by using
dollars data. In this study he analyzed data from the budget experi­
ence of twelve domestic federal agencies in the 1950s and 1960s. He
found that the correlation between the dollar requests and appropria­
tions were uniformly high. But the correlation between personnel
requested and personnel allowed for the same agencies were generally
lower than the comparable correlations on dollar data. He concluded
that when inflationary forces and some of the mandated increases are
removed, Congress acted more independently of agency requests than in
the dollar data. 45

Wildavsky (1975) observed that incrementalism is becoming institu­
tionalized in other rich nations. For example, in France the Parlia­
ment votes only on additions or subtractions from past totals and the
Ministry of Finance treats past commitments as if they were inviolable.
In England a new budgetary procedure has been adopted to make it more
difficult for old items to be taken out of the existing base. Incre­
mentalism is also practiced in Japan. The Ministry of Finance imposes
a 125 percent ceiling over the past year and the majority of the budget­
ary decisions are concentrated to this increment. 46

45 John Wanat, "Bases of Budgetary Incrementalism," pp. 1221-8, and
"Personnel Measures of Budgetary Interaction," Western Political Quar­

46 Wildavsky, Budgeting: A Comparative Theory of Budgetary
Based on the empirical researches in RCE, Wildavsky (1975) summarized the characteristics of the budgetary process as well as the behavior of the participants in this environment as:

1. The budgetary process in these countries classified as RCE is incremental in nature where past decisions serve as bases from which future expenditures are determined. Thus, the budgetary participants are concerned mainly with the changes from the existing base.

2. The participants in this environment use modest amount of strategic activities, since the relationships between them are highly determined and any gross departures from this expectation are easy to discover.

3. The budgetary process in this environment is the simplest in calculation comparing to other environments. Rich and certain nations generally budget by increments (last year plus or minus a certain percentage) so, the administrative agencies in these environments request certain funds with this relationship in mind. The central organ acts almost in the same manner. Hence, the budgetary process is very simple compared to the other environments.

II. Poor and Certain Environments (PCE)

Numerous studies have been conducted on the governmental budgetary processes at the local level resembling (PCE). Anton investigated the governmental budgetary processes of three cities in Illinois. He found that in each of the cities, agency heads

are instructed to base their spending requests on the estimated availability of revenue. So, the first step in formulating the city budget is to determine how much money will be available, rather than how much will have to be spent. Anton concluded that revenue constraint is the major feature of the budgetary process at the local level. 48

Barber (1966), in laboratory experiments, examined the governmental budgetary process of twelve boards of finance in Connecticut. He noticed the lack of comprehensiveness in the boards' decisions. Instead they relied on simplified techniques and criteria.

Crecine (1969), in a computer simulation technique, analyzed the budgetary process of three metropolitan governments (Pittsburgh, Detroit, and Cleveland). He concurred with Anton that the key feature of municipal budgeting is that the budget must be balanced to meet the revenue constraint. Also, this revenue constraint governs the behavior of the major participants in the budgetary process. 49

Caputo (1970), by utilizing open end interview format, studied the behavior of the major participants at various stages of the budgetary process in four medium-size cities (Midford and Bridgeport, Connecticut; and Chicapee and Springfield, Massachusetts). One of the main conclusions of this study was that the majority of the budgetary decisions were based on prior budgetary expenditures after they were justified on the basis of fund availability. He also concluded that the budgetary processes in these cities are basically political in nature.

so the behavior of the budget participants is best described as "gamesmanship," and the usual behavior pattern was one of compromise and negotiation.  

Meltsner and Wildavsky (1970) examined the nature of budgetary process of Oakland, California. They found that the most important characteristic of budgeting in Oakland is revenue behavior which results from financial constraints such as a balanced budget and shortages in revenues.

The characteristics of the budgetary process and the behavior of the participants in PCE was summarized by Wildavsky (1975) as:

(1) The budgetary process in PCE is revenue oriented due to the lack of resource positions. The budgetary participants in this environment are aware of their future needs; however, most of them compromise considerably in the fact of limited resources. Thus, the whole budget process in this environment becomes a revenue oriented and expenditures are determined according to revenue availability.

(2) The budgetary participants in this environment use least amount of strategic activities. Due to the lack of resources and certainty in predicting future funds, the budgetary relationships among participants are highly predictable; thus, any departure from these pre-determined relationships is easy to discover.

(3) Certainty in this environment creates simplicity in budget

---

calculations; however, poverty limits change in the budget's original base.

III. Poor and Uncertain Environments (PUE)

Caiden and Wildavsky in their book "Planning and Budgeting in Poor Countries" examined the major features of the governmental budgetary processes in poor and uncertain countries. They pointed out that the major feature of the budgetary processes in these countries is repetition. The basic reason for this phenomenon is extreme and extensive uncertainty which, when combined with severe scarcity of financial resources, narrow the time span of budget decisions and enforce the budget participants to renegotiate the budget throughout the year. The repetitive budget enforces the budget participants to enact in a complete series of strategic maneuvers. Thus, increases the complexity of the budget decision making process.  

Patton (1975) conducted an empirical study to examine the budgetary process of the Confederate States of America during the Civil War. The Confederacy resembled a poor and uncertain environment because the sources and quantities of revenues and thus expenditures were uncertain. The government had to deal with lack of information, few trained personnel and political instability as well as military problems. Thus, the Confederacy experienced budgetary poverty because of the inability to mobilize sufficient resources at the same time, the Confederacy experienced budgetary uncertainty because of inability to project the flow of either expenditures or revenues in the near future. This study concluded that the Confederate budgetary process was repetitive in terms of both requests and appropriations. The repetitive

\[\text{Caiden and Wildavsky, Planning and Budgeting in Poor Countries.}\]
budgeting encouraged strategic maneuvers to be used extensively by the budget participants and increased the complexity of the decision making process. Patton's major findings concurred with Caiden and Wildavsky's conclusions.\textsuperscript{54}

Wildavsky (1975) summarized the characteristics of the budgetary process as well as the behavior of the participants in this environment as:\textsuperscript{55}

(1) The poor and uncertain nations employ a budgetary process of repetition. Lack of sufficient resources leads the participants in this environment to delay expenditures in order to ensure that their financial resources are not depleted. In the meantime, uncertainty causes them to reprogram or repeat funds in order to adjust to rapidly changing conditions. Thus, the budget in this environment becomes meaningless and mainly repetitive of the previous years.

(2) The budgetary strategies are most used in this environment. The existing poverty and uncertainty increase the strategic activities among the participants. Since the administrative agencies are not sure of their needs and the control organ does not have the financial capability to grant these requests, the administrative agencies tend to exaggerate their request, knowing in advance that these requests will be substantially altered by the control organ.


(3) PUE has the most complicated budgetary process among all other environments. Poverty and uncertainty make it difficult for the budget participants to predict next year's budget. Any one financial year is likely to be quite different from last or next year's budget in terms of revenue and expenditures. Hence, the budgetary process in this environment becomes very complex in calculating the budget, and in many times most of the decisions are arbitrary.

IV. **Mixed Environment**

Wealth and certainty are mixed in different proportions in American States. Some have the characteristics of rich and certain environment and others are most like the poor and certain environment. At the state level, a number of empirical studies have been conducted to study the governmental budgetary processes. Anton (1967) investigated the budgetary process in Illinois for the period 1961-1963 by utilizing an open-end interview format. His conclusion supported the incrementalism approach to the budgetary process.56

Sharkansky analyzed the requests of 592 state agencies in 19 states. He concluded that the budgetary process at the state level is a combination of incrementalism and legislative dependence.57

Elmore (1978) in his study of South Carolina's budgetary process confirmed the notion of incrementalism in the budgetary process. One important attribute of Elmore's study is that he employed the aggregate data approach which was introduced by Davis, Dempster, and Wildavsky.

In addition, he utilized the descriptive analysis by Anton. In other words, he utilized the following tools to investigate the budgetary process.

1. Modification of Davis, Dempster, and Wildavsky's models to test the notion of incrementalism in the South Carolina budgetary process.
2. Modification of Anton's open-end interview to describe the role perceptions of major budgetary participants.

The major finding of Elmore's study is that incrementalism as a descriptive tool and as a bargaining process in South Carolina's budgetary process is retained, but incrementalism as an explanatory tool to provide reasons for the marginality of changes in budget outcomes is rejected. 58

In summary, Figure 4 outlines the characteristics of the budgetary process, frequency of strategic activities, and the degree of complexity in calculation for the classes of budgetary environments.

Since the budgetary process in rich and uncertain environments, to the knowledge of this researcher, has never been investigated, the present study is aimed toward examining empirically the characteristics of the budgetary process in this environment. This involves analyzing the role of the major participants in the budget of the Saudi Arabian government, and examining the major characteristics of the Saudi Arabian governmental budgetary process. Finally, the characteristics of the budgetary processes and the role of the major budgetary participants in rich and uncertain environments will be compared with those of the other environments.

Figure 4. The Characteristics of the Budgetary Processes, Frequency of the Strategic Maneuvers, and the Degree of Complexity in the Calculation for the Classes of Budgetary Environments.

<table>
<thead>
<tr>
<th>Economic Wealth and Financial Predictability</th>
<th>Characteristics of the Budgetary Process</th>
<th>Frequency of the Strategic Maneuver</th>
<th>Degree of Complexity in the Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Rich and Certain Environments</td>
<td>Incremental Budgeting</td>
<td>Moderate</td>
<td>Simple</td>
</tr>
<tr>
<td>(2) Poor and Certain Environments</td>
<td>Revenue Budgeting</td>
<td>Lowest</td>
<td>Moderate</td>
</tr>
<tr>
<td>(3) Poor and Uncertain Environments</td>
<td>Repetitive Budgeting</td>
<td>Highest</td>
<td>Complex</td>
</tr>
<tr>
<td>(4) Rich and Uncertain Environments</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
CHAPTER III
RESEARCH HYPOTHESES AND METHODOLOGY

Davis, Dempster, and Wildavsky (1966, 1966, 1971, 1974) have formalized research methods that investigate the budgetary process in rich and certain environments. Recent research in the other budgetary environments can be seen as refinements, extensions, or challenges to the basic orientation presented in these works. Since no study has been conducted to investigate the budgetary process in rich and uncertain environments, reliable precedent with respect to methodology in this environment is unavailable. Therefore, a combination of research methods is used in this study. This combination includes library research, interviews, empirical testing of the quantitative budgetary data from the records of the Saudi Arabian government, and statistical analysis.

This chapter provides an overview of the methodology employed in the investigation of the budgetary process in rich and uncertain budgetary environment of Saudi Arabia. The first section describes the interview phase of the study designed to investigate the nature of the budgetary process and the budget participants role perceptions. Section II describes the quantitative analysis of budget data.

I. Interview

Open-end interviews were conducted with major participants in the Saudi Arabian governmental budgetary process. The interview format
is similar to that used by Caputo (1970) in his study of four medium-size cities. The major objectives of this research tool are to provide a description of the budgetary process and the role perceptions of the major budgetary participants. Following is an outline of the interview objectives, a description of instrumentation, and a specification of the subjects.

The Objectives of the Open-End Interview

Davis, Dempster, and Wildavsky series of the studies (1966, 1966, 1971, 1974) relied heavily on testing budget data for the period 1947-1963 in studying the characteristics of the budgetary process of the United States. Anton (1967) utilized the open-end interview format in investigating the budgetary process in Illinois for the period 1961-1973. Elmore (1970) combined both research tools (analysis of budget data and interviews) in analyzing the South Carolina budgetary process for the period 1967-1977. The objectives of utilizing the open-end interview in this study are: (A) to describe the actual budgetary process and (B) to determine the role perceptions of major budgetary participants.

(A) Description of the Actual Budgetary Process

Wildavsky suggested the development of a descriptive budgetary theory as a substitute to the normative theory that was suggested by Kay. Such a theory involves descriptive and empirical research as to how the budget is actually created. In this context, he argued

\[\text{[citation needed]}\]

1 Caputo, "The Normative and Empirical Implications of the Budgetary Processes of Four Medium-Size Cities."
"...the point is that until we develop more adequate descriptive theory about budgeting, until we know something about existing situations in which the participants find themselves under our political system, proposals for major reforms must be based on awfully inadequate understanding."\(^2\)

One major objective of using the open-end interview format in this study is to provide knowledge (or a description) of the budgetary process of the Saudi Arabian government. This knowledge is obtained by questioning the major budgetary participants about the actual budgetary process. Personal observations of the major steps of the budgetary process were used to verify these responses.

(B) Role Perceptions of the Major Budgetary Participants

The second major objective of the interview is to describe and analyze the role perception of the budgetary participants in the Saudi Arabian governmental budgetary process.

Apart from economic or political differences, any governmental budgetary process includes two groups of participants - the "requestor" group and the "giver" group. The first group commonly is comprised of the government administrative agencies while the second group includes the central control organs. Every agency budget office is viewed as the location for developing and orchestrating the budget process.

The pervasive notion in government budget literature is that the role of the agency budget official or requestor group varies along a continuum ranging from expansion of resources to maintenance of available resources.\(^3\) In rich and certain environments, Wildavsky maintains the position that agency people are expected to advocate increasing


\(^3\) Anton, "Roles and Symbols in the Determination of State Expenditures," p. 27.
appropriations. Anton reached the same conclusion at the state level. He observed:

"...I do have a good deal of confidence in the assertion that very few responsible agency administrators will be likely to request less money than is currently available to them."^5

Anton attributed this phenomenon to the environmental pressure to expand the agency budget. He continued:

"...To request a smaller budget than the current budget is to suggest that the job being done by the agency is not sufficiently important to warrant a grant or claim on state resources and that the administrator in charge of that job is not sufficiently aggressive (or competent) to make the claim ...requesting an increase is the surest method available to the administrator to satisfy each of its audiences."^6

Lafavor, in his study of the New Mexico budgetary process, documented that the operating agency heads consistently request more funds. Elmore, in his study of the South Carolina agencies, concluded that the agency heads were concerned only with increasing expenditure levels.

The maintenance of currently available resources (maintaining agency requests within the boundaries of the actual needs) is the other extreme of the budget official's role. This role was documented by Rufus Browning in his study of two Wisconsin departments. In an interview with the budget official, the official response was:

^5Anton, "Roles and Symbols in the Determination of State Expenditures," p. 27.
^6Ibid., pp. 28-29.
"...The budget is supposed to reflect only the judgement of the administrator. There is no point in playing it cozy in trying to second-guess everybody along the line. The budget should reflect only felt needs, nothing more, or less."⁹

Thus, the evidence from empirical research suggests that the agency budget official is mainly concerned with increasing budget appropriations.

The budgetary process literature emphasizes decision-making criteria and agency budgetary strategy. In other words, the criteria the budget officials use to decide how much to request and the strategies to be used to maintain or increase the amount of money available to the governmental agencies are investigated. Wildavsky pointed out that the simplest approach would be to add up the cost of all worthwhile projects and to submit the total.⁹⁰ Due to the limitations in resources, the governmental agencies use strategic processes to compete for these scarce resources.

In a RCE, budgetary decisions are often characterized as incremental. So, the administrative agencies in this environment request certain funds with these relationships in mind. Thus, the decisions are considered simple compared with other budgetary environments. At the same time, the administrative agencies do not rely heavily on strategic maneuvers because the relationships between the agency and the control organ are highly determined.

In PCE, the budgetary process is characterized as revenue

⁹Quoted from Anton, "Role and Symbols in Determination of State Expenditures," p. 28.
constraint. Certainty in this environment creates simplicity in calculations, but poverty limits change in the budget's original base. Because of the lack of resources and certainty in predicting future funds, the budgetary relationships among participants are highly predictable, and the administrative agencies in this environment use strategic maneuvers less than any other environments.

The budgetary process in a PUE is characterized as repetitive budgeting. The administrative agencies in this environment face very complicated problems in deciding the amount of funds to be requested. Poverty and uncertainty make it difficult for the budget participants to predict next year's budget. Any fiscal year is quite different from the next or previous year in terms of revenues, expenditures, foreign aids, and inflation. Hence, budgetary process in this environment is very complex in calculating the requests of the administrative agency. The administrative agencies in this environment rely heavily on strategic maneuvers in order to survive, so they tend to exaggerate their requests knowing in advance that these requests will be substantially altered by the control organ.  

