

**THE ROLE OF THE GOVERNMENT INCENTIVES POLICY  
IN THE DEVELOPMENT OF THE PRIVATE  
SECTOR IN SAUDI ARABIA**

**B Y**

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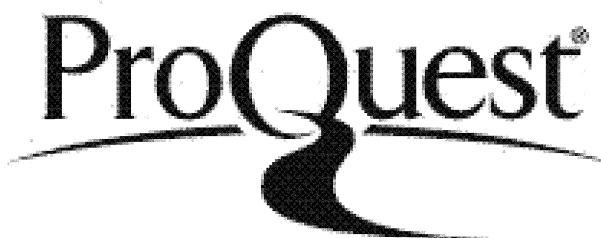
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DEDICATION

TO MY MOTHER, FATHER, GRANDMOTHER

AND

TO MY WIFE, CHILDREN, BROTHERS, SISTERS.

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moral support, understanding and patience throughout my stay  
in the U.S.A and U.K.

## **ABSTRACT**

### **The Role of the Government Incentives Policy in the Development of the Private Sector in Saudi Arabia**

by

**Abdullah Abdulaziz Al-Muajel**

Government, in Saudi Arabia, has been the dominant sector in the economy. Funded by high revenues from oil and pressed by the need for economic development at a time when a vigorous indigenous private sector was virtually nonexistent, the government found itself, willingly or unwillingly, at the center of the development process, as a planner and implementer.

The government's interest in achieving a diversified economy, which does not depend solely on the oil sector, has led to the introduction of many types of incentives such as, procurement, subsidies, concessionary loans, and awarding of infrastructure contracts. The aim of these incentives has been to stimulate and improve private sector investment.

It can be said that the private sector in Saudi Arabia has developed much more after the provision of the incentives, particularly in the agriculture sector. Nonetheless, no study has been made to evaluate these incentives and find out their role in the development of the private sector. Thus, this study aims to provide a comprehensive survey of the incentives policy in Saudi Arabia and to evaluate its impact on the development of the private sector, which is the target sector.

The methodology adopted in this study has involved three aspects of research :

a) Theoretical aspect: this involves reviewing the theoretical side of the relationship between the incentives policy and the desired economic objectives.

b) Field research aspect: this involves designing a questionnaire and an interview directed to the private sector's establishments and businessmen, respectively.

c) Regression aspect: a time-series regression analysis concerning the impact of government expenditures, in general, and the incentives, in particular, on the private sector investment and output, has been carried out.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 An Overview

Government, in Saudi Arabia, has been the dominant sector in the economy. Funded by high revenues from oil and pressed by the need for economic development at a time when a vigorous indigenous private sector was virtually nonexistent, the government found itself, willingly or unwillingly, at the center of the development process, as a planner and implementer. The coordination of planning and implementation of development policies has led to some impressive gains, especially in the areas of education, health, communications, utilities, transportation, agriculture, and manufacturing. It is through government expenditure that, more than anything else, modern infrastructure has been made very conducive to the growth and development of the economy at large.

The private sector made impressive gains of government expenditures on development programmes. However, the participation of the private sector in the economy is not at the level that the government wishes. Therefore, the government has initiated many incentives to increase the involvement of the private sector. This encouragement includes, procurement, subsidies, concessionary loans, and awarding of infrastructure contracts. The government's interest in achieving a diversified economy, which does not depend solely on the oil sector, has led to the introduction of such incentives to the private sector since it has the

potential to achieve this objective.

The boom period 1974-1982, witnessed the starting of many incentive programmes directed to benefit the private sector. For instance, many development funds, such as Saudi Industrial Development Fund (SIDF), different subsidies programmes such as wheat subsidy, and other forms of incentives; were initiated during that period. In addition, the period witnessed the commencement and completion of many development projects, particularly, infrastructure projects, which had a significant impact on the private sector. These factors, no doubt, have improved the position of the sector and made it an important component of the economy.

## 1.2 The Statement of the Problem

The main concern of the Saudi government is the achievement of economic development. The private sector is meant to be developed as any other sector of the economy. Moreover, the sector's development will accelerate the development progress since it is considered as one of its performers. Many factors have provided support for the development of the private sector directly and indirectly. The indirect support has come from establishing many infrastructure facilities, and from huge government expenditures.

The direct support stemmed from the provision of many types of subsidies, interest-free loans, and land distributed free. The aim of these incentives has been to stimulate and improve private sector investment. These incentives tend to reduce the risk associated with domestic investment, and enhance its profitability. Additionally, these incentives are directed to intensify the use of advanced technology to replace traditional practices in the sector and increase its efficiency.



In response to these incentives, the private sector has registered, in different degrees, some expansion in its output and capital formation. The producing sectors of the economy, namely: agriculture, industry, electricity, and the construction sector, have been given the priority, in terms of development, since they constitute the driving force of the economy, and play an essential role in the process of economic diversification. Their share in GDP was 38.5 per cent at the beginning of the Fifth development Plan (1990/1991). Although most of the incentives have been directed to benefit the agricultural and industrial sectors, their contribution to the total GDP in 1990 were 8 per cent, and 6 per cent, respectively, compared to 22 per cent for the construction sector. However, these two sectors' contribution to the total capital investment in the same year were 4.3 per cent, and 6 per cent, respectively, compared to 3.8 per cent for the construction sector.

Unfortunately, although the government has been supporting the private sector for almost two decades, no serious effort has been made as far as we know, either by the government or the private sector, to review and evaluate the incentives policy. As a result, the type and magnitude of effect, negative or positive, of these policies is not known with certainty. It is true that the private sector has grown remarkably during the previous period, but many factors, beside the incentives, contributed to such a growth. For instance, high government expenditures resulting from its general involvement in the economy affected positively the private sector activities, as was proved by many previous studies. Moreover, government investment has, definitely, affected private sector investment in many respects, although the nature of such an effect is not known for sure.

However, the exact effect of the incentives on the development and growth of the private sector is not known.

Was the expansion in the private sector activities a result of the incentives alone, or of the improvement of the investment climate in the country in general? Likewise, it is not known whether the achievement of the incentives policy justify the forgone revenues.

We argue that the incentives policy has affected the private sector positively, particularly the small and new investments. But it might be more efficient if there was a periodical evaluation to the policy, and if there was a strict supervision on their use by the beneficiaries. Moreover, the effectiveness of the incentives has been limited by some constraints such as, the policy's administration, government policies and regulations, and the lack of coordination between the government departments providing the incentives. Because of these limitations, it was possible to achieve what has been achieved with less than the incentives provided actually.

### 1.3 The Objective of the Study

It can be said that the real sector in Saudi Arabia has developed much more after the provision of the incentives, particularly in the agriculture sector. Nonetheless, no study has been made to evaluate these incentives and find out their role in the development of the private sector. Thus, the study's main objective is to fill this gap by providing a comprehensive study of the incentives policy in Saudi Arabia and evaluate its impact on the development of the private sector, which is the target sector. Moreover, special attention is directed to the following substantive issues:

- a. to provide an overview of the current private sector status in Saudi Arabia and identify the major constraints facing it.

- b. to examine the volume of government investment and how

it has affected the private sector.

c. to emphasize the viewpoints of Saudi businessmen regarding the various incentives provided by the government.

d. to explore the weaknesses that reduce the effectiveness of the incentives policy.

The incentives to be evaluated in our study include the following programmes: subsidies, interest-free loans, land distribution, and protection policy. Their impact on the private sector, in general, and on the agricultural and the industrial sectors, in particular, will be the subject of the evaluation. The choice of these two sectors is justified by the fact that the incentives have been directed mainly to these two sectors. Moreover, according to the policy makers, they have the potential to achieve the economic diversification objective.

#### 1.4 The Methodology

The methodology adopted in this study has involved three aspects of research :

a) Theoretical aspect: this involves reviewing the theoretical side of the relationship between the incentives policy and the desired economic objectives.

b) Field research aspect: this involves designing a questionnaire and an interview directed to the private sector's establishments and businessmen, respectively. The frequency and percentage statistics of this survey have been employed to evaluate the incentives policy in Saudi Arabia.

c) Regression aspect: a time-series regression analysis concerning the impact of government expenditures, in general, and the incentives, in particular, on the private sector investment and output, has been carried out.