The second group in any governmental budgetary process can be characterized as the giver group. The power and the organization structure of the giver group varies according to the country's political environment. In some countries, the power of making most of the budgetary decisions rests in the central-control organ. In others, this power is divided among different political organizations.

11 Wildavsky, Budgeting: A Comparative Theory of Budgetary Processes, pp. 5-231.
An example of the first category exists in most poor and uncertain countries. The Ministry of Finance or equivalent in those countries is the most powerful governmental institution in budgetary decisions.

An example of the second category is the governmental budgetary process of the United States. The central-control organ in the United States is relatively weak compared with poor and uncertain countries. In fact, there is no Finance Ministry in the United States. The director of the office of management and budget does not have the final decision in budgetary matters. Actually, Congress can override the judgement of the office of management and budget (OMB). The role of the giver group in the United States changes as the budget moves through the budget cycle. After the OMB has reviewed the budget requests and final decisions are made, the OMB becomes an advocate before the legislative appropriation committee.\(^{12}\)

The pervasive notion in governmental budgetary literature is that the giver group acts as a guardian of the public treasures. Wildavsky described the most generally accepted role of the appropriation committee as guardian of the public purse.\(^ {13}\) Schick, in his study of the control pattern in state budget execution, concluded that the "watchdog" function was the most accurate description of the budget review officer's role.\(^ {14}\) Anton, in his study of state expenditures, attributed the "watchdog" role to the mistrust in the agency budget

\(^{12}\text{Ibid.}, \text{pp. 105-207.}\)

\(^{13}\text{Wildavsky, The Politics of the Budgetary Process, p. 147.}\)

process and to political and personal reasons. He observed:

"...recognizing the strength of built-in pressures to expand budget, then, and believing that these pressures will be reflected in budget requests, reviewing officials naturally see themselves as "cutter"...To explain the apparent negativism of budget review officials solely in terms of their mistrust of agency budget estimates, however, would be to overlook the personal and political stake they have in doing what they do....Their failure to make the cuts others expected them to make would challenge the grounds for the existence of specialized review agencies and thus threaten the jobs they hold."15

Elmore, in his study of the South Carolina budgetary process, described the role of the state budget and control board as "gatekeeper" to the state treasury.16 In poor and uncertain environments, Wildavsky pointed out that repetitive budgeting results in careless estimating by departments, which leads to indiscriminate budget cutting by the finance ministry.17

The purpose of the role perception portion of the interview phase is to determine the perceived role of the participants in rich and uncertain environment, specifically, the Saudi Arabian budgetary process. The role perceptions determined from the interviews are used in conjunction with the analysis of actual budgetary data described in the second methodological stage to investigate conformity of role perception and actual decision behavior.

Instrumentation

Open-end interviews were conducted with the major participants in the Saudi Arabian governmental budgetary process during the period May 14, 1980 - August 18, 1980. The interview format is similar to that used by Caputo (1970) with some modification (see Appendix I). Since English is not the first language of the participants, the interviews were conducted in Arabic (see Appendix II). The responses were handwritten, documented, and then translated back into English. Finally, the results were transcribed. The interviews ranged in length from thirty minutes to two hours. The average interview was approximately one hour.

As previously stated, the interviews were designed to provide a description of the budgetary process and to describe the role perception of the major budgetary participants. To achieve these objectives, the interview used in this study stressed the following main points:

(1) The formal and informal budgetary procedures.
(2) The role of the participants during each stage of the process.
(3) The decision criteria used by the participants during each stage of the process, the reason for using these criteria, and their effectiveness.
(4) The formal and informal contacts with the other budgetary participants during each stage of the process and their results.

Subjects

The subjects of the interview consisted of a non-random sample of the participants in the Saudi Arabian governmental budgetary process. A total of 47 interviews were completed. It was felt that a larger
sample was both impractical and unnecessary due to the observed redundancy in the later interviews.

Data Analysis

To describe the Saudi Arabian budgetary process, the responses of all subjects were examined to determine whether a discernable pattern existed among them. The results were also confirmed by reviewing official government publications and personal observations of the actual process.

The data gathered were also used to analyze the role perception of the budgetary participants. Accordingly, the subjects were divided into groups (see Figure 5).

(1) The directors of the budget or fiscal department of each agency (DBA).

(2) The staff of the budget or fiscal department for each agency (SBA).

(3) The senior staff officers of the budget department of the Ministry of Finance (OBF).

(4) The staff of the budget department of the Ministry of Finance (SBF).

The role, the decision criteria, the reason for using the criteria and effectiveness, the formal and informal contacts with other participants and its results are analyzed for each group.

Secondly, the subjects were then divided into two groups, namely:

(1) The Requestor Group which consisted of the DBA and SBA for each agency.

(2) The Giver Group which consisted of the OBF and SBF.
Figure 5. Summary of the Interviewing Process.

<table>
<thead>
<tr>
<th>SUBJECTS</th>
<th>TOTAL COMPLETED INTERVIEWS</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Requestor Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The directors of budget or fiscal departments for each agency. (DBA)</td>
<td>15</td>
<td>Non-random sample consisted of 15 directors of the budget or fiscal department of 15 non-defense agencies.</td>
</tr>
<tr>
<td>2. The staff of the budget or fiscal department for each agency. (SBA)</td>
<td>15</td>
<td>Non-random sample consisted of one of the staff of the budget or fiscal department of 15 non-defense agencies.</td>
</tr>
<tr>
<td><strong>II. Giver Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The senior staff officers of the budget department of the Ministry of Finance. (OBF)</td>
<td>7</td>
<td>Non-random sample of the staff who make the primary decisions in reviewing the agencies' budget.</td>
</tr>
<tr>
<td>2. The staff of the budget department of the Ministry of Finance. (SBF)</td>
<td>10</td>
<td>Non-random sample of the staff members who are directly involved in the budget process.</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>
II. Empirical Testing of the Quantitative Budget Data

The second stage of the study is designed to determine whether the quantitative budget data are consistent with the budget description and role perceptions suggested by the interviews.

The first two hypotheses to be tested during this stage related to the nature of the budgetary process in the rich and uncertain environment of Saudi Arabia. Specifically, the degree of incrementalism in the process and the extent to which supplemental budgeting is used.

The third hypothesis investigates which factor (independent variables) influence the budgetary output (the dependent variable) in this environment and the relative strength of those influences.

The Degree of Incrementalism in the Budgetary Process

As discussed previously, research in the other three budgetary environments has shown that in only the rich and certain environments is the incremental process present. Based upon this previous research, it does not appear whether wealth or a combination of wealth and certainty that lends itself to incrementalism. However, it is argued here that the presence of uncertainty in an environment will not allow for an incremental process. The combination of unreliable forecasts, non-diversified revenue, lack of information, and lack of qualified personnel characterizing an uncertain environment is inconsistent with incremental budgetary process. To investigate the degree of incrementalism in the budgetary process the magnitude of year-to-year budgetary change will be analyzed.

Previous research concerning the governmental budgetary process
in different environments has investigated the magnitude of budgetary changes from one year to the next as a means of testing the degree of incrementalism in a given budgetary process. Wildavsky (1964) analyzed the range of variation as the percentage of increase or decrease of appropriation as compared to previous years (or the magnitude of budgetary changes) for a sample of the U. S. federal agencies over twelve years. He found that a third of these cases (149 out of 444) show modification of 5 percent or less. Slightly more than half of the cases (233) show less than 10 percent modification. Approximately 75 percent of the cases (326) show modification within 30 percent. The study used criteria of 0 to 30 percent change to define an incremental process. Accordingly, it was concluded that the budgetary process in the United States at the federal level is incremental. 18

Fenno (1966) analyzed the changes in 576 congressional appropriations granted to federal agencies from one year to the next. By using 0 to 20 percent as a cut-off point, it was found that almost three quarters of the agencies had grown on an incremental scale. Thus, he concluded that the budgetary process in the United States is incremental. 19 Bailey and O'Connor defined adjustments in the range of 0 - 10 percent as incremental; modification in the range of 11 - 30 percent as intermediate; and variations over 30 percent as non-incremental. 20

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19 Fenno, The Power of the Purse.
This study uses similar techniques to investigate the degree of incrementalism in the Saudi Arabian governmental budgetary process. Magnitude of change in budgetary allocations is defined as the ratio of allocation in a given fiscal year to the allocations in the last fiscal year. Thus,

$$\Delta \text{ALL}_{g,t} = \frac{\text{ALL}_{g,t}}{\text{ALL}_{g,t-1}}$$

where:

- $\Delta \text{ALL}_{g,t}$ = The Magnitude of Change in budgetary allocations for agency $g$ in fiscal year $t$.
- $\text{ALL}_{g,t}$ = The original budgetary allocations for agency $g$ in fiscal year $t$.
- $\text{ALL}_{g,t-1}$ = The original budgetary allocations for agency $g$ in fiscal year $t-1$.

Since there is no clear definition of "incrementalism" in budgetary literature, and the issue remains subjective, this study recognizes the conservative criteria used by Bailey and O'Connor to test the degree of incrementalism in the Saudi Arabian governmental budgetary process. Three categories are identified:

(I) "Incremental" where $\text{ALL}_{g,t} = 1.00-1.10$

(II) "Relatively Incremental" where $\text{ALL}_{g,t} = 1.11-1.30$

(III) "Non-Incremental" where $1.00 \geq \Delta \text{ALL}_{g,t} \geq 1.30$

The first hypothesis tested is as follows:

$H_1$: The budgetary process of Saudi Arabian non-defense agencies is non-incremental in nature. The magnitude of changes in budgetary allocation ($\Delta \text{ALL}_{g,t} \geq 1.30$ or $< 1.00$).
The magnitude of change in budgetary allocations for 28 agencies is analyzed. The number of cases in each category is calculated and tabulated for each fiscal year. Also, the ratio of the cases in each category to the total cases in each fiscal year is calculated and tabulated.

Since the magnitude of change in budgetary allocations might vary according to type of expenditure, the data are further analyzed by type of expenditure. Hence, the magnitude of change in budgetary allocations for each type of expenditure is defined as:

\[ \Delta \text{ALL}_{i,g,t} = \frac{\text{ALL}_{i,g,t}}{\text{ALL}_{i,g,t-1}} \]

where:

- \( \text{ALL}_{i,g,t} \) = The magnitude of change in budgetary allocations for expenditure \( i \), agency \( g \) in fiscal year \( t \).
- \( \Delta \text{ALL}_{i,g,t} \) = The original budgetary allocation for expenditure \( i \), agency \( g \) in fiscal year \( t \).
- \( \text{ALL}_{i,g,t-1} \) = The original budgetary allocations for expenditure \( i \), agency \( g \) in fiscal year \( t-1 \).
- \( i \) = The types of expenditures: salaries, general expenditures, other expenditures, and projects.

The number of cases in each category of incrementalism calculated for each type of expenditure for each period of the study. Also, the ratio of the cases in each category to the total cases in the entire period is calculated and reported for each type of expenditure.

The magnitude of changes in actual expenditures are used also
to test the degree of incrementalism in budgeting process. The magnitude of change in actual expenditures is defined as:

$$\Delta AE_{g,t} = \frac{AE_{g,t}}{AE_{g,t-1}}$$

where:

- $\Delta AE_{g,t}$ = The magnitude of change in actual expenditures for agency $g$ in fiscal year $t$.
- $AE_{g,t}$ = The actual expenditures for agency $g$ in fiscal year $t$.
- $AE_{g,t-1}$ = The actual expenditures for agency $g$ in fiscal year $t-1$.

The number of cases in each category is calculated and tabulated for each fiscal year. Also, the ratio of the cases in each category to the total cases in each fiscal year is calculated.

**The Existence of Supplemental Budgeting**

Wildavsky conjectured that if a rich and uncertain budgetary environment exists the participants will engage in supplemental budgeting. In this context, he argued:

"...My hypothesis about budgeting in environments that are rich but administratively uncertain is that, when such environments are discovered, they will be found to engage in supplemental budgeting - treating each expenditure request and grant as if it were a supplemental due to unexpected circumstances. The spending agency would wait until its funds ran out, because it could not estimate what it would need or actually be able to spend, and the finance ministry would reconsider its allowances, because it was not at all certain of how much revenue it could raise or had on hand." 22

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Thus, uncertainty in budgetary environment creates an inability on the part of budgetary participants to anticipate short-run needs and wealth allows such practice. Accordingly, the need for supplemental budgeting is hypothesized. The second hypothesis tested is:

H2. Supplemental budgeting is a characteristic of the budgetary process of Saudi Arabian non-defense agencies as evidenced by the existence of supplementary budgets in the majority (50%) of the agencies for the majority (50%) of the fiscal years studied.

To test the hypothesis data is calculated as to the number and percentage of agencies that engaged in supplemental budgeting during each fiscal year during the study period.

The Relations Among Participants

To gain a keener insight into the nature of the budgetary process and the interaction among budgetary participants, another series of tests is employed to investigate the factors which influence the budgetary output (budget expansion). A group of variables suggested to be influential in the budgetary process by previous research are empirically tested for potential relationships with the dependent variable.23 The third hypothesis tested is:

H3. A significant association exists between budget expansion in the Saudi Arabian budgetary process and agency acquisitiveness, Ministry of Finance support, estimated

Numerous techniques have been utilized in the literature to investigate relationships among various budget participants in other environments. For example, Davis, Dempster, and Wildavsky, in a series of studies (1966, 1966, 1971, 1974), explained the federal budget behavior of the United States through linear models. Specifically, a series of mathematical models was constructed to represent several decision rules for both the Requestors Group and for the Givers Group. For each series of requests or appropriations, they selected that rule which most closely represented actual behavior. Sharakansky, in his study of the budgetary process in nineteen states, investigated the relationships between the budgetary participants by analyzing the annual percentage changes in each stage and by analyzing the coefficient of simple correlation between the outputs of each budgetary stage. Danziger, in his study of the British Municipal Budgeting, utilized multiple regression techniques in investigating the relationship among the budgetary participants. Elmore, in his study of the South Carolina budgetary process, used the annual percentage changes technique and simple correlation to study the relationship between the participants. Also, he used the regression analysis technique to explain the effects of multiple variables on budgetary changes. The present study employs a combination of these techniques to describe and explain the relationships between the participants in Saudi Arabian governmental budgetary process.

For detailed discussion of these studies, please see Chapter II.
The Coefficient of Simple Correlation is employed in the present study to investigate the relationship between the dependent variable (budget expansion) and the independent variables (agency acquisitive-ness, Ministry of Finance support, estimated revenue expansion, actual revenue expansion and spending efficiency). Specifically, the Coefficients of Simple Correlation between the dependent variable and independent variables were computed for each of the 26 agencies (cross-time analysis). The agencies were also grouped by types of services, and the Coefficients of Simple Correlation between the dependent and independent variables were computed for each of the five types (Aggregate Data Analysis). These correlation coefficients were examined to make inferences concerning relationships of the dependent and independent variables in order to test Hypothesis No. 3.

Regression analysis is also used in the study to measure the ability of the independent variables to explain the variations in the dependent variable. This technique was used by Davis, Dempster and Wildavsky to explain the federal budgetary behavior of the United States by Danziger to explain the relationships among budget participants in British municipal budgeting, and by Elmore to explain the nature of the relationships in the South Carolina Budgetary process. Regression analysis extends simple correlation analysis to allow the measurement of associations between more than one independent variable and to test for the statistical significance of such associations. Thus, regression analysis was used to make inferences concerning the factor(s) that affect Saudi Arabian budget expansion. Step-wise regression was performed for each of the six years (cross-sectional analysis).
Data and Variables

Quantitative budgetary data were collected from all non-defense Saudi Arabian governmental agencies for the fiscal years 1973/74 through 1978/79. The period was chosen to represent rich and uncertain environment. Prior to 1973 per capita income in Saudi Arabia was below $900, figures used by Wildavsky as a minimum in characterizing rich environment. During the 1974 period, oil prices rose significantly and per capita income rose to over $6,000. Thus, Saudi Arabia can be characterized as a poor and uncertain environment prior to the study period and a rich and uncertain environment during the study period.

Each agency must meet the following criteria to be included in this study:

1. the agency must be non-defense.

2. Agency data throughout the period of the study must be available.

3. The agency must not have any major structural changes throughout the period of the study.

A total of 26 agencies met the above criteria for inclusion in this study. Two other agencies were included in testing the magnitude of change in budgetary allocations due to their data availability. The

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data for each agency for each fiscal year consisted of:

(1) The original agency's planned requests.

(2) The original budgetary allocations excluding any supplemental requests.

(3) The original budgetary allocations for salaries, for general expenditures, and for other expenditures and projects.

(4) The total budgetary appropriations approved by the Council of Ministers.

(5) The total supplemental appropriations.

(6) The total actual expenditures.

The data for each fiscal year consisted of total government estimated and actual revenues. The data were collected from Saudi Arabian records. These records were the government original budget documents (Budgets of 1973/74 through 1978/79; the annual reports of the Audit Bureau (1973/74 through 1978/79); Statistical Year Book 1978; and the five-years development plans 1970 and 1975. The variables used in this part of the study are operationally defined as follows:

**Independent Variables**

(1) Agency Acquisitiveness (AA) =

\[ \frac{\text{REQ}_{g,t}}{\text{APP}_{g,t-1}} \]

where:

\( \text{REQ}_{g,t} = \) The original planned request for agency \( g \) for fiscal year \( t \).

\( \text{APP}_{g,t-1} = \) The total Council of Ministers appropriations for agency \( g \) for fiscal year \( t-1 \).
(2) Ministry of Finance Support (MFS) =
\[ \frac{\text{ALL}_{g,t}}{\text{APP}_{g,t-1}} \]
where:
\[ \text{ALL}_{g,t} \quad = \quad \text{The original budgetary allocation for agency g for fiscal year t.} \]

(3) Spending Efficiency (SE) =
\[ \frac{\text{AE}_{g,t-1}}{\text{APP}_{g,t-1}} \]
where:
\[ \text{AE}_{g,t-1} \quad = \quad \text{The total actual expenditures for agency g for fiscal year t-1.} \]

(4) Estimated Revenue Expansion (ERE) =
\[ \frac{\text{ER}_{t}}{\text{AR}_{t-1}} \]
where:
\[ \text{ER}_{t} \quad = \quad \text{The total government estimated revenue for fiscal year t.} \]
\[ \text{AR}_{t-1} \quad = \quad \text{The total government actual revenue for fiscal year t-1.} \]

(5) Actual Revenue Expansion (ARE) =
\[ \frac{\text{AR}_{t}}{\text{AR}_{t-1}} \]
where:
\[ \text{AR}_{t} \quad = \quad \text{The total government actual revenue for fiscal year t.} \]
Dependent Variable

Budget Expansion (BE) =

\[
\frac{APP_{g,t}}{APP_{g,t-1}}
\]

where:

\[APP_{g,t}\] = The total Council of Ministers budgetary appropriations for agency \(g\) for fiscal year \(t-1\).

The next chapter presents the results of the interviews and the quantitative analysis described in this chapter.
CHAPTER IV

RESULTS

This chapter is organized into two sections. The first section is devoted to reporting the results of the open-end interviews with major participants in the Saudi Arabian governmental budgetary process. The analysis of the quantitative budget data is reported in the second section. The conclusions suggested by each research tool are stated separately and then considered together.

I. The Open-End Interview Results

One major objective of using the open-end interview as a research tool was to provide a description of the budgetary process of the Saudi Arabian government. The second objective was to describe and analyze the role perception of the major budgetary participants. The results of those interviews are organized according to the interview objectives.

A. The Formal Saudi Arabian Governmental Budgetary Process:

Descriptive Analysis

To obtain a description of the current formal Saudi Arabian governmental budgetary process, the interviewer asked the study subjects to state the formal budgetary procedures. Specifically, the DBAs and SBAs of each agency were asked the following questions:

(1) How does your agency go about drawing its annual budgetary request?
(2) How many people and work hours are involved with the development of your agency's request?

(3) After you have submitted your agency's request to the general budget affairs, what does your office do?

(4) After the agency's budget is approved, what does your office do?

The OBFs and SBFs were asked:

(1) How does your office review and approve each agency's annual budget?

(2) How does your office review and approve the whole governmental budget?

(3) How many people and work hours are involved with the development of the governmental budget?

(4) After approving the governmental budget, what role does your office have in the budget execution?

The responses of each group to the above questions were analyzed to determine if any pattern existed among them. These responses were verified through personal observation and a review of the official budgetary regulations. The results were organized for each cycle of the budgetary process in order to simplify the presentation.

1. The Formulation Cycle

The five-year development plan (FYDP) is considered by most of the OBFs and SBFs interviewed as the first step in the formulation of the country's budget. Concerning the annual budget, this document outlines the general objectives of each governmental organization, specifies the detailed projects and programs to achieve these
objectives, and forecasts the financial requirements for these projects and programs. The FYDP is prepared every five years by the Ministry of Planning with the cooperation of all governmental organizations; it is submitted to the Council of Ministers and finally to the King for final approval. The plan then becomes compulsory for all governmental organizations.

The Council of Ministers Resolution No. 565, dated May 15, 1975, required all Ministries and independent agencies to comply with the contents of the FYDP in preparing their annual budget. This resolution required the budget department of the Ministry of Finance to allocate the required funds for the projects and programs in the plan through cooperation and coordination with the central planning organization (which became the Ministry of Planning) and the concerned Ministries or independent agencies. Thus, officially, the FYDP furnishes the basic outline for the formulation of the country's annual budget. But the results of the interview suggested the difficulty of adherence to the plan in preparing annual budgets of agencies. Some of the study subjects attributed this difficulty to the rapid changes in the governmental economy, while others cited other reasons such as: "lack of sufficient accounting systems or lack of qualified personnel."

The results of these interviews reveal that the first actual step in the formulation of the country's annual budget is at the budget department of the Ministry of Finance (BDF). At the beginning of each fiscal year the BDF submits a report to the Minister of Finance. This report is prepared with the cooperation of both the revenue department of the Ministry of Finance and the Ministry of Planning. The major
objectives of this report are to summarize the economic conditions of the country; to outline the degree of adherence to the FYDP and to suggest any necessary changes to this plan; to forecast the next year's revenues; and to recommend the ways of spending the revenues. The Minister of Finance discusses this report with concerned government officials. After approval, this report furnishes the basic guidelines in preparing the country's next year's budget.

Approximately eight months before the beginning of each fiscal year, the BDF issues directives outlining all financial policies as well as major procedures which the agencies are to follow in preparing the estimate of their next year's budgets. Most of the responses of the various agencies' DBA and OBA suggested that these directives are the most important guidelines that they follow in preparing the estimate of their agency's annual budget. These directives outline specific instructions in estimating each chapter of the budget.

The second step of budget formulation starts at the government agencies. After receiving the Ministry of Finance directive, the budget or fiscal director of each agency issues instructions to all agency departments to prepare an estimate of their actual needs for the coming fiscal year. Each of the agency departments submits an estimate of their departmental needs for the coming fiscal year. The general director of each agency then forms a committee to collate all departmental needs and to make financial decisions on the programs and projects to be included in the agency's request for the next fiscal year. The fiscal requirements to execute these projects and programs as well as the estimated cost of salaries, general
expenditures, and other expenditures are projected on the basis of the Ministry of Finance directives. These projections then become the agency requests which are submitted to the BDF for review.

As directed by the Ministry of Finance, the agency request must be comprised of four chapters. Chapter I is devoted to salaries, allowances and compensations. Chapter II included the agency's general expenditures such as furniture, utilities, rents and so on. Chapter III is called "other expenditures" and is devoted to expenditures for specific purposes. Chapter IV, "projects," is divided into two categories: Under-construction Projects and New Projects.

The first three chapters are broken down into heads and sub-heads. In Chapter IV, each project is a separate heading. The agency's requests for Chapters I, II and III must include a justified estimate of each head and sub-head. In addition, the agency request must include a summary of spending efficiency to date for each head and sub-head, last year's budget, and the agency organization chart. Chapter IV requests must include detailed descriptions of the status of each project under consideration and the estimated cost of their completion. In addition, it must include justifications for each new project.

Although the agencies usually comply with these standardized procedures in preparing their estimated requests, the results of the interviews suggested that most of the government agencies face major problems in preparing their requests. The following factors are often cited by most of the participants as the reason for this phenomenon:

(1) The lack of clarified objectives. Even though the FYDP
specifies the objectives of each governmental organization, these objectives are considered broad and difficult to meet.

(2) The lack of sufficient accounting systems to generate feedback information. Hence, most of the government agencies prepare their requests without knowledge of their actual expenditures or vital statistical information.

(3) The lack of qualified personnel. The interview showed that most of the DBA and SBA in the government agencies lack the special education in preparing the budget.

(4) The rapid changes in the economic conditions of the country. But in general most of these obstacles are recognized by the government, and various special committees have been formed to find the proper solutions to these obstacles.

2. **Review Cycle**

Each governmental agency must submit its budget requests for Chapter I, II, III and part of Chapter IV (new projects) to the budget department of the Ministry of Finance no later than six months prior to the beginning of each fiscal year. The deadline for submitting the second part of Chapter IV (projects under construction) is three months before the beginning of each fiscal year.

When the budget department receives the requests of every agency, this department calls a meeting of each agency representative. Usually the senior staff officers of the budget department represents the Ministry of Finance and the director of the budget or fiscal department of each agency represents the agencies in these meetings. The agency representative must justify every item in his agency's request.
When mutual agreement between these representatives is achieved, a comprehensive proposed budget is prepared. If there is sharp disagreement among the representatives, the matter is submitted to the Deputy of the Ministry of Finance for the final decision. Officially there are specific instructions for reviewing each agency request, but most of the study subjects stressed a lack of efficiency in conducting these reviews. Again, the same obstacles that faced the agency in preparing its requests also faced the representatives in negotiating the agency budget.

After reviewing the requests of each agency, the DBF organizes the results of the reviews and prepares the proposed government budget for the next fiscal year. The Deputy Minister of Finance and Budget Affairs then calls a meeting with the Deputy Minister of Planning and the Deputy Minister of the concerned agency. There are several objectives of this meeting: to further discuss the agency's proposed budget; to investigate the degree of compliance of this proposed budget with the FYDP; to analyze the impact of each government program and to project the country's economy; and to make an extensive effort to balance the budget. The product of this meeting is then submitted to the Ministry of Finance, who calls extensive meetings with the OBF and other concerned officials to discuss the final proposed budget. Then this proposed budget is submitted to the Council of Ministers for approval.

3. **Approval Cycle**

As mentioned before, the proposed budget has been approved indirectly by the ministers of each agency through their representatives in the reviewing cycle. The approval cycle is used only to confirm
the proposed budget. Also, the budget is proposed in compliance with
the policy issued by the cabinet and the King during the fiscal year.

These policies determine in detail what should and should not
be approved in the review cycle, which is begun upon submission of the
proposed budget to the Council of Ministers. In a special meeting
headed by His Majesty the King, the Council of Ministers discusses the
proposed budget. After approval, the King sings the budget decree,
and the budget becomes a law that must be followed by all governmental
agencies.

4. **Execution and Audit Cycle**

Execution and audit is the final cycle of the Saudi Arabian
budgetary process, commencing with the beginning of the fiscal year
(the first day of Rajjab, or approximately May 5). The current
government budget is composed of two schedules, Schedule A and B.
Schedule A is for revenue and Schedule B is for expenditures. Schedule
A is classified by a source of revenues which is disclosed in the
budget in lump sums and in details. Schedule B (expenditures) is
classified into titles, a separate one assigned for each ministry or
agency.

The title is further classified into sections. A section is
assigned to a major department and each section is composed of four
chapters, as discussed earlier. The budget also includes the total
expenditures for each of the sections of the economy, which makes it
compatible with the FYDP organizations. Additionally, comparative
figures for the last year's budget are disclosed for each of the budget
schedules.

This cycle will be discussed in general, but the details involve
the financial system, which is outside the scope of this paper.
The sources of the government revenues usually include royalties from oil; income taxes from oil companies, other companies and individuals; custom duties; services fees; and other miscellaneous sources. Oil revenues comprise approximately 97 percent of the total government revenues in the fiscal year 1979/1980. The responsibility of the oil revenue estimation, control and collection is placed primarily on the Ministry of Finance. The Ministry of Finance coordinates and cooperates with other government agencies, such as the Saudi Arabian Monetary Agency, the Ministry of Planning and the Ministry of Petroleum in this effort. The Department of General Revenues in the Ministry of Finance keeps accurate records of each revenue item. Other sources of revenue (approximately 3 percent) are estimated, controlled, and collated directly by the concerned agencies.

Approximately two weeks after approval of the budget, the BDF notifies each agency of its budget. Once the agency receives the budget, the agency proceeds to use its funds according to the financial and accounting instructions. The appropriations of each expenditure chapter, head, and sub-heads may not be used for purposes other than the ones that are specified in the budget decree and the Ministry of Finance instructions. The agency is responsible for keeping a detailed record to control its spending activities.

The financial regulations, within certain limits, allow shifts in the original appropriations. The details of these regulations are outside the scope of this paper. The interview results show that most original appropriations of the government agencies are frequently changed during the fiscal year. These changes occur by transferring funding throughout the agency or by supplemental appropriations.
Uncertainty and the lack of a scientific basis for budget formulation are cited by most of the study subjects as the major factors for these changes.

The major objective of the Audit Stage is largely to guarantee the compliance of government agencies with the provisions of the budget, the government policies, and the financial regulations. Specifically, it is to ensure that the agency's budget was spent for the predetermined purposes.

The auditing function is performed simultaneously during the fiscal year by both the Ministry of Finance and the Audit Bureau. The Ministry of Finance is responsible for pre-audit while the Audit Bureau is responsible for post-audit.

The pre-audit function is performed through a representative who is assigned to each agency to ensure that the agency complies with the accounting and financial regulations prior to any fund payments. The pre-audit function is also performed through the budget department of the Ministry of Finance to guarantee that the agency is in compliance with the provisions of the budget.

The post-audit function is vested in the Audit Bureau, which was established as an independent agency in 1953. The major objective of the post-audit function is to investigate the compliance of all government agencies with the provisions of the budget and with the financial regulations. The results of these audits are then submitted in an annual report to the Council of Ministers.