## 1.5 Organisation of the Study

This study consists of nine main chapters. Chapter One introduces the study and lays out the problem to be investigated. It also states the objectives of the study, and the methodology employed.

In Chapter Two, an effort has been made to review the literature concerning some issues of incentive policies. These include: the types of incentives provided by many developing countries, the objectives which these countries seek to achieve from them, and the arguments regarding their utilisation. Moreover, this chapter talks about administering the incentives to point out the important aspects that determine the success of the incentives in achieving their objectives.

Since stimulating investment is the general aim which the incentives are directed to achieve, Chapter Three highlights the investment models which have been introduced to explain the relationship between the incentives and the private investment. Moreover, this Chapter reviews the methods that have been utilised by many studies to evaluate the incentive policies applied in many countries. The general findings of these studies are presented, including finding of studies of the Saudi Arabian case.

Chapter Four examines the extent and the nature of government involvement in the economy of Saudi Arabia. The government efforts, through the planning process, to develop the country, will be reviewed in this chapter.

Chapter Five is devoted to discuss the different types of incentives provided by the government to the benefit of the private sector. Their objectives, values, and the government departments providing them, are introduced in the Chapter. Additionally, the Chapter gives more details about the administration of these incentives, and other relevant issues.

In Chapter Six we introduce the methodological approach used by the study in evaluating the incentives policy in Saudi Arabia. The details regarding the procedures that have been followed in managing the field research investigation, namely: the questionnaire and the interview, are discussed. Also, the Chapter provides information regarding the regression analysis to be used in the study.

Chapter Seven is about the Saudi Arabian private sector's development and activities. In this Chapter, the relationship between the government expenditures and incentives, and the private sector development and activities will be examined. That examination is done mainly through the regression analysis approach.

Chapter Eight presents the results of the field research investigation, and utilised them to evaluate the incentives policy applied in Saudi Arabia. Yet, more investigation on the incentives policy will be carried out in that Chapter to have a full evaluation to the incentives policy.

Finally, Chapter Nine gives the conclusion of the study and provides some recommendations for improving the performance of the incentives policy in Saudi Arabia.

## CHAPTER TWO

### A SURVEY OF LITERATURE ON THE PRACTICES OF INCENTIVE POLICIES IN DEVELOPING COUNTRIES

#### 2.1 Introduction

Economic development is a desirable objective of all developing countries. The transition from primitive and poor economies, to well developed economies, has been the aim of all these countries. However, the economic problems facing developing countries, such as, the low productivity of production factors, lack of experience and technology, lack of skilled labour, etc., and the big gap between them and the developed countries, have made the process of development a difficult and long process, though not impossible. Many developing countries, such as Taiwan and Korea, have made rapid improvement in the recent past and overcome many problems which prevented development. "The past three decades of industrialization in developing countries have created a second industrial revolution that is transforming the world economy ... the most rapidly growing developing countries have been those that, without neglecting other sectors, have achieved the most efficient and rapid growth in manufacturing industries"<sup>1</sup> These achievements have partly been a result of

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<sup>1</sup> Hughes, H., 1980, p.12.

government policies and intervention in the economies of most developing countries. Such policies include the provision of infrastructure facilities, public sector investment in many economic activities, and economic planning for improving the general conditions of the economy. Planning as practised by developing countries, is visualised as the principal means in achieving faster economic growth and other development objectives. Many arguments have been raised regarding the success of planning in developing countries but they are beyond the subject of this chapter. Our aim in this chapter is to review one of the policies that has been used by developing countries in their effort to become developed. That policy is the incentive policy which is widely practised in these countries in different forms. Incentive policies in their broad meaning include all systems, regulations, services and facilities that the government provides in order to encourage the existence and expansion of economic projects and activities and to enhance their development and continuation. These incentives include : (i) incentives for the pre-investment stage such as, feasibility studies of the projects at free or at low charges, survey studies of the investment opportunities in the country, provision of necessary information such as the market size, and the assistance in the cost of investment through grants and loans; (ii) the provision of the necessary infrastructure facilities such as transport and communication networks; (iii) the provision of skilled and trained labour through the establishment of appropriate institutions; (iv) the provision of research and development centres; (v) the development of capital markets and financial institutions; (vi) and lastly, the provision of fiscal incentive programmes such as subsidies and protection policies.

We do not intend to review all incentive policies in developing countries but will concentrate on fiscal

incentives, namely: tax incentives, subsidies, lending facilities, and protection policy.

## 2.2. Tax Incentives

Taxes are one of the main sources of income of most governments. Taxes finance government expenditures including that on the improvement and development of the economy. On the other hand, taxes have a bearing on the ability and willingness of the private sector to participate effectively in economic activities. Therefore, many developing countries employ tax concessions policies to create a favourable climate for investment and/or to promote particular economic activities. Among these countries are Malaysia, Mexico, India, Brazil, and Turkey. Tax incentives take many forms such as deductions, credit, exemption, deferrals, and preferential rates.

Tax holiday is one type of tax incentive that is by far the most common incentive in developing countries. It might take all previous mentioned forms. However, the famous form is the full or partial exemption from income and other taxes for a period of time. This ranges, in general, from five to ten years( although some countries such as Nepal offer a much longer period). Among the countries that provide tax holidays is Malaysia. It offers exemption from corporation income tax, dividend income tax, and indefinite loss carry-over for a period of five to ten years based on the size of the investment, its location, and employment. In Thailand, a tax holiday offers full exemption from business tax and corporation income tax for a period of three to eight years, and a 50% reduction on both taxes for five more years. Some countries offer exemption on only a part of the earnings. For instance, India limits income tax exemption to earning less than 6% of average capital employed. Lower tax rate is



another type of tax incentive where the government sets a reasonable rate for taxes, to attract investors to participate in economic activities, instead of providing a tax concession in one form or another. Indonesia is one country that follows such a policy. This type of a concession offer is preferred to a tax holiday where the tax rate the investor has to face, after the exemption period is over, is very high. Tax credit allows the firm to deduct all or part of the asset's cost from taxable income. In the Philippines, tax credit is granted to 100% of the cost of equipment bought from foreign and domestic markets to be used in investment operations. A penalty of twice the credit is imposed on those enterprises which resell the equipment without authorization. Korea provides full exemption from taxes on interest on foreign loans. The forms of tax incentives take more than what we have mentioned such as exemption from export taxes, preferential tax treatment, and reinvestment allowances which exempt reinvested income from the income tax. However, our aim is to shed light on some of them instead of listing all.

#### 2.2.1 THE ROLE OF TAX INCENTIVES

As we have said, many developing countries offer tax incentives in one form or another. Their purpose, as with other incentives, is to help in achieving economic objectives such as economic growth and income distribution. Disagreement on the effectiveness of tax incentives exists and opinions vary from an extreme, such as those of Ross and Christensen<sup>2</sup>, who argue that tax incentives rarely affect business decisions; to the other such as of Bryce who said " I have taken pleasure in attempting to debunk ... those who seek to discredit such proved industrial incentives as tax

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<sup>2</sup> Ross, G.S., and J.B. Christensen, 1959, p.ix.

exemption"<sup>3</sup>. This controversy exists and will continue as long as both success and failure of developing countries experience in using these incentives exist.