Figure No. 6 summarizes the major formal Saudi Arabian governmental budgetary process described above.
### Figure 6. Summary of the Saudi Arabian Governmental Budgetary Process

#### Organization Levels and Modes of Activities

<table>
<thead>
<tr>
<th>Executive Agencies</th>
<th>Ministry of Planning</th>
<th>Ministry of Finance</th>
<th>Council of Ministers and H. M. the King</th>
<th>Audit Bureau</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary preparation of the FYDP for each agency with the cooperation of the Ministry of Planning</td>
<td>Preparation of the FYDP for the whole country to be submitted to the Council of Ministers for approval</td>
<td>Feedback from the Ministry of Finance during the preparation of the FYDP</td>
<td>FYDP Final Approval</td>
<td>Audit report for last year</td>
</tr>
<tr>
<td>The government agencies must comply with the FYDP in preparation of their budgets</td>
<td>Annual report concerning the degree of compliance with the FYDP</td>
<td>Annual report concerning economic conditions, the agencies spending efficiencies, and revenue estimate</td>
<td>General guideline &amp; instructions in preparing next year's budget</td>
<td></td>
</tr>
<tr>
<td>Preparation of the next year's budget request</td>
<td>Feedback</td>
<td>Numerous directives concerning budget preparations</td>
<td>Holds meetings with the agencies representatives</td>
<td></td>
</tr>
<tr>
<td>Feedback and negotiations</td>
<td></td>
<td></td>
<td>Proposes the primary budget proposed for the country</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Forms committees to discuss all aspects government budget proposal</td>
<td></td>
</tr>
</tbody>
</table>
Figure 6. Summary of the Saudi Arabian Governmental Budgetary Process (Continued)

Organization Levels and Modes of Activities

<table>
<thead>
<tr>
<th>Executive Agencies</th>
<th>Ministry of Planning</th>
<th>Ministry of Finance</th>
<th>Council of Ministers and H. M. the King</th>
<th>Audit Bureau</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Final Budget Proposal</td>
<td>Final Approval</td>
<td></td>
</tr>
<tr>
<td>Budget Execution</td>
<td></td>
<td>Informs each agency with its budget</td>
<td>The annual government budget</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Issues financial and accounting instructions during the year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare monthly financial report</td>
<td></td>
<td>Pre-audit through representatives</td>
<td></td>
<td></td>
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<tr>
<td>Make the necessary corrections</td>
<td></td>
<td>Monitor the degree of compliance with the budget</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare annual financial report</td>
<td></td>
<td>Prepare the country's annual financial report</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Annual Audit Report</td>
</tr>
</tbody>
</table>
B. Description and Analysis of the Budgetary Participants' Role Perceptions

This study utilized direct open-end interviews with the major participants to describe and analyze the role perception of participants. Roles to be described and analyzed are primarily those of the director of budget or fiscal department of each agency (DBA), the staff of the budget or fiscal department of each agency (SBA), the senior staff officers of the budget department of the Ministry of Finance (OBF), and the staff of the budget department of the Ministry of Finance (SBF). The interviewer stressed the following points during each interview:

1. The formal and informal training of the participants.
2. The role of each participant in each budget cycle.
3. The decision criteria used in each budget cycle.
4. The effectiveness of these criteria.
5. The formal and informal contacts with other participants.
6. The results of these contacts.

1. The Requestor Group: Role Description and Analysis

The origin of development and orchestration of the Saudi Arabian budgetary process is in the agencies' budget or fiscal offices. In some agencies, this responsibility is divided between both departments. The budget department formulates requests, while the fiscal department executes the budget. In other agencies, the fiscal department performs both duties. Thus, the budget or fiscal officials are considered the main participants in the agency budgetary process. Following is a summary of the results of the open-end interviews conducted with fifteen DBAs and fifteen SBAs.
Formal and Informal Background Training

The absence of skilled and highly trained budgetary professionals was the rule not the exception in each of the departments. Of the fifteen DBAs interviewees, only four had college degrees, and only six had professional training in fiscal and budgeting fields. The formal education of the DBAs ranged from secondary school to university level. The experience of these DBAs ranged from five to fifteen years. But most of the DBAs had "on the job" experience. Nine of the directors had at least one intensive course in budgeting and accounting.

The vast majority of the SBAs also lacked professional skills. Of fifteen SBAs interviewed, only one had a college degree, and only four had had professional training in budget and accounting fields. The formal education of the SBAs ranged from secondary school to college level. Most of the informal training of the SBAs was composed of "on the job training." This experience ranged from two to nine years. Six of the SBAs had had an intensive course in budgeting and accounting.

The evidence suggests that the DBAs and OBAs lack the necessary and professional skills to perform their duties. This problem has discouraged any budgetary innovations and reforms.

The Role of the DBAs and SBAs in the Budgetary Process

When asked to describe their role in the budgetary process, most of the DBAs viewed their role as "planning and budget coordinators" rather than "decision makers." They considered themselves "budget and financial matter specialists" in addition "defenders of the agency's requests." The following two excerpts typify responses of the DBAs:

Q. What is your role in the budgetary process?
A. My role, as the director of the budget department, is
composed of the following functions:

(1) To coordinate and prepare the agency's five-year development plan (FYDP).

(2) To represent the agency in the discussions of this plan at the Ministry of Planning.

(3) To determine the degree of agency compliance with the FYDP.

(4) To furnish the basic statistical and feedback information to the department heads.

(5) To coordinate and prepare the agency's annual requests.

(6) To represent the agency in the budget reviews at the Ministry of Finance.

(7) To provide professional consultation to the agency in budget and financial matters.

Q. Does your role include any part of budget execution?
A. Not directly. This office was established last year to coordinate budget and planning activities. The execution function is primarily the responsibility of the fiscal department.

Q. Do you become involved in the budget decision making?
A. Actually, no. My role is confined to coordination among the various departments in preparing their requests. It is not my responsibility to make budgetary decisions. I am only a specialist who provides the basic information and explains the budgetary and financial regulations. After I receive the departments' request, I coordinate them and send them to a special committee. I represent this department on this
committee, which is headed by the general director. This committee makes the major budgetary and planning decisions. The other DBA also stressed the same role:

Q. What is your role in the budgetary process?
A. The department of fiscal affairs is concerned mainly with all budgeting and financial matters, such as preparing the annual agency requests, representing the agency in the budget reviews at the Ministry of Finance, and supervising execution of the budget.

Q. Does your department involve itself in the preparation of the FYDP?
A. Yes. Since we do not have a separate budget department, this department helps in the preparation of the agency FYDP. We furnish the basic statistical and financial information to various departments. At the same time, this office is responsible for determining the degree of compliance of the annual budget with the FYDP.

Q. So, your department is responsible for both budget formulation and execution.
A. As I have explained before, yes. But the agency plans to establish a separate budget department. Then both the planning and preparation of the budget will be the responsibility of this department. This trend is evident in almost every government agency. I personally approve of this trend because this department cannot perform both functions. Also, the separation of budget formulation from budget extension is good internal control.
Q. Do you make any budgetary decisions?

A. No. This is the responsibility of the special committee. This committee usually is headed by the agency's general director. I serve on this committee with the other departmental directors.

When asked to describe their role in the budgetary process, most of the SBAs considered it to be "assistant to the DBAs." They were mainly concerned with preparation of the necessary information to help in the formulation and review of the budget.

The role of the SBA who worked in the budget department differed slightly from the role of SBA in the fiscal department. The first was mainly concerned with planning and budgeting matters, the latter with both budgeting and accounting matters. Most of the SBAs viewed themselves as experts in budget procedures. The following excerpts typified the SBAs responses:

Q. What is your role in the budgetary process?

A. My job, as the supervisor of the accounting department, is mainly concerned with budget execution. Since we do not have separate budget departments, this office is responsible for providing the DBA with the necessary feedback information.

Q. Then you actually are involved in budget formulation?

A. Not directly. We provide the information and prepare the necessary forms, and the committee makes most of the decisions.

These excerpts summarize the role of the requestor group in the budgetary process. Obviously, the budget or fiscal department is considered by most of the DBAs and SBAs as the place for formulation and execution of the agency's budget. The budget or fiscal department is
concerned only with coordination among the agency departments in formulating both the agency's plans and requests. Although this department does not involve itself in the decision-making process, most of the DBAs are members of the agency committee that makes most of these decisions. Moreover, the DBAs represent the agency in the budget review, so they also consider their role to be that of defender of the agency requests. In addition, the fiscal department is responsible for the budget execution.

In summary, the budget or fiscal department is perceived mainly a service department rather than a decision-making department. The responsibility for the budgetary decision-making is relegated to special committees.

**Decision Criteria and Its Effectiveness**

The FYDP outlines the general objectives for each government agency and specifies the projects and the programs to be performed by each governmental agency for the next five fiscal years. The plan furnishes the basic grounds for most of the budgetary decisions. In addition, the Ministry of Finance issues an annual directive outlining in detail the procedures to be followed by each agency in preparing its annual requests. In spite of the extensive effort by both the Ministry of Planning and the Ministry of Finance to standardize the criteria in most of the budgetary decisions, the calculations of the agency's requests is the most complex step in the budgetary process. This complexity leads most of the government agencies to exaggerate their annual requests. The vast majority of the DBAs and SBAs attributed this complexity to the following causes:

1. **The lack of clarified objectives.** Even though these
objectives are spelled out in the FYDP, most of the DBAs and SBAs considered them broad and difficult to meet.

(2) The lack of sufficient accounting systems to generate the basic feedback information. Some of the DBAs prepared their agency requests without complete knowledge of the actual expenditures during the year.

(3) The lack of qualified personnel. This obstacle was considered by most of the DBAs and SBAs as the major cause of the complexity in calculation.

(4) The rapid changes in the economic environment in the country.

The interview revealed that the decision criteria used by the agencies differed according to the types of expenditures. Salaries and general expenditures (Chapter I and II of the budget) are usually estimated through the use of historical precedent. The other expenditures (Chapter III) are estimated according to the agencies' actual needs. The estimation of the project's cost (Chapter IV) was considered by the majority of the DBAs and SBAs as the most difficult task in the budget formulation. This difficulty led most governmental agencies to exaggerate the cost of these projects. The following examples typify the responses of most of the DBAs and SBAs:

Q. What criteria do you use in evaluating each department request?

A. As I mentioned before, this department does not involve itself in the decision part of the budget. But I am a member of the committee that makes these decisions. According to the Council of Ministers resolution #565, each agency must comply
with the guidelines of the FYDP in preparing its annual budget. But it is a major problem to adhere to these guidelines because we do not have the qualified personnel to give us the necessary feedback information. Neither can we adjust to the rapid changes in the economic conditions. These problems have led us in previous years to overestimate or underestimate our requests substantially. In some years, we have excess funds in our budget. In other years, we have asked for more supplemental funds. In the committee meetings, we tried to follow the Ministry of Finance regulations in preparation of the agency requests. Salaries and general expenditures are generally estimated for the next year on the basis of last year's appropriations and actual needs. Since Chapter III is devoted to other expenditures, these expenditures are estimated on the basis of actual needs. We include in our request most of the projects that are outlined in the FYDP in addition to modifications of these projects. But the cost estimation of these projects is the most difficult step. This difficulty is mainly due to the lack of a sufficient accounting system and ill-qualified personnel as well as the rapid changes in the country's economic conditions. Thus, we end up over- or underestimating our requests for projects.

When asked about the effectiveness of the decision criteria, the majority (approximately 70%) of the DBAs' and SBAs' responses were negative. They called for an increase in the quality and quantity of the budget department personnel, substantial improvements in the accounting systems, and specific and clear objectives and guidelines.
When asked if their agencies requested supplementary funds during the fiscal year, most replied affirmatively (approximately 76%). They attributed this phenomenon to the imprecision in estimating the costs of their projects. The following example typifies the response of most of the DBAs and SBAs:

Q. During the execution stage, does your agency request supplementary funds? And why?
A. Yes. But the percentage of these supplemental funds has decreased during the last few years. As I mentioned before, we may underestimate the cost of some projects and later we have to ask for more funds. Or we may underestimate the project costs and then we cannot spend the budget funds for these projects. The inflation rate and the capacity to spend these funds are the major causes of these phenomena.

In summary, the majority of the budgetary decisions were not based on well-defined criteria. This leads to the complexity in the budgetary decision process. Even though the regulations called for the utilization of the FYDP, the last year's appropriations, the spending efficiency, and the agency's actual need, the guidelines were not fully followed. The complexity of the budgetary decision-making results in the overestimations or underestimations of most of the agencies' requests. Furthermore, the lack of qualified personnel and of modern data-gathering procedures discouraged any attempts at new innovations in the budgeting process (such as PPBs or ZBB).

Formal and Informal Contacts with Other Participants and the Results of These Contacts

As discussed above, the DBAs considered their role as to be
that of "defenders of the agency's request." This role compels the DBAs to make formal and informal contacts with other officials in order to justify their agency requests. Also, the lack of well defined budgetary decision criteria leads most of the government agencies to utilize these contacts as strategical maneuvers to justify their requests. The vast majority (approximately 93%) of the DBAs described their formal and informal contacts in the affirmative. A typical response follows:

Q. Are you formally or informally in contact with other budget participants concerning your requests?
A. Definitely, yes. In the formulation stage I contact all agency departments to explain the general guidelines for preparing their needs. Also, I coordinate efforts among these departments to prepare the agency requests. In the reviewing stage, I represent the agency in the Ministry of Finance. At these meetings, I have to justify the agency's requests. But most of the time I do not have the necessary feedback information to justify the agency's request. Thus, I use negotiation techniques, such as compromising to reach the final figure. Actually, the informal contacts with the reviewers are the most effective means to inform them about our needs.

The interviews revealed that the DBAs must resort to "games" and strategic maneuvers to secure the Ministry of Finance approval of their agency requests. The most common strategic maneuver is to overestimate their requests. One of the DBAs said:

"...Based on my previous experiences, we have to ask for 100 to get 50."
Another "game" used by the DBAs is to make personal friendships with the budget reviewers.

In summary, strategic maneuvers are used extensively by the DBAs to justify their requests. This phenomenon is attributed to the lack of specific decision criteria and well-defined objectives. Furthermore, the uncertainty of future needs compelled most of the agencies to overestimate their requests.

2. The Giver Group: Role Description and Analysis

In the Saudi Arabian governmental budgetary process, the Ministry of Finance has the prime responsibility for organizing and collecting agency requests and preparing the country's final proposed budget. This responsibility is centralized in the budget department of the Ministry of Finance. The official of this department represents the main participant in reviewing agency requests. Following is a summary of the results of the open-end interviews conducted with seven senior officers of the budget department (OBF) and with ten staff members of that department (SBF).

Formal and Informal Background Training

Unlike the agency budget officials, most of the OBFs have both extensive formal and informal training backgrounds in government budgeting. However, the number of these professionals is not adequate to review all the government agency requests in the allowed time span. Of the seven OBFs interviewed, four had master degrees in public administration, and two had some college education. Most of the OBFs had professional training in financial, accounting, and budgeting fields. Their "on the job" experience ranged from eight to twenty-two years.

Although the SBFs did not have the same formal and informal
training backgrounds as the OBFs, their training is considered adequate. But again the lack of SBF staff members is insufficient to carry out their responsibilities. Of the ten SNFs interviewed, four had some college education. Most of the SBFs had at least one course in accounting and in budgeting fields. Their "on the job" experience ranged from two to ten years.

It is clear that the budget department of the Ministry of Finance, unlike the budget department of the agencies, does not lack the professional personnel. However, it does have an inadequate number of personnel to perform its functions.

The Role of OBFs and SBFs in the Budgetary Process

The major role of the OBFs in the Saudi Arabian governmental budgetary process can be more accurately viewed as that of "cutter" than "efficient economizers." This role is similar to the role of the budget review officers that Schick described in his study of the control patterns in state budget execution. The budget review officers interviewed by Schick indicated that the watch-dog function was an accurate description of actual budget review. He attributed this phenomenon to the built-in pressure for budget expansion and the feeling that consequently there must be a specialized agency with the task of saying "No."^2 The role of the OBFs in the Saudi Arabian governmental budgetary process is also similar to the role of the members of state budget and control that are described by Elmore in his study of the South Carolina budgetary process. Elmore viewed their role as "Gatekeeper of the State Treasury."^3

^2 Schick, "Control Patterns in State Budget Execution," p. 98.
The responsibility of reviewing the agency's requests in the Saudi Arabian governmental budgetary process is divided among the OBFS. Each OBF is primarily responsible for reviewing the agency requests in one sector of the economy such as the economic resource sector, the human resources development sector, and so on. After receiving the agency requests, the OBF calls a meeting with the representative of each agency. The main purpose of this meeting is to negotiate the budget that will be appropriated to the agency for the next fiscal year. When the two parties come to a mutual agreement, the final proposal is submitted to the Deputy Minister of Finance for further revision.

Believing that the agency administrators overestimate their budgets and lacking sufficient feedback information, the majority of the OBFS (approximately 71%) tend to cut these estimates as much as possible. In addition, the inadequate number of OBFS and the time span are attributable to these attitudes. The following excerpt typifies the OBFS responses:

Q. What is your role in the budgetary process?
A. Every OBF in this department is responsible primarily for reviewing all the agency requests in a whole sector of the economy. This function includes reviewing the agency's annual estimate in his section. Also, it includes the determining of the degree of compliance of the agency budget to the FYDP. When I receive the agency's request, I call a meeting with the agency representative to discuss the request. In this meeting, I negotiate with the agency representative in order to reach a final agreement for each item and project. I face many problems in these meetings. For example:
(1) Most of the agencies substantially overestimate their requests without adequate justification; thus, I am forced to cut these requests substantially.