The general effect of the provision of tax incentives is an overall improvement in the financial state of the enterprise. This improvement enables the enterprise to undertake more activities than in the absence of the tax concession. It is argued that the exemption or reduction from income tax in the early years of investment, such as in the case of a tax holiday, speeds up the cash flow from operations and hence puts more funds at the disposal of the firm to finance current investment requirements. The increased share of the profit left with the enterprise, due to the exemption, often results in a positive impact on its technical and economic indicators. The role of tax exemption in helping the enterprise recover its capital more quickly and maintains liquidity is expected to reduce the risk associated with investing in developing countries. These positive effects can be limited by many factors. Among them is the state of the tax system. Opponents of the use of tax incentives argue that investors prefer the reform of the, outdated, inefficient, inequitable and often corrupt, tax systems in developing countries to the provision of tax incentives for a period of time and then be left to live with the bad system. Bryce agrees with them about the need for a reform of the tax system in these countries, but he maintains that tax concessions and tax reform are two separate issues and should not be confused with each other. He adds that, although some countries might need one of them, others might benefit from having both tax incentives and a reform in the tax system.<sup>4</sup> Another factor

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<sup>3</sup> Bryce, M.d., 1965, p.v.

<sup>4</sup> Ibid, p.205.

that needs to be explored, is the tax system that the foreign investor faces in his country. Galenson argues that the tax system in foreign countries will strongly affect the attractiveness of tax concessions to the foreign investor.<sup>5</sup> She adds that if the tax rate in both the home country and the host country is the same then, the income tax exemption will have no effect on a firm's tax liability and what will happen is a transfer of revenue from the host country to the home country. Another point that she mentions which also limits the positive impact of the tax exemption is that the tax holiday would be worthless, particularly for infant firms, if the period of exemption begins in the first year of operation instead of the first year of earnings since the earnings of first years are usually small.<sup>6</sup> However, if the exemption starts in the first year of operation, it might encourage the firm to work hard to benefit from the tax exemption before the period ends. Lim argues that tax holiday provides little help for firms earning little or no profits, while they are in need of support; and great assistance for firms earning high profits who are not in need of it. He adds that, for risky investment a tax holiday offers little incentive since its effect does not appear until profits are made.<sup>7</sup>

Before we finish this section it is worth mentioning another argument which is concerned with the cost of tax incentives. The cost of tax incentives as revenue forgone by the government has been mentioned by its opponents as a reason against the use of this policy. Galenson and Bryce argue that if tax incentives have induced investment that would not be undertaken by the investors without the existence of tax

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<sup>5</sup> Galenson, A., 1984, p.10.

<sup>6</sup> Ibid, p.9.

<sup>7</sup> Lim, D., 1983, p.208.

incentives, then, the cost to be lost is compensated.<sup>8</sup> Moreover, the revenue forgone by the government which induced new investment will yield more revenue in the future from these new investments.

## \* 2.3 The Subsidies Policy

A very old method employed by policy makers to support desired economic activities is the subsidy policy. Although it is difficult to define the word 'subsidy', the identification of the programmes that can be classified under subsidies is not difficult. There are many types of subsidies but we do not intend to discuss all of them. We shall only mention two types which are relevant to this chapter, namely, input subsidies, and output subsidies.

Input subsidies include any assistance the government provides to the producers that enable them to purchase inputs such as, capital goods, labour, raw materials, land, and utilities, cheaper than their market prices. Government assistance takes many forms. It could be through subsidising capital goods and raw materials for example, by reducing their cost to the producers. In some countries, such as India and Pakistan, the government sells inputs, such as fertilisers, directly to the farmers, at prices below the market price. Brazil, Korea and Turkey have provided an exemption of or a reduction in customs duties on capital goods, which are not domestically produced, in their effort to accelerate the process of industrialisation.<sup>9</sup> Labour may also be subsidised through the provision of manpower training programmes by the government, as in Nigeria; easy regulations for importing

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<sup>8</sup> Galenson, A., p.9; and Bryce, M., p.210.

<sup>9</sup> Donges, J. B., 1976, p. 630.

foreign labour, as in the Arab Gulf States; and supporting the firm with credit equal to a specified percentage of its wage expenditure as in some other countries. Another form includes the distribution of agricultural lands, freely or at low prices; and the provision of industrial estates, which are equipped with all necessary facilities such as, electricity, water, and telephone lines, for businessmen to buy or lease at reasonable prices. Lastly, the low charges on gas, electricity, and other utilities are considered to be a form of input assistance provided by the government as an encouragement to enterprises. Kuwait offers the cheapest rates of these utilities among the Gulf States.

On the side of production subsidies we find many types of programmes. The price support is the most popular one. Many countries are interested in supporting both the producers in gaining profitable revenues, and the consumers in buying the commodity at a reasonable price. To do so, the government sets the price of the commodity at a certain level that ensures that both goals are attained. In Cameroon, the producers, of the supported products, can sell their final products at a price that provides a margin of 12% on top of all costs. Another way of providing production subsidies is paying the producer a cash grant when his production exceeds a certain volume. In some countries, the government guarantees the purchase of the final product, partially or totally and in turn resells it to the public or exports it. Other countries require that the contractors of government projects buy the project needs, totally or partially, from the domestic market whenever they are available at acceptable quality. Assisting products marketing, domestically and internationally, is another important form of subsidy since marketing costs are high in most developing countries. In Saudi Arabia, local producers receive a discount of 30% on commercial advertisements on television. Some developing countries, such

as Korea, Taiwan, and Malaysia, have chosen export oriented industrialisation as a strategy for developing their economies. Therefore, Korea, for example, provides many types of incentives to the export industries such as, generous wastage allowances, credit preferences, and preferential electricity and railroads rates.<sup>10</sup> The subsidisation of export facilities such as, storage, shipping, advertising abroad, and insurance, is an important encouragement for export production. In the Philippines, exporters are supported by the government toward the costs of shipping and promotional expenses for exports. In addition, free trade zones have been established in many places to encourage export. The producers of exported goods who depend heavily on imports for their production needs benefit most from these zones. In Colombia, an export processing zone has been established since 1970.

#### 2.3.1 THE ROLE OF THE SUBSIDIES

The role of the subsidies can be investigated at various levels of economic analysis. At the microeconomic level, subsidies are treated as affecting (correcting or distorting) factor and product markets. Subsidies such as capital grants influence the factor market, while others like price controls on selected products change product market conditions. At the macroeconomic level, subsidies affect the nation's capital formation, employment, industrial production, etc. For instance, capital subsidy for a favoured industry makes capital cheaper, and therefore lowers the cost of production in the microeconomic sense. At the macroeconomic level, the lower cost of capital induces greater capital formation. Moreover, the investor's income is affected by subsidies in

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<sup>10</sup> Balassa, B., 1978, p. 28.

different ways. Lower price of inputs will increase the real purchasing power of a given sum of money income. In addition, loans provided by governmental institutions, at low or interest-free rates, reduce both the cost of financing, which represents a large part of production costs, and eases budget constraint that faces the investor. Lastly, output subsidies increase revenue and enhance the profitability of the firm.

In the factor market, subsidies alter relative prices by making one factor cheaper than the other and therefore lead to the substitution of the subsidised inputs for the non-subsidised ones, depending on the elasticity of substitution. "Many studies on production functions carried out in developed and developing countries have found that the elasticity of substitution in factor proportions is positive with respect to factor prices".<sup>11</sup> In developing countries where the capital is the most desired factor and therefore the government subsidise its use by investors, it should be borne in mind that the subsidy might lead to the expansion of capital intensive industries at the probable cost of a higher rate of unemployment. As Jones and Cockeril stated, capital subsidies reduce capital prices relative to labour prices, and due to the substitution effect, investment will increase in more capital intensive methods of production.<sup>12</sup> Another impact of capital subsidy on investment is through making the payback period shorter and therefore making the economic life of the assets eligible for the subsidy shorter than before.<sup>13</sup> Capital subsidy stimulates production and hence increases the derived demand for other factors of production. But in the long run, under the assumption of perfect competition, the

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<sup>11</sup> Gandhi, V.P., 1986, p.29.

<sup>12</sup> Jones, T.T., and T.J. Cockeril, 1984, p117.

<sup>13</sup> Denton, G., and S.O. O'Cleireacian, 1972, p.64.

reduction in average cost, due to the subsidy, increases the profit received by the firm, and in turn induces the firm to expand and/or new firms will enter the market. In addition, the drop in product prices because of the increment in output, and the increase in factor price due to the increase in derived demand for them, will eliminate any additional profits the firm earns.