(2) Feedback information is inadequate to make efficient decision.

(3) Clarified objectives and purposes are lacking.

(4) There are not enough personnel.

(5) The time span to review all the agency requests in my sector is short.

After reaching a final agreement with the agency representative, I submit it to the Deputy Minister of Finance for a final revision.

The major role of the SBFs in the Saudi Arabian governmental budgetary process can be viewed as that of "assistants to the OBFs." Thus, they are responsible for preparing the feedback information for the OBFS. Also, they are responsible for controlling the degree of the agency's compliance with its budget during the execution stage.

The evidence from the interviews and the personal observations suggests that the Ministry of Finance plays the most influential role in developing the annual government budget. This role is embodied in the reviewing, collating, scrutinizing, and finalizing the whole government budget at both the OBF level and the top official level. Although there is no formal way of restricting the power of the Ministry, this power is also shared by the head of the agencies. Also, this power is restricted by the FYDP. In addition, the Ministry must take into consideration the general policy and desires of both the Council of Ministers and H. M. the King. The power of the Ministry of
Finance was expressed by one OBF as:

"...Almost all of what the Ministry of Finance recommends will be in the final budget."

The Ministry of Finance is also responsible for preauditing all government agency spending during the execution stage. Also, it is the responsibility of the Ministry to control the degree of agency compliance with both the budget and the FYDP. In addition, the agency must go through the Ministry of Finance when asking for supplemental funds or any changes in the original budget appropriations.

The Decision Criteria and Their Effectiveness

The interviews revealed that the decision making during the review cycle is a very complex process because of poorly defined criteria and objectives, the lack of a sufficient data base, the time limitation, and the small number of personnel.

As discussed in Chapters II and III, the budgetary decisions in rich and certain countries are often incremental and are considered simple. In poor and certain countries, the certainty creates the simplicity in the budgetary decision making. The combination of both poverty and uncertainty causes complexity in budgetary decisions in poor and uncertain countries. Unlike those poor and uncertain countries, the complexity of decision making in the Saudi Arabian governmental budgetary process is caused not by the lack of resources but by insufficient guidelines and well-defined objectives.

The interviews showed that the decision criteria in the review cycle vary according to the type of expenditures. The following is a summary of the most common criteria mentioned:

(1) Salaries, General Expenditures, and Other Expenditures

The interviews showed that reviewing the agency salaries
most of the time and effort of the OBFs. Historical precedent and the actual needs of the agency for human resources were the major criteria in reviewing these types of expenditures. Chapter II (general expenditures) were estimated primarily on the basis of the previous year expenditures. The decisions for other expenditures appropriations were based on actual needs and previous year spending efficiency.

(2) Projects Under Construction and New Projects

A large proportion of the Saudi Arabian budget is devoted each year to capital projects. Thus, an extensive effort has been employed to develop specific criteria as the basis for making the major decisions for this type of expenditure. In addition, the last few years have witnessed an improvement in the government accounting system. The most common criteria used by the OBFs were the FYDP, the agency's execution capacity, previous year spending efficiency, and the general economic conditions of the country. But no matter the degree of precise criteria, the execution of these projects encounters the same problems that were mentioned by Wildavsky in poor and uncertain countries:

"Poor countries have trouble getting the work done. Projects may be delayed because the weather is bad, because necessary materials have not arrived from abroad, because plans were improperly drawn, because skilled labor cannot be found, because of excessive paper work...."4

For these reasons and many others, most of the projects cannot be executed during the fiscal year. Thus, a major

complexity exists in the decision making for the next year's budget.

**Formal and Informal Contacts with the Other Participants and Their Results**

The interview results showed that the OBFs and SBFs used formal and informal contacts with agency officials to simplify the process of negotiations. Again, the lack of clarified criteria and sufficient information leads most of the OBFs to utilize this technique to arrive at a mutual agreement. Most of the OBFs stressed the importance of informal contacts with agency officials. These contacts helped to clarify formal instructions and simplify the process of regulations.

**Conclusions**

The interview results suggest the following conclusions:

1. The Saudi Arabian government budget is formulated in a piecemeal and fragmented fashion. The budget or fiscal department of each agency is the primary place for developing and orchestrating its proposed request. However, both the Ministry of Planning and the Ministry of Finance play major roles in this process.

The Ministry of Planning, through the FYDP, outlines the agencies' general objectives, specifies the agencies' programs and projects, and furnishes a rough estimate of the financial requirements to execute these projects and programs. After approval by the Council of Ministers and by H. M. the King, the FYDP becomes compulsory. Thus, all government agencies must comply with the contents of the FYDP in preparing their annual budgets. The Ministry of Finance, through numerous directives, established the guidelines that must be followed in the formulation of the budget.
The budget review is centralized in the budget department of the Ministry of Finance. After hearing the point of view of the agencies through their representatives, this department organizes each agency's estimates into a unified, final form. Then the proposed budget for the entire country is extensively reviewed by a special committee. This committee is commonly headed by the Minister of Finance. It is in this committee that most of the final budgetary decisions are made. Thus, it would seem that the Ministry of Finance influences the output of the final budgetary decision more than any other government organization.

The Council of Ministers, as the main legislative body, has the power to approve the country's annual budget. However, since the Ministry of Finance takes into consideration the general policies of the Council in preparing the final proposed budget, the Council members, through their representatives, also participate in budget formulation. The existence of the approval cycle seems to be for legitimacy purposes only. However, any major changes in the original budget must be approved by the Council of Ministers.

2. In all fifteen agencies, the directors and the staff of the budget department lack the necessary skills and professional training to perform their duties. This problem does not exist in the budget department of the Ministry of Finance, which does, however, face a shortage in staff that can review agency requests in the allotted time. Both problems have contributed to the lack of innovations in the budgetary process.

3. The majority of the DBAs view their role as "coordinators" among the agency departments in the formulation of both the agency's plans
and annual budget requests. Although budgetary decisions are made by a special committee, most of the DBAs and involved in making these decisions through their participation on this committee. Moreover, the DBAs represent the agency in budget review hearings. Thus, most of the DBAs consider their role as "defender" of the agency's requests. The SBAs prepare the necessary information to aid in budget formulation and review.

The role of DBFs can be viewed as that of "cutter" more than "efficiency economizer." Most of the OBFS tend to cut agency requests, believing that the agencies exaggerate their estimations. Although these officials do not have the authority to make final decisions, their views carry considerable weight.

4. Complexity in calculation is commonly encountered throughout the budgetary process. However, the degree of complexity varies according to the type of expenditure. Salaries and general expenditures are estimated mainly on the basis of both actual needs and prior budgetary appropriations. Thus, the majority of budgetary decisions for these types of expenditures are incremental in nature. Moreover, determining projects priority and cost is the most complex stage in the budget process.

The lack of clarified objectives, specific criteria, an efficient accounting system, qualified personnel, rapid changes in the country's economy, and numerous problems in the execution of projects are the major causes for this complexity. Finally, the complexity in project budget calculation induces most of the government agencies to over- or underestimate the cost of their projects. The result is either a decrease in the agencies' spending efficiency ratios or the
creation of supplemental budgets.

The estimation of revenue is a very easy task in the budgetary process since oil is the main source of government revenues. Although balancing the budget is a very important step in the budgetary process, the cumulative wealth of the government is often used to cover any shortages in the annual revenue.

5. The Saudi Arabian governmental budgetary process exhibits a high level of strategizing. Spending agencies tend to exaggerate their estimates, knowing that the Ministry of Finance will alter their estimates. The agencies' representatives utilize formal and informal contacts to justify their requests. However, the frequency of strategic maneuvers is less than in poor and uncertain countries because uncertainty always increases the frequency of strategic maneuvers. In those countries, the spending agencies will maneuver continuously, and the Ministry of Finance must tend to cut the agencies' requests dramatically to remain viable. But the economic wealth in Saudi Arabia lessens the degree of strategizing. The spending agencies can always ask the Ministry of Finance for supplemental funds if these funds can be justified.

II. Quantitative Budgetary Data Analysis

This section presents the results of the second stage of the research - the analysis of quantitative budgetary data. Results of tests to determine the degree of incrementalism in the Saudi Arabian governmental budgetary process are presented first. Next, findings with respect to the existence of supplemental budgeting are detailed.
The final portion of this section presents results of the quantitative investigation to determine the influence of factors affecting the budgetary output.

1. **The Degree of Incrementalism in the Budgetary Process**

The first issue investigated in the quantitative phase of the study was the degree of incrementalism in the Saudi Arabia governmental budgetary process. The study investigated the magnitude of budgetary changes from one year to the next as a means of testing the degree of incrementalism in a given budgetary process. The magnitude of change in budgetary allocation was defined as the ratio of allocation in a given fiscal year to the allocation in the preceding fiscal year.

To operationalize the test of the degree of incrementalism, three categories were identified:

I. "Incremental Process." The magnitude of change in budgetary allocation ranges from 1.00 to 1.10.

II. "Relatively Incremental Process." The magnitude of change in budgetary allocation ranges from 1.11 to 1.30.

III. "Non-Incremental Process." The magnitude of change in budgetary allocation is greater than 1.30 or less than 1.00.

Table 1 displays the magnitude of changes in budgetary allocation for all major non-defense agencies (fiscal years 1973/1974 through 1978/1979). As shown, the magnitude of changes in budgetary allocation for 69.64 percent (117 cases) of the 168 cases studied clearly were within the "Non-Incremental Process" range; 22.62 percent (38 cases) were within the "Relatively Incremental Process" range; and only 7.74 percent (13 cases) were within the "Incremental Process" range. Also when viewed by fiscal year, the table reveals that a majority of the
agencies' budgetary processes were characterized by a "Non-Incremental Process" during most of the fiscal year studied.

There were only two exceptions. During the 1976-77 fiscal year slightly less than a majority (46%) of the agencies were in the "non-incremental" category. Over 54% of the cases were in either the "incremental" or "relatively incremental" category. The other exception, the 1973-74 fiscal year, might be attributable to the fact that the 1974 increase in oil prices, which is the main source of the government revenue, was not incorporated in the 1973/1974 budget. The results in Table 1 generally support Hypothesis No. 1; hence, the budgetary process of most Saudi Arabian non-defense agencies can be characterized as a "Non-Incremental Process."

A further analysis of the data revealed additional insight. Table 2 shows the magnitude of changes in budgetary allocations by type of expenditures. As displayed, the magnitude of changes in Chapters I and II (salaries, and general expenditures, respectively) allocations for most of the cases studied were within the "incremental" and "relatively incremental process" ranges. Specifically, the magnitude of changes in Chapter I allocations for 52.38 percent of the 168 cases were within the "incremental" and "relatively incremental" ranges, while 47.62 percent were within the "non-incremental" range. The magnitude of changes in Chapter II allocations for 64.88 percent of the 168 cases were within the "incremental" and "relatively incremental" ranges, and 35.12 percent were within the range of "non-incremental process."

Table 2 also shows that the magnitude of changes in Chapters III and IV (other expenditures and projects, respectively) allocations for
TABLE 1. MAGNITUDE OF CHANGES IN BUDGETARY ALLOCATIONS FOR ALL MAJOR NON-DEFENSE AGENCIES FOR FY 1973/74 - FY 1978/79.

<table>
<thead>
<tr>
<th>FISCAL YEARS</th>
<th>INCREMENTAL</th>
<th>RELATIVELY INCREMENTAL</th>
<th>NON-INCREMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0-1.10 ALL&lt;sub&gt;T-1&lt;/sub&gt;</td>
<td>1.11-1.30 ALL&lt;sub&gt;T-1&lt;/sub&gt;</td>
<td>&lt;1.0 or&gt;1.30 ALL&lt;sub&gt;T-1&lt;/sub&gt;</td>
</tr>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1973/74 n=28</td>
<td>2 7.14</td>
<td>14 50.0</td>
<td>12 42.86</td>
</tr>
<tr>
<td>1974/75 n=28</td>
<td>1 3.57</td>
<td>4 14.29</td>
<td>23 82.14</td>
</tr>
<tr>
<td>1975/76 n=28</td>
<td>0 0</td>
<td>1 3.57</td>
<td>27 96.43</td>
</tr>
<tr>
<td>1976/77 n=28</td>
<td>7 25.0</td>
<td>8 28.57</td>
<td>13 46.43</td>
</tr>
<tr>
<td>1977/78 n=28</td>
<td>2 7.14</td>
<td>6 21.43</td>
<td>20 71.43</td>
</tr>
<tr>
<td>1978/79 n=28</td>
<td>1 3.57</td>
<td>5 17.86</td>
<td>22 78.57</td>
</tr>
<tr>
<td>TOTAL n=168</td>
<td>13</td>
<td>38</td>
<td>117</td>
</tr>
<tr>
<td>MEAN PERCENTAGE</td>
<td>7.74</td>
<td>22.62</td>
<td>69.64</td>
</tr>
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</table>
### TABLE 2. MAGNITUDE OF CHANGES IN BUDGETARY ALLOCATIONS FOR ALL MAJOR NON-DEFENSE AGENCIES, BY TYPE OF EXPENDITURES DURING THE FY 1973/74 - 1978/79.

<table>
<thead>
<tr>
<th>TYPE OF EXPENDITURE</th>
<th>INCREMENTAL 1.0-1.10 ALL $t-1$</th>
<th>RELATIVELY INCREMENTAL 1.11-1.30 ALL $t-1$</th>
<th>NON-INCREMENTAL $&lt;1.0$ or $&gt;1.30$ ALL $t-1$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Chapter I. Salaries</td>
<td>47</td>
<td>27.98</td>
<td>41</td>
</tr>
<tr>
<td>n=168</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Chapter II. General Expenditures</td>
<td>41</td>
<td>24.40</td>
<td>68</td>
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<td>n=168</td>
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<tr>
<td>Chapter III. Other Expenditures</td>
<td>43</td>
<td>26.71</td>
<td>37</td>
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<td>n=161</td>
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<td></td>
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<tr>
<td>Chapter IV. Projects</td>
<td>19</td>
<td>11.45</td>
<td>15</td>
</tr>
<tr>
<td>n=166</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
most of the cases studied were clearly in the "non-incremental process" range. In particular, the magnitude of changes in Chapter III budgetary allocation for 50.31 percent of the 161 cases were within the "non-incremental process" range, while the magnitude of changes in Chapter IV budgetary allocations for 79.52 percent of the 166 cases were within the "non-incremental process" range.

The results in Table 2 suggested that the degree of incrementalism in Saudi Arabian governmental budgetary process varied according to type of expenditure. The budgetary process for Chapters I and II can be characterized as either "incremental" or "relatively incremental" process, while the budgetary process for Chapters III and IV are a clear case of "non-incremental" process.

Also, the previous results are supported when the actual expenditures were analyzed. Table 3 contains the magnitude of changes in actual expenditures for all major non-defense agencies during the fiscal years 1973/1974 through 1978/1979. As shown, the magnitude of changes in actual expenditures for 58.33 percent (98 cases) of the 168 cases were within the "non-incremental process" range; 27.38 (46 cases) were within the "relatively incremental process" range; and only 14.29 percent (24 cases) were in the range of "incremental process" range. Also when analyzed by fiscal years, the table shows that a majority of the agencies' budgetary processes were characterized by a "non-incremental process" during most of the fiscal years. Again, fiscal year 1973/1974 was the only exception.

In summary, the results in Tables 1 and 3 suggested that the Saudi Arabian governmental budgetary process can be characterized in general as a "non-incremental process." Also, the findings in Table 2
### TABLE 3. MAGNITUDE OF CHANGES IN ACTUAL EXPENDITURES FOR ALL MAJOR NON-DEFENSE AGENCIES FOR FY 1973/74 - FY 1978/79.