In the product market, the government's concern is the support of production as a means of encouraging producers to undertake the desired investment. When the government buys the final products of the producers, as a method of subsidisation, the marketing operations are its responsibility. The costs and benefits of such a subsidy, for the government and producers respectively, depend largely on supply and demand curves elasticities. For instance, if the supply curve is perfectly elastic, production quantities will increase in response to the government purchasing policy. This response of the producers increases the quantity the government receives and has to resell. Here the elasticity of demand is the critical element in determining how much such a subsidy policy costs the government. If demand is totally inelastic or its elasticity is lower than that of supply, then the cost of the subsidy will be more than the difference between the product price of the government and the market (assuming that the government price is cheaper). The choice of the appropriate production subsidy policy that takes into consideration all circumstances in the product market is a very essential issue. Galenson argues that the cost-plus pricing policy tends to "reduce the incentive to lower costs and improve efficiency, provide an incentive for firms to bias their cost estimate upward, and ignores the principal of comparative advantage by allowing identical profit margins for all activities, regardless of efficiency".<sup>14</sup>

Generally speaking, the effect of the production subsidy



would be in three forms : (i) an increase in the quantity produced which leads to a price reduction by an amount less than the subsidy; (ii) an increase in the quantity produced that induces a price reduction equivalent to the amount of the subsidy; (iii) the quantity produced does not change, but the price of the product declines by the amount of the subsidy. It is believed that the first case happens when we have a perfectly competitive product market where the supply curve is upward sloping and the demand curve is downward sloping; the second case is when the supply curve is perfectly elastic; while the third case would be when the supply curve is totally inelastic. Apostolakis<sup>15</sup> argues that the impact of the subsidies, received by the seller, is reflected by the fall in price but not by the full amount of subsidy. He adds that the increase in production and the optimum allocation of resources to increase efficiency, are indicators of the effectiveness of the subsidy. He said that "... the role of subsidies, as a potential regulator, was ignored by both Keynes and Marx although both referred to a deficiency in the regulation function of prices and markets".<sup>16</sup>

## 2.4 The Lending Facility

An important type of incentive that can be provided and has a significant effect on investors, is the financing facility. Finance in economic life is as blood in the human body. The most binding constraint in the process of economic development in developing countries, is the financial constraint. The lack of investible funds required to finance

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<sup>14</sup> Galenson, A., p.6.

<sup>15</sup> Apostolakis, B.E., 1987, p.293.

<sup>16</sup> Ibid.,.

development programmes in most developing countries is attributed mainly to the absence of organized capital markets, and the unwillingness of commercial banks to provide long-term loans to private sector units.

Governments usually play an important role in affecting the behaviour of savers and investors through a fiscal and/or monetary policy. Included in these policies is the establishment of development banks in many developing countries such as Jordan, Kuwait, and Malaysia. A development bank is a financial institution which is established to respond to particular needs of a given economy in terms of finance and technical assistance such as marketing research, engineering design, and managerial consultation.

The development banks' idea was explored by economists in order to induce capital in the private sector to finance development programme. The successful experience of European countries in the 1930s with such financial tools led to the diffusion of such banks in many countries as an integral part of their financial systems. The loans (long-term, medium-term, and short-term loans) and services provided through these banks for economic projects are at low interest rates and have appropriate maturity dates.

## **2.5 The Protection Policy**

The imposition of barriers on some selected imports has been the practice of many developing countries, as well as some developed countries. The purpose of such a policy differs from one country to another. For instance, some countries have used the import barriers policy to generate income. Others have used it to protect domestic producers from foreign competition. More about the purposes of the use of this policy is studied in the field of international economics. Our concern in this part is the use of import

barriers as a means of protection to encourage and stimulate domestic investment in developing countries.