<table>
<thead>
<tr>
<th>FISCAL YEARS</th>
<th>INCREMENTAL 1.0-1.10 AE&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>RELATIVELY INCREMENTAL 1.11-1.30 AE&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>NON-INCREMENTAL &lt;1.0 or &gt;1.30 AE&lt;sub&gt;t-1&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1973/74 n=28</td>
<td>4</td>
<td>14.29</td>
<td>14</td>
</tr>
<tr>
<td>1974/75 n=28</td>
<td>3</td>
<td>10.71</td>
<td>8</td>
</tr>
<tr>
<td>1975/76 n=28</td>
<td>5</td>
<td>17.86</td>
<td>5</td>
</tr>
<tr>
<td>1976/77 n=28</td>
<td>3</td>
<td>10.71</td>
<td>9</td>
</tr>
<tr>
<td>1977/78 n=28</td>
<td>4</td>
<td>14.29</td>
<td>4</td>
</tr>
<tr>
<td>1978/79 n=28</td>
<td>5</td>
<td>17.86</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL n=168</td>
<td>24</td>
<td>46</td>
<td>98</td>
</tr>
<tr>
<td>MEAN PERCENTAGE</td>
<td>14.29</td>
<td>27.38</td>
<td>58.33</td>
</tr>
</tbody>
</table>
reveals that the degree of incrementalism varies somewhat according to the type of expenditures. The budgetary process for both salaries and general expenditures is represented by either "incremental" or "relatively incremental" processes, while the process for other expenditures and projects can be characterized as a purely "non-incremental process."

2. The Existence of Supplemental Budgeting

Since the existence of supplemental budgets implies the lack of an organization's capability to anticipate their short run needs, the second test investigated this indicator for each fiscal year.

Hypothesis No. 2 stated that supplemental budgeting is a characteristic of the budgetary process of Saudi Arabian non-defence agencies as evidenced by the existence of supplementary budget in the majority (50%) of the agencies for the majority (50%) of the fiscal years studied.

In order to test this hypothesis, Table 4 shows the number and percentage of agencies which had or did not have a supplemental budget for each fiscal year. The data indicated that the majority of the government agencies engaged in supplemental budgeting during each of the six years studied. Specifically, 60.26 percent (94 cases) of the 156 cases had a supplemental budget during the period of the study, while 39.74 percent did not. The results in Table 4 are consistent with a budgetary process characterized by frequent supplemental budgets.

The quantitative data did not suggest reasons for this result. However, the interview results revealed additional insight. The interview data indicated that most of the agencies engaged in supplemental budgets in spite of the agencies' low spending efficiencies. The vast
<table>
<thead>
<tr>
<th>FISCAL YEARS</th>
<th>SUPPLEMENTAL BUDGETS FOR ALL NON-DEFENSE AGENCIES FOR THE FY 1979/1974 - FY 1978/1979</th>
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<tbody>
<tr>
<td></td>
<td>Agencies with Supplemental Budgets</td>
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<tr>
<td></td>
<td>N</td>
</tr>
<tr>
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<td>19</td>
</tr>
<tr>
<td>n=26</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>1977-1978</td>
<td>15</td>
</tr>
<tr>
<td>n=26</td>
<td></td>
</tr>
<tr>
<td>1978-1979</td>
<td>10</td>
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<tr>
<td>n=26</td>
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</tr>
<tr>
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<td>94</td>
</tr>
<tr>
<td>n=156</td>
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</table>
majority of the participants attributed this practice to the project cost estimation and execution. The lack of clarified criteria for cost estimation, ill-qualified personnel, and an insufficient accounting and feedback system led the agencies to over- or underestimate the cost of their projects. Overestimation creates the low spending efficiency, while the underestimation creates the supplemental budget.

The economic wealth in Saudi Arabia makes the budgetary process different from that in underdeveloped countries. In case of delay in project execution or underestimation of cost, the agencies systematically go to the Ministry of Finance for a supplemental budget. Limitation, in economic resources in poor countries necessarily restrain such a practice.

3. The Relationships Among the Participants in the Budgetary Process

The next series of tests investigate the relationships between the budgetary participants in the Saudi Arabian governmental budgetary process. In particular the relationships between budget expansion (a dependent variable) and agency acquisitiveness, Ministry of Finance support, estimated revenue expansion, actual revenue expansion, and spending efficiency (as independent variables) are investigated. The dependent variable and the independent variables are operationally defined in Chapter III.

Simple correlation was used to evaluate the significance of each independent variable. This analysis was performed for each agency. The agencies were then grouped by type, and simple correlation was utilized to measure the significance of each independent variable for each type. Additionally, step-wise regression procedures
were performed to select the "best" independent variable(s) in explaining the variation in the dependent variable.

1. **Simple Correlation Analysis**
   
   **A. Single Agency Analysis**
   
   As shown in Tables 5A - 5E, agency acquisitiveness and Ministry of Finance support play a major role in the budgetary process. The correlation between the Ministry of Finance support and budget expansion was significant for the majority of the government agencies. Specifically, the simple correlations between the Ministry of Finance support and budget expansion were significant for 69 percent (18 agencies) at .01 level. For only two agencies the correlation between the Ministry of Finance support and budget expansion was not significant at .10 level.

   Tables 5A - 5E show that there was significant correlation between agency acquisitiveness and budget expansion. In particular, the correlations between these two variables were significant in 4 agencies at .01 level. The correlation between agency acquisitiveness and budget expansion was not significant at .10 level in 15 agencies. However, the values of these correlations were in the range of moderate correlation.

   The findings in Tables 5A - 5E reveal that the relationships between Ministry of Finance support and budget expansion were stronger than the relationships between agency acquisitiveness and budget expansion. Specifically, the average simple correlation between Ministry of Finance support and budget expansion was .87 and between agency acquisitiveness and budget expansion was .65. Accordingly, the Ministry of Finance seems
TABLE 5A. CORRELATION BETWEEN BUDGET EXPANSION (DEPENDENT VARIABLE) AND AGENCY ACQUISITIVENESS, MINISTRY OF FINANCE SUPPORT, ESTIMATED REVENUE EXPANSION, ACTUAL REVENUE EXPANSION, AND SPENDING EFFICIENCY (INDEPENDENT VARIABLES). "ECONOMIC RESOURCE DEVELOPMENT"

<table>
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<td>-.236</td>
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<td>Economic Resource Development</td>
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<td>.184</td>
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* Significant at .01 level
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<th>ERE</th>
<th>ARE</th>
<th>SE</th>
</tr>
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<td>.723 T</td>
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<td>.996*</td>
<td>.049</td>
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<td>Development</td>
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</table>

* Significant at .01 level
** Significant at .05 level
T Significant at .10 level
### TABLE 5C. CORRELATION BETWEEN BUDGET EXPANSION (DEPENDENT VARIABLE) AND AGENCY ACQUISITIVENESS, MINISTRY OF FINANCE SUPPORT, ESTIMATED REVENUE EXPANSION, ACTUAL REVENUE EXPANSION, AND SPENDING EFFICIENCY (INDEPENDENT VARIABLES).

"SOCIAL AND CULTURAL DEVELOPMENT"

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<tr>
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<td>.963*</td>
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<td>Agency #12</td>
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<tr>
<td>Agency #13</td>
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<td>Agency #14</td>
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<td>Social and Cultural Development</td>
<td>.643</td>
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</tbody>
</table>

* Significant at .01 level  
** Significant at .05 level  
T Significant at .10 level
TABLE 5D. CORRELATION BETWEEN BUDGET EXPANSION (DEPENDENT VARIABLE) AND AGENCY ACQUISITIVENESS, MINISTRY OF FINANCE SUPPORT, ESTIMATED REVENUE EXPANSION, ACTUAL REVENUE EXPANSION, AND SPENDING EFFICIENCY (INDEPENDENT VARIABLES). "PHYSICAL INFRASTRUCATION DEVELOPMENT"

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<th>ERE</th>
<th>ARE</th>
<th>SE</th>
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<td>.220</td>
<td>.423</td>
<td>.175</td>
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<td>.050</td>
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<td>.373</td>
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<td>.349</td>
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<td>.204</td>
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<td>.583</td>
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<td>Physical</td>
<td>.952*</td>
<td>.997*</td>
<td>.117</td>
<td>.262</td>
<td>-.009</td>
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</tbody>
</table>

* Significant at .01 level
** Significant at .05 level
TABLE 5E. CORRELATION BETWEEN BUDGET EXPANSION (DEPENDENT VARIABLE) AND AGENCY ACQUISITIVENESS, MINISTRY OF FINANCE SUPPORT, ESTIMATED REVENUE EXPANSION, ACTUAL REVENUE EXPANSION, AND SPENDING EFFICIENCY (INDEPENDENT VARIABLES).

"ADMINISTRATIVE AND SERVICES"

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<th>MFS</th>
<th>ERE</th>
<th>ARE</th>
<th>SE</th>
</tr>
</thead>
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<td>.594</td>
<td>.366</td>
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<td>Agency #22</td>
<td>.949*</td>
<td>.937*</td>
<td>- .156</td>
<td>- .435</td>
<td>.583</td>
</tr>
<tr>
<td>Agency #23</td>
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<td>Agency #24</td>
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<td>.472</td>
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<tr>
<td>Agency #25</td>
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<td>.977*</td>
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<td>-.214</td>
<td>-.168</td>
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<tr>
<td>Agency #26</td>
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<td>.846**</td>
<td>.084</td>
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<td>-.027</td>
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<tr>
<td>Administrative and Services</td>
<td>.924*</td>
<td>.973*</td>
<td>.056</td>
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<td>All Agencies</td>
<td>.906*</td>
<td>.987*</td>
<td>.361</td>
<td>.257</td>
<td>-.333</td>
</tr>
</tbody>
</table>

* Significant at .01 level
** Significant at .05 level
to influence the output of the final budgetary decisions more than individual agencies did.

The results in Tables 5A - 5E also indicate that there were no significant correlations between budget expansion and the other independent variables. The correlation between estimated revenue expansion and budget expansion ranged from a low of -.005 to a high of .950. In only 2 agencies was the correlation between estimated revenue expansion and budget expansion significant at .10 level. The correlations between actual revenue expansion and budget expansion was not significant at .10 level. The correlations ranged as low as -.007 and as high as .62. Moreover, the spending efficiency was not significant at .10 level for any of the agencies in the study sample.

In summary, the single agency analysis shows that a significant correlation existed between budget expansion and agency acquisitiveness and between budget expansion and Ministry of Finance support. However, the correlation between budget expansion and Ministry of Finance support was stronger than between budget expansion and agency acquisitiveness. Moreover, there were no significant correlations between budget expansion and estimated revenue expansion, between budget expansion and actual revenue expansion, and between spending efficiency and budget expansion (the other independent variables). These findings indicate that both Ministry of Finance and individual agencies play major roles in the budgetary process; however, the Ministry of Finance seems to influence the output of the final budgetary decisions more than individual agencies.
B. Aggregate Data Analysis

As displayed in Table 5E, Ministry of Finance support and agency acquisitiveness played a major role in the budgetary process. For the entire period examined, the simple correlation between agency acquisitiveness and budget expansion was .90 and between the Ministry of Finance support and the budget expansion was .98; each was significant at the .01 level. The aggregate data analysis reveals that both the Ministry of Finance and the government agencies influenced the budgetary output.

The data in Tables 5A - 5E indicate that the simple correlations between the Ministry of Finance support and budget expansion did not vary considerably upon the grouping agencies by types of services. In fact, the correlation between Ministry of Finance support and budgetary expansion was significant at the .01 level in all agency types.

The correlation between agency acquisitiveness and budget expansion relatively varied from one type to another. This correlation was significant at .01 level in human resource development, physical infrastructrature development, and administrative and service types (.925, .952, and .924, respectively). The correlation was not significant in economic resource development and social and cultural development at .10 level (.557 and .643, respectively).

Tables 5A - 5E also show that a stronger correlation exists between Ministry of Finance support and budget expansion than between agency acquisitiveness and budget expansion. Among all the agency types, the correlation between the Ministry
of Finance support and budget expansion was stronger than between budget acquisitiveness and budget expansion.

In summary, the aggregate data analysis shows that both the Ministry of Finance and the individual agencies (agency acquisitiveness) influenced the budgetary outputs. The role of the Ministry of Finance did not vary upon grouping agencies by type of services. However, the role of agencies varied from one type to another. Also, the Ministry of Finance seemed to influence the budgetary output more than agency acquisitiveness did. In addition, estimated revenue expansion, actual revenue expansion, and spending efficiency were not significantly correlated with budget expansion.

II. Step-wise Multiple Regression Analysis

Regression analysis was used to make inference concerning the factor(s) that affect Saudi Arabian budget expansion. Step-wise multiple regression procedures were used to select statistically the independent variable(s) that significantly explain the variations in the dependent variable. The selection procedures were based on the t-statistics for the regression coefficient and on the maximization of the $R^2$.

Step-wise regression results for each fiscal year – cross-sectional analysis – are displayed in Table 6. As shown, the following results were observed:

1. **Fiscal Year 1973/1974.** The interaction of both Ministry of Finance support and spending efficiency explained 64 percent of the variations in budget expansion ($R^2$ changes = .570 and .072, respectively. F was significant at .01 level). T-statistics for the regression coefficient of both variables were
<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>INTERCEPT</th>
<th>AA</th>
<th>MFS</th>
<th>ERE</th>
<th>ARE</th>
<th>SE</th>
<th>R²</th>
<th>F VALUE</th>
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<td>.062</td>
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<td>.650 13.61*</td>
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<td>R² Change</td>
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<td></td>
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<td>.072</td>
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<td>.827 54.85*</td>
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* Significant at .01 level  ** Significant at .05 level  + Significant at .10 level
significant at .01 level.

2. **Fiscal Year 1974/1975.** Ministry of Finance support explained 93 percent of the variations in budget expansion ($R^2 = .925$, $F$ was significant at .01 level). $t$-statistics for the regression coefficient were significant at .01 level.

3. **Fiscal Year 1975/1976.** Ministry of Finance support explained only 3 percent of the variation in budget expansion. None of the independent variables were significant at .10 level. $F$ was not significant at .10 level.

4. **Fiscal Year 1976/1977.** The interaction of both agency acquisitiveness and Ministry of Finance support explained 69 percent of the variation in budget expansion ($R^2$ changes = .062 and .632, respectively, $F$ was significant at .01 level). $t$-statistics for the regression coefficient of agency acquisitiveness was significant at .05 level and the $t$-statistic for the regression coefficient of agency acquisitiveness was significant at .01 level.

5. **Fiscal Year 1977/1978.** The interaction of both Ministry of Finance support and spending efficiency explained 54 percent of the variations in budget expansion ($R^2$ changes = .498 and .043, respectively, $F$ value was significant at .01 level). The $t$-statistic for the regression coefficient of the Ministry of Finance support was significant at .01 level, and the $t$-statistic for the regression coefficient of agency acquisitiveness was significant at .10 level.

6. **Fiscal Year 1978/1979.** Ministry of Finance support explained 81 percent of the variations in budget expansion
(R² = .813, F was significant at .01 level). The t statistics for the regression coefficient was significant at .01 level.

The above findings indicate that Ministry of Finance support is the dominant independent variable, explaining most of the variation in budget expansion. However, the interaction of both Ministry of Finance support and spending efficiency increased the correlation with budget expansion in two fiscal years. Moreover, the interaction of both Ministry of Finance and agency acquisitiveness increased the correlation with budget expansion in one fiscal year. Therefore, spending efficiency and agency acquisitiveness are contributing influences to the primary factor, Ministry of Finance support, in explaining the variation in budget expansion in the Saudi Arabian budgetary process.

Conclusions

Based on the quantitative budgetary data analysis, the following conclusions were reached:

(1) The Saudi Arabian governmental budgetary process can be characterized as a "non-incremental process." However, the degree of incrementalism varies according to the type of expenditures. The budgetary process for both salaries and general expenditures are consistent with an "incremental or "relatively incremental process," while the process for both other expenditures and projects could be characterized as "non-incremental Process."

(2) The majority of the Saudi Arabian government agencies engaged in supplemental budgeting during each of the six fiscal years studied.

(3) Significant positive correlations were found between budget expansion (the dependent variable) and agency acquisitiveness, as well as between budget expansion and Ministry of Finance support.
(4) A stronger positive correlation was found between budget expansion and Ministry of Finance support than between budget expansion and agency acquisitiveness.

(5) A significant correlation was not found between budget expansion and estimated revenue expansion, actual revenue expansion and spending efficiency.

(6) Ministry of Finance support was found to be the dominant independent variable that explained most of the variation in budget expansion. Thus, the Ministry of Finance seemed to influence the output of the final budgetary decision more than any other factor.
Summary

As reflected by the literature, the environment of each country influences the budgetary process in that country. Often-cited factors which shape this environment are: economic wealth, financial predictability, political institutions, elite values, and size. Economic wealth and financial predictability are considered the most powerful factors. Economic wealth refers to the availability of resources with which to finance the budgetary goals. Rich countries are those with economic wealth sufficient to finance needed programs. Poor countries have precisely the opposite conditions. Financial predictability refers to the ability to anticipate flow of available resources in relation to spending commitments. Certain countries have the ability to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future.\(^1\) The per capita gross national product was used to distinguish between rich and poor countries, a poor country being one with a low per capita gross national product relative to per capita GNP in most Western European countries and the United States. In uncertain budgetary environments future revenue and/or expenditures cannot be forecast with much probability.

of occurrence. Financial predictability is a relative concept. However, uncertain budgetary environments are similar in several respects, including lack of sufficient information, shortage in qualified human resources, lack of diversification of sources of revenues, and lack of administrative capability.

Economic wealth and financial predictability permit four classifications of budgetary environments, namely: rich and certain; poor and certain; poor and uncertain; and rich and uncertain environments. The United States, the United Kingdom, France, and Japan are examples of countries with rich and certain environments. Poor and certain environments exist in American cities, where the budgetary process is certain with respect to financial predictability but poor with respect to economic wealth. Poor and uncertain environments exist in most of the underdeveloped countries. Each of these three classes of budgetary environments has been investigated in the existing literature. Their common characteristics have been identified, and the major behavioral differences among their budgetary participants have been outlined. However, the budgetary process in rich and uncertain environments has never been investigated. One authority explains:

"Budgetary process falling the rich and uncertain box will not be discussed....because I have not been able to find accounts of contemporary governments with these characteristics." \(^2\)

Saudi Arabia is in fact a government with both wealth and environmental uncertainty, and therefore fits in the fourth classification. In Saudi Arabia, the per capita gross national product is on the

\(^2\)Ibid., p. 11.
same level as previously mentioned rich countries (1980 gross national product per capita was estimated to be $15,700). However, Saudi Arabia's current income is high. Rather than the result of manufacturing and industry, this income is results from an inexpensive transfer of capital in the form of oil into capital, in the form of money. In addition, the Saudi Arabian agencies are not able to calculate expenditures in the recent past nor project them into the near future. Therefore, the purpose of this study was to examine empirically the characteristics of the government budgetary process in which the environment is uncertain but where the government is rich.

The study was carried out in four major phases.

First, the theory that exists to explain the governmental budgetary process in any country regardless of the existing government within that country is examined.

Second, the characteristics of budgetary processes in the first three classes of budgetary environments (Rich/Certain, Poor/Certain, and Poor/Uncertain) are reviewed.

Third, the characteristics of the budgetary process in rich and uncertain environment are examined empirically. This phase involves several stages. The role perceptions of the major participants in the Saudi Arabian government budgetary process are analyzed; the characteristics of the country's governmental budgetary processes are empirically examined; and preliminary recommendations for the improvement of the country's governmental budgetary process are developed.

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Finally, the characteristics of the budgetary processes in rich and uncertain environments are compared with the other three classes of the budgetary environments.

Since no previous study has been conducted to investigate the budgetary process in rich and certain environments, the reliance on a single research method to examine the budgetary process in this environment was unavailable. Therefore, a combination of different research methods were used to gather the relevant data for this study. This combination included library research, interviews, and empirical testing of the quantitative budgetary data. In particular, open-end interviews were conducted with 47 budgetary participants. The objectives of the open-end interviews were twofold, namely: (1) to provide adequate knowledge (or a descriptive picture) of the Saudi Arabian governmental budgetary process, and (2) to describe and analyze the role perception of the participants in the budgetary process. The result of these interviews were reported in Chapter III.

The characteristics of the Saudi Arabian governmental budgetary process and the relationships among the budgetary participants were investigated through analyzing quantitative budgetary data. Data from 26 selected agencies over a period of six years (FY 1973/1974 through FY 1978/1979) were collected and analyzed. Three steps were used, namely:

(1) Testing the degree of incrementalism in the process by employing the magnitude of changes in budgetary allocations.

(2) Examining the capability of the government agencies in anticipating their short run needs by analyzing the number and percentage of agencies that engaged in supplemental budgeting.
(3) Investigating the relationships between budget expansion (the dependent variables) and Ministry of Finance support, agency acquisitiveness, estimated revenue expansion, actual revenue expansion, and spending efficiency (the independent variables) by employing the statistical tools of simple correlations, regression analysis, and stepwise multiple regression procedures. The data were analyzed for each of the 26 agencies, for the six fiscal years (cross-sectional analysis), and for type of agency. The results of these analyses are reported in Chapter III.

Consolidation of the Study Conclusions

The evidence suggests that the Saudi Arabian governmental budgetary process can be characterized as a non-incremental process. Specifically, the interview results showed that complexity in calculations was a common attribute throughout the budgetary process. The determination of the projects' priorities and the estimation of their cost, as well as the numerous problems in projects' execution, were determined to be the major causes of this complexity.

The complexity in calculation led most of the government agencies to either over- or underestimate their requests, thus compelling the Ministry of Finance to review the entire agency requests instead of concentrating on the changes or the increments from last year's appropriations. In addition, the dramatic changes in the country's economy forced the Ministry of Finance to give less weight to last year's appropriations and to review the budget on a yearly basis. Hence, most of the project decisions were non-incremental in nature.

Salaries and general expenditures were estimated on the basis of actual needs and, more importantly, on the basis of previous year's
appropriations. Thus, the budgetary decision for these types concentrated on the increment or the changes from previous year appropriations and were incremental in nature.

The evidence from the quantitative budgetary data also supported the above conclusions. The magnitude of changes in budgetary allocations and actual expenditures for most of the cases studied were in the range of "non-incremental" process. However, the degree of incrementalism varied according to the type of expenditures. The budgetary process for both salaries and general expenditures suggested incremental or relatively incremental process while the process both for other expenditures and for projects was non-incremental in nature.

The results of both research tools showed that supplemental budgeting was one of the major attributes of the Saudi Arabian budgetary process. The interview indicated that the government agencies used these budgets extensively to overcome uncertainties in predicting their future needs. Economic wealth has contributed a great deal to the existence of these budgets. However, the agencies must justify the needs for any changes in the original budget. The quantitative budgetary data also revealed that the majority of the government agencies required supplemental budgets during each of the six years surveyed.

The interview results showed that the lack of skilled and highly trained professionals was the rule, not the exception, among the government agencies. However, this problem did not exist in the budget department of the Ministry of Finance. This department did face, however, shortage in the number of staff. Both problems contributed to the absence of innovations in the budgetary process.
The budgetary process suffered substantially from the lack of well-defined decision criteria. This problem led most of the government agencies to over- or underestimate their requests. In fact, the vast majority of the participants called for clarifying the decision criteria. However, extensive efforts have been devoted throughout the entire government organization since the 1970's in overcoming this problem. The Five-Years Development Plan was actually a step in that direction. Also, the numerous directives issued by the Ministry of Finance lessened the degree of this problem.

The absence of modern data-gathering and data-reporting techniques was observed throughout the budgetary process. The existing accounting and budgeting system are not sufficient to provide the necessary feedback information.

The results of both research tools revealed that spending agencies and the Ministry of Finance played major roles in the budget output decisions. However, the Ministry of Finance seemed to influence the output of the final budget.

The interview results showed that the formulation cycle is a coordinated effort of various government organizations. The budget or fiscal department at each agency is the primary place for developing and orchestrating its proposed requests. However, both the Ministry of Finance and the Ministry of Planning play a major role in this cycle. The Ministry of Planning, through the FYDP, outlines the agencies' general objectives, specifies the agencies' programs and projects, and furnishes a rough estimate of the financial requirements to execute these projects and programs. The Ministry of Finance has the sole responsibility for reviewing the agencies' proposed
requests and making the final budgetary decisions. However, the Council of Ministers, as the main legislative body, has the power to approve the country's annual budget.

The interview data revealed that the majority of the DBAs viewed their role as "coordinator" among the agency's departments in formulation of both the agency's plans and annual budget request, rather than as "decision maker." Most of the agency budget decisions were made by special committees in which the DBAs participated extensively. In contrast, the role of OBFs could be viewed as that of "cutter" more than an "efficiency economizer." Most of the OBFs tended to cut the agencies' requests, believing that they had exaggerated in their estimation. The budgetary process showed a high level of strategizing. Spending agencies tended to exaggerate their estimates, knowing that the Ministry of Finance would alter their estimates. This resulted in utilizing formal and informal contacts by both the agencies' representatives and the staff of the budget department to achieve mutual agreements.

The quantitative budgetary data seemed to support the interviews' results concerning the relationships between the budgetary participants. Significant positive correlations were found between budget expansion and both agency acquisitiveness and Ministry of Finance support. The correlations between budget expansion and Ministry of Finance support was stronger than the correlations between budget expansion and agency acquisitiveness. Moreover, there were no significant correlations among budget expansion and estimated revenue expansion, actual revenue expansion, and spending efficiency. Since the Ministry of Planning has a major influence on agency acquisitiveness,
the simple correlation indicated that these three organizations affected the final budgetary output. However, the multiple regression analysis showed that the Ministry of Finance support was the independent variable that explained most of the variation in budget expenditure.

The final objective of this study is to compare its conclusions with the research findings in other budgetary environments. These comparisons are limited to the characteristics of the budgetary process, frequency of strategic maneuvers, and the degree of complexity in calculations. Figure 7 displays a summary of the characteristics of the budgetary process, frequency of the strategic maneuvers, and the degree of complexity in calculations for the three classes of budgetary environments (rich and certain, poor and certain, and poor and uncertain) and their counterparts in the Saudi Arabian governmental budgetary process.

"Rich and certain environment" refers to a budgetary system which has the ability to mobilize sufficient resources or to control expenditures, or both, and which has the ability to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary processes in the United States, the United Kingdom, France and Germany are examples of this budgetary environment. The budgetary process in these countries classified as rich and certain is incremental. Past decisions serve as bases from which future expenditures are determined, and the budgetary processes are concerned with adding or subtracting a small percentage (increment) to or from the existing base.

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Figure 7. Summary of the Characteristics of the Budgetary Processes, Frequency of the Strategic Maneuvers, and the Degree of Complexity in the Calculation for the Three Classes of Budgetary Environments, and Their Counterparts in the Saudi Arabian Governmental Budgetary Process.

<table>
<thead>
<tr>
<th>Economic Wealth and Financial Predictability</th>
<th>Example</th>
<th>Characteristics of Budgetary Process</th>
<th>Frequency of the Strategic Maneuver</th>
<th>Degree of Complexity in the Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Rich and Certain Environments</td>
<td>U. S. A., Japan, France, and Britain</td>
<td>Incremental Budgeting</td>
<td>Moderate</td>
<td>Simple</td>
</tr>
<tr>
<td>(2) Poor and Certain Environments</td>
<td>American Cities</td>
<td>Revenue Budgeting</td>
<td>Lowest</td>
<td>Moderate</td>
</tr>
<tr>
<td>(3) Poor and Uncertain Environments</td>
<td>Pakistan, India</td>
<td>Repetitive Budgeting</td>
<td>Highest</td>
<td>Complex</td>
</tr>
<tr>
<td>(4) Rich and Uncertain Environments</td>
<td>Saudi Arabia</td>
<td>Non-Incremental Process Combined with Supplemental Budgeting</td>
<td>High but Less than Poor and Uncertain Environment</td>
<td>Complex but Less than Poor and Uncertain Environment</td>
</tr>
</tbody>
</table>
"Poor and certain environment" refers to a budgetary system which is unable to mobilize sufficient resources (because of the lack of which is unable to mobilize sufficient resources (because of the lack of resources) or to control expenditures, or both, but which has the ability to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary process in most American city governments is the best example of this budgetary environment. Most American cities are in a poor resources position, but they have significant financial predictability. The budgetary process in this environment becomes a whole revenue control - orientation due to the poor resource position. City officials are aware of the needs of the city, but they must compromise their needs considerably in the fact of limited resources. So, the budgeting process in the poor and uncertain environment is revenue oriented because income determines expenditures.

"Poor and uncertain environment" refers to a budgetary system which is unable to mobilize sufficient resources (because of the lack of resources) or to control expenditures, or both, and which is unable to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary process in India, Pakistan, Egypt, and other poor countries is an example of this budgetary environment. The poor and uncertain nations employ a budgetary process of repetition. Poverty leads them to delay expenditures to ensure that their financial resources are not depleted, whereas uncertainty causes them to reprogram funds repeatedly in order to adjust to rapidly changing conditions. So, the budgetary process in poor and uncertain environments can be characterized
as repetitive budgeting.

"Rich and uncertain environment" refers to a budgeting system which has the ability to mobilize sufficient resources but which is unable to calculate the flow of expenditures or revenues, or both, in the immediate past and to project them into the near future. The budgetary process in Saudi Arabia is a prime example of this budgetary environment. This category seems to be a paradox since certainty is usually a result of wealth. However, this researcher believes that Saudi Arabia is a country which occupies this unique position. Saudi Arabia does not possess the productive factors of manufacturing, agriculture, and banking, which make the United States, The United Kingdom, and France wealth countries. However, Saudi Arabia has a high current income, which, according to the operational definition of economic wealth, makes Saudi Arabia a wealth country (GNP per capita is approximately $15,700). So, Saudi Arabia possesses the financial resources, but does not have the ability to calculate the flow of expenditures in the immediate past nor to project them into the near future. The results show that the government agencies spent an average of 61 percent of their original appropriation during the period of the study. Therefore, the characteristics of the budgetary process in Saudi Arabia differ from those in poor countries (those without money) and in rich countries which are certain about their budgets.

The interview results and the quantitative budgetary data provided ample evidence that the budgetary process of the Saudi Arabian government is a non-incremental process combined with supplemental budgeting. Both Saudi Arabian and rich and certain countries share the common attribute of economic wealth; however, the budgetary process of
Saudi Arabia differs from these countries due to uncertainty in calculating the flow of expenditures in the immediate past and in projecting them into the near future. The past decisions in rich and certain countries serve as bases from which future expenditures are determined and budgetary processes are concerned with adding or subtracting a small percentage (increment) to or from the existing base. By contrast, both spending agencies and the Ministry of Finance in Saudi Arabia do not rely heavily on past decisions as bases from which future expenditures are determined especially for projects expenditures. In fact, uncertainty leads both groups to reevaluate the whole government budget on a year to year basis instead of concentrating on only the changes from the last decision.

The budgetary process in Saudi Arabia is different from those of poor and uncertain countries. Both share the uncertainty factor. Poor and uncertain countries employ repetitive budgeting. Poverty leads them to delay expenditures to ensure that their financial resources are not depleted, where uncertainty causes them to reprogram funds repeatedly in order to adjust to rapidly changing conditions. By contrast, economic wealth in Saudi Arabia extenuates the uncertainty in the budgetary process. Spending agencies engage in supplemental budgeting to cover any shortage in the original funds. Also, the Ministry of Finance utilizes the cumulative wealth to overcome revenue shortages. Poverty in poor and uncertain countries disallows such practice.

The budgetary strategies are most used in poor and uncertain environments. The existing poverty and uncertainty increase the strategic maneuvers among the budget participants. The reason for this phenomenon is that the administrative agencies are not sure of their
needs, and at the same time, the control organ does not have the financial capability to grant the agencies' requests; hence, the administrative agencies tend to exaggerate their requests, knowing in advance that they will be substantially altered by the control organ.

The administrative agencies in poor and uncertain environments frequently utilize strategic maneuvers in order to survive, and the control organ uses severe and erratic reductions due to the uncertainty about future funds.

The participants in rich and certain environments use modest amounts of strategic activities. In this environment the resources are abundant, but the ways and means of requesting and appropriating specific funds are limited by sharply held expectations of desirable conduct. The relationships between the administrative agencies and the control organ in this environment are highly determined and gross departures from this expectation are easy to discover. So, the budget participants in this environment do not rely heavily on strategic maneuvers.

Budgetary strategies are used least in poor and certain environment. Due to the lack of resources and certainty in predicting future funds, the budgetary relationships among participants are highly predictable. Any departure from this pre-determined relationship is easy to discover. So, the budget participants in this environment use strategic maneuvers less than any other environment.\(^4\)

The participants in a Saudi Arabia budgetary process use a high level of strategic activities. However, the frequency of strategic maneuvers is less than in poor and uncertain countries and higher than

\(^4\)Ibid.
in both rich and certain and poor and uncertain environments. The budgetary participants in rich and certain and poor and uncertain environments do not rely heavily on strategic maneuvers since the relationships between the participants are highly determined and any gross departures from this expectation are easy to discover. In contrast, uncertainty compels the spending agencies in Saudi Arabia to exaggerate their requests, and also compels the Ministry of Finance to cut these requests. Both use formal and informal contacts in order to arrive at mutual agreements - without relying on well defined objectives and criteria. Moreover, uncertainty increases the frequency of strategic maneuvers, as in poor and uncertain countries, but the economic wealth reduces the level of those activities among the participants in Saudi Arabian budgetary process. Spending agencies can be satisfied with their original appropriation since they can ask for a supplemental appropriation to cover any unforeseen conditions.

Poverty in poor uncertain countries prohibits such practice. In those countries, spending agencies utilize strategic maneuvers in order to survive. The control organ uses strategic maneuvers due to the lack of funds. The poor and uncertain environment has the most complicated budgetary process of all environments. Poverty and uncertainty in this environment make it difficult for the budget participant to predict next year's budget, so the budget becomes meaningless. Any one financial year is likely to be quite different from last or next year's budget in terms of revenue, expenditures, foreign aid, or inflation; hence, the budgetary process in this environment becomes very complex in calculating the budget, and most of the time it is arbitrary. Because of wealth and certainty, the budget process in rich and certain
environment is the simplest in calculations compared to other environments. Rich and certain nations generally budget by increments (last year's budget plus or minus a certain percentage). So, the administrative agencies in these environments request certain funds with this relationship in mind. The control organ acts almost in the same manner. Hence, the budgetary process is very simple compared to that in the other environments. The degree of complexity in the calculation in poor and certain lies between these two extremes. Certainty in this environment creates simplicity in calculation, but poverty limits change in the budget's original base. 5

The calculation of the Saudi Arabian budget is a very complex process. Uncertainty makes it difficult for the budget participants to predict next year's budget. However, the degree of the complexity is less than in poor and uncertain environments. Economic wealth decreases the degree of complexity since the government has the economic leverage to overcome any mistake in calculation.

Recommendations

1. Establishment of an independent budget department in all government organizations. The trend in the last decade to establish an independent budget department in some agencies to formulate the agency's plans and its annual requests is a step in the right direction. However, the researcher noticed that planning, budgeting, and accounting matters in other agencies are still performed by one department, namely: The Fiscal Department Affairs. Thus, establishment of an independent budget department in those agencies to carry the

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5 Ibid.
responsibility of plans and request formulation is recommended. The responsibilities of both the budget and the fiscal department must be well defined. Moreover, a channel of communications must be established between these two departments.

2. Establishment of a cost accounting unit in each budget department. The study results indicated that the budgeting decision-making process at the agency level suffered substantially from the lack of the necessary feedback information. In order to overcome this deficiency, a centralized cost accounting unit should be established within each budget department. The main responsibility of this unit would be to provide cost/benefit analysis to the decision maker and to furnish monthly reports. The cost accounting unit must utilize modern data-gathering techniques and be equipped with modern data-processing hardware, as well as being staffed with qualified personnel. Furthermore, a channel of communication should be established between this unit and the fiscal department and the other agencies.

3. Increase the formal and informal training of all levels of personnel in each agency's budget and fiscal departments. As mentioned before, the absence of skilled and highly trained budgetary professionals was the rule not the exception in all of those departments. This problem has discouraged any budgetary innovations. The budget and fiscal departments must encourage their employees to participate in the accounting and budget courses that are offered through the countries universities and the Public Administration Institute.

4. Increase the degree of linkage between the five-year development plans and the annual budget. Concerning the annual budget, the FYDP outlines the general objectives of each government organization,
specifies the detailed projects and programs to achieve these objectives, and forecasts the financial requirements for these projects and programs. Officially, the FYDP furnishes the basic outlines for the formulation of the country's annual budget. However, the results of the study suggested the difficulty of adherence to the plan in preparing the annual budget. The writer is not an advocate of introducing PPBs or ZBBs into the Saudi Arabia governmentary process at this time; however, increasing the linkage between the FYDP and budget preparation is essential.

5. Improvement of budget execution. Wildavsky pointed out that poor countries have common problems in budget execution, such as, delay in project execution due to bad weather, delay in delivery of materials, insufficient plans, ill-qualified personnel, and excessive paper work.6

Due to the economic wealth in Saudi Arabia, the severity of these problems is less than in poor countries. However, uncertainty in the Saudi Arabian governmental budgetary process leads most of the government agencies to delay some of the planned projects, thus, increasing the degree of complexity of decision-making for the next year's budget.

The last decade has witnessed extensive efforts by all government agencies and organizations to improve budget execution. These efforts are steps in the right direction. However, more efforts are recommended in order to decrease the degree of complexity of the decision-making process. These efforts may take any or all of the following paths:

6Wildavsky, Budgeting: A Comparative Theory of Budgetary Process, p. 149.
(a) Increase of the responsibility of the Ministry of Public Works and Housing to include control of all government projects execution and preparation of monthly reports on the progress of all government projects.

(b) Separation between the budgetary processes for recurrent expenditures and project expenditures.

(c) Extension of the project budgetary cycles from their present one-year cycle to a two-year cycle thereby allowing more time for project decisions.

(d) Increase in the degree of cooperation among all government organizations in project executions.

(e) Improvement of the financial and accounting guidelines.

6. Establishment of a committee to study the government accounting system. This committee may be composed of the members of the professional and academic communities.

7. Establishment of well-defined decision criteria throughout all the budget cycles.

8. Improvement of the budget classifications. Due to the rapid increase in government activities, relevant information is more essential now than ever before; such information is not generated by the traditional Saudi Arabian budgetary process. Although the traditional budget promotes "Accountability" by emphasizing the control over administrative spending abuses, the traditional budget does not focus upon budget output or the accomplishment of governmental goals. The government agencies are advised to focus on program, program cost and program outputs in formulating their requests, instead of focusing upon item cost. In addition, the Ministry of Finance should
review the budget on the basis of programs rather than line items. This approach would be easy to accomplish in Saudi Arabia's governmental budgetary process since it is reviewed and approved in a centralized fashion, in contrast to the process in countries where the budget is reviewed and approved in fragmented fashion.

9. Establishment of a cost accounting unit within the budget department of the Ministry of Finance. The responsibility of this unit is to furnish basic feedback information to the budget reviewers.

10. Increase the number of budget reviewers at the budget department of the Ministry of Finance. The study showed that this department, unlike the budget department of the agencies, does not lack professional personnel. However, it does have an inadequate number of personnel to perform its functions in the required time span. The Ministry of Finance is advised to make an extensive effort to hire additional professionals.

11. Improvements in audit procedures and reporting. A committee should be established to study the audit procedures and reporting. As an initial step, both the Ministry of Finance and the Audit Bureau should be encouraged to issue monthly reports in pre- and post-audit.
BIBLIOGRAPHY

I. BOOKS


Steiss, Allen


II. PERIODICALS


III. MISCELLANEOUS


Audit Bureau, Annual Reports on Budget Execution (1972-1979), Kingdom of Saudi Arabia (Arabic).


Ministry of Finance, Budget Preparation Instructions and Forms 1979, Saudi Arabia (Arabic).


U. S. Department of State. Foreign Economic Trends and Their Implications for the United States, International Marketing Information Series, Number 79-150.
APPENDIX I

Open-End Interview Schedule

"ENGLISH"

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OPEN-END INTERVIEW SCHEDULE*

I. The following questions will be asked of the various participants in the budgetary process.
   - To start with, would you give me a brief biographical sketch of yourself? Please include your educational and occupational background.
   - What is your current position?
   - What is your role in the budgetary process?

II. The following questions will be asked of the agency's budget officials.
   - How does your agency go about drawing up its annual budgetary request?
   - How many people and work hours are involved with the development of your agency's request?
   - What criteria do you use in evaluating each departmental request?
   - How effective are these criteria?
   - What criteria do you use to judge whether an item should be included in your agency's request? Why?
   - How effective are these criteria?
   - Are you formally or informally in contact with other agency budget officers concerning your request?

- What are the results of these contacts and how effective are they?
- After you have submitted your agency's request to the Budget Department, what does your office do?
- Are you formally or informally in contact with the Budget Department's officers concerning your requests?
- What effect do these contacts have on your subsequent request?
- What criteria does the General Budget Department use to evaluate your agency's request?
- How effective are these criteria?
- After the agency's budget is approved, what does your office do?
- During the execution stage, does your agency request supplementary funds? If yes, why?
- What criteria does the budget officer use to evaluate the supplementary request?
- Are there any other items pertaining to the budgetary process you feel are important, but which I have left out?
- Finally, what suggestions do you think could improve the budget process in Saudi Arabia?

III. The following questions will be asked of the Budget Department officials (Ministry of Finance).
- How does the Budget Department go about reviewing the approving each agency's annual budget?
- How does the Budget Department go about reviewing and approving the whole governmental budget?
- How many people and work hours are involved with the development of the governmental budget?
- What criteria does your office use in reviewing and approving each agency's budget?
- How effective are these criteria?
- Does your office give equal treatment to all agencies' requests? Why?
- Does your office contact other agencies concerning their requests?
- What effect do these contacts have on the budget review and approval?
- After approving the governmental budget, what role does your office have in the budget execution?
- During the execution stage, does your office approve any supplementary funds to the agencies? If yes, why?
- What criteria does your office use to evaluate the supplementary requests?
- What suggestions do you think could improve the budgetary process in Saudi Arabia?
- Finally, are there any items pertaining to the budgetary process you feel important, but which I have left out?
APPENDIX II

Open-End Interview Schedule

"ARABIC"
بسم الله الرحمن الرحيم

- نقطة رئيسية في المقابلة المفتوحة

الأسئلة التالية توجه لمراجعة الإدارات المالية أو التخطيط والميزانية في الوزارات والصالح الحكومية المعنية في عينة البحث، وكذلك موظفي إدارة الميزانية بوزارة المالية المسؤولين مباشرة عن مناقشة الميزانية.

- ارجو اعطائي نبذه عن حياتكم الوظيفية وكذلك التعليم؟

ما هو مركز الوظيفي الحالي

ما هو الدور الذي تقوم به شخصيًا في إعداد ومناقشة الميزانية؟
الاستفادة التالية توجه إلى مدارس الادارات المالية أو التخطيط والميزانية

المنشأة في بيئة البحث في الوزارات والمصالح الحكومية.

ما هي الإجراءات التي تتخذها ادارتك عند عدد ميزانية الوزارة (المصلة)?

كم عدد الموظفين وساعات العمل على التقريب التي تستغرق في اعداد ميزانية الوزارة (المصلة)?

ما هي الاسس التي بوجبها يتم الموافقة على ميزانية الأقسام المختلفة؟

ما عدد تلك الاسس؟

ما هي الاسس والقواعد التي بوجبها تحكم ادارتك عند طلب أي بند مال

بنود الميزانية؟
ما جدوى تلك الأساس والقواعد؟

هل تصلون رسماً أو غير رسمي مع مدير ان الادارات المالية أو المالية من الوزارات والصالح الحكومية الأخرى عند اعدادكم لميزانية الوزارة أو المصلحة؟

ما هي نتائج هذه الاتصالات وما جدواها؟

ما هي الإجراءات التي يتم اتخاذها من قبل اداركم عند تقديمكم لميزانية
الوزارة (المصلحة) لوزارة المالية؟

هل تصلون رسماً أو غير رسمي مع موظفي ادارة الميزانية بوزارة المالية قبل
أو بعد تقديم ميزانية الوزارة (أو المصلحة)؟
ما جدوى تلك الاتصالات قبل وبعد تقديم الميزانية؟

ما هي القواعد والأسس في رأيك التي تبنى عليها إدارة الميزانية بوزارة المالية عند مناقشة ميزانية الوزارة (المملحة)؟

ما جدوى تلك القواعد والأسس؟

ما هي الإجراءات التي تتخذها ادارتك بعد موافقة وزارة المالية على ميزانية الوزارة (أو المملحة)؟

خلال دور تنفيذ الميزانية هل تطلب ادارتك مجالس اضافية على ما هو مرتبط به أصلاً في الميزانية؟ إذا كان نعم لماذا؟
ما هي القواعد والأسس التي بوجيها يتم الموافقة على تلك ال bäbal الإضافية؟

ما جدوى تلك الأسس والقواعد؟

هل هناك أي اقتراح في رأيك لتطوير إجراءات إعداد الميزانية في المملكة العربية السعودية؟

أخيرا هل هناك أي نقطة تمتصدون انتها مسبقة في إعداد الميزانية لم يشر اليها سابقاً؟
1- الإشكال التالية توجه إلى موظف في إدارة الميزانية بإدارة المالية السئولين مسئولية
من مناقشة الميزانية:
- ما هي الإجراءات التي تتخذها إدارةكم عند مناقشة واتخاذ ميزانية أو وزارة
أو صحة حكومية؟

- ما هي الإجراءات التي تتخذها إدارةكم عند مناقشة واتخاذ ميزانية الملكة العربية
السعودية ككل؟

- كم عدد الموظفين وساعات العمل التي تستغرق في إعداد ميزانية الدولة؟

- ما هي القواعد والأسس التي بوجبها يتم مناقشة واتخاذ ميزانية الوزارات والمصالح
الحكومية؟
ما جدوى تلك القراع والاسع؟

هل تعطي الوزارات والمصالح الحكومية نفس المعاملة عند مناقشة الميزانية؟
إذا كان الجواب بالنفي لماذا؟

هل تتصلون رسمياً أو غير رسمياً مع مسئولي الوزارات والمصالح الحكومية قبل وأثناء وبعد مناقشة الميزانية؟

ما جدوى تلك الاتصالات؟

ما هي الإجراءات التي تتخذها ادارتهم بعد اقرار وخلال تنفيذ الميزانية؟

هل توافق ادارتهم على اعتمادات اضافية للمؤسسات والمصالح الحكومية خلال تنفيذ الميزانية؟ لماذا؟
ما هي نسبة تلك الاعتمادات الإضافية خلال العام الحالي على التعرف من ميزانية الدولة الأصلية؟

ما هي النواحي والأسس التي يموج بها يتم الموانع على تلك الاعتمادات الإضافية؟

هل هناك اقتراح في رأيكم لتطوير اجراءات أعداد الميزانية في المملكة العربية السعودية؟

أخيراً هل هناك نقطة توجد اضافتها تعتقدون انها مهمة في اعداد الميزانية لم يشر الى سابقاً؟
VITA

Abdulrhman Ibrahim Alhumaid was born in Riyadh, Saudi Arabia, on December 27, 1949. His high school education was completed in Riyadh, Saudi Arabia, in 1969.

He majored in Accounting and Business Administration at the University of Riyadh and graduated in 1973. He taught Accounting courses while working as a Graduate Assistant at the College of Commerce, University of Riyadh.

He received his MBA degree from Central Missouri State University in 1976.
EXAMINATION AND THESIS REPORT

Candidate: Abdulrhman I. Alhumaid

Major Field: Accounting


Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]
Bert P. Hartso

[Signature]
Thomas J. Durand

[Signature]
Kath Felske

[Signature]
J. Paul Spence Land

Date of Examination:

May 14, 1981