Protection is a universal method of providing incentive for industrial and agricultural development. It is the classic way, that has been followed in many countries, to improve the competitiveness of the domestic product. Protection policy subsidizes local producers by restricting the import of foreign goods that compete with their products. Theoretically, these restrictions aim to increase the domestic prices of foreign goods in favour of domestic goods. The final goal is to discourage the demand for foreign products and substitute it by the increment of the demand for domestic products. In reality, the matter is more complex than it seems from this simple analysis. Tariffs, which take two forms; an ad valorem tax on imports [so that, if  $P$  is the pre-tariff price, the cum-tariff price will be  $(1+t)P$ , where  $t$  is the tariff rate]; and a specific tariff [so, many pounds per unit of the commodity]; are one type of protection policy. Another type is quotas, which are an import quantitative restriction system [so, many commodities of a certain type per unit of time]. The prohibition of some imports, and license regulations, are other types of protection policies.

There are three factors that favour the use of protection policies: the importance of custom duties as a source of revenue for the government; the need to protect some domestic industries; and the desire to avoid excessive economic dependence of the economy on foreign countries. Guerard argues that the importance of the import duties as an easy source of income for the governments of developing countries is the reason behind its use as an incentive policy.<sup>17</sup> If this is the situation, it does not indicate by any means, however, the ineffectiveness of the protection

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<sup>17</sup> Guerard, M., 1975, p.20.

policy as an incentive. It, in fact, indicates that the protection policy is a costless policy. Lent argues that "...many businesses prize tariff protection more than any other investment incentives provision, because it enables them to operate in sheltered market".<sup>18</sup> On the other hand, consumers, obviously, do not prefer the protection policy since it usually raises the price level in the market. Baldwin argues that the fraction of income that the consumers lose, as a result of the increase in price level of protected items, will limit consumers' opportunities to increase their living standards.<sup>19</sup> Another reason behind the use of import barriers in developing countries as an incentive policy, which has been mentioned by Guerard too, is their ability of insuring the equilibrium of balance of payments.<sup>20</sup>

According to Johnson<sup>21</sup>, there are economic arguments and non-economic arguments for the use of protection policy in developing countries. Economic arguments consider tariff as a means of increasing real output or real income. He gives the infant industry argument as an example. Noneconomic arguments recommend the use of tariffs " ... as a means of achieving objectives with respect to structure and composition of output that are desired for their own sake rather than as a means of increasing real income".<sup>22</sup> One example that he mentions is the desire to industrialise by some developing countries as a matter of national pride and self-respect. The infant industry argument is the traditional argument for the use of

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<sup>18</sup> Lent, G., 1967. p.281.

<sup>19</sup> Baldwin, R., 1970, p.32.

<sup>20</sup> Guerard, M., 1975, p.20.

<sup>21</sup> Johnson, H., 1972p.274.

<sup>22</sup> Ibid, p.275.

protection policy. According to this argument, the use of protection is temporary and it will be eliminated when the concerned new industry acquires the necessary technological and technical experience that enables it to compete strongly with similar foreign industries. Winters has extended the infancy argument for protection to include what he called "the infant economy case", where the protection policy is needed, because of the underdeveloped state of the economy, to protect, not only one industry, but a whole sector in the economy, such as the industrial sector.<sup>23</sup>

\* Export industries might be affected negatively by the protection policy in many ways such as, by the increase in the cost of imported items, and the transfer of resources from the export sector to protected industries. Therefore, a well designed comprehensive incentive policy, that takes into consideration all different aspects of the economy, reduces the possibility of having negative consequences. Lent warns against continuation of protection for a long time which might cause the protection of inefficient industries that never can stand on their own feet.<sup>24</sup> Donges in his study of industrialisation policies in some developing countries, found that "... the protectionist import-substituting policies tended to favour more or less systematically those industries which were relatively less essential and/or comparatively less efficient".<sup>25</sup> This conclusion reached by Donges might be explained by what he mentions in that same study that "... the protection system itself was rather complex and generally fell short of an obvious link to the structure of actual or potential comparative advantages".<sup>26</sup> Attempts by foreign

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<sup>23</sup> Winters, L.A., 1985, p.105.

<sup>24</sup> Lent, G., 1967, p.281.

<sup>25</sup> Donges, J., 1976, p.636.

producers to overcome import barriers will increase and policy makers should be aware of these for the protection policy to be effective. Johnson argues that the comparative advantage that foreign producers possess enable them to set up local production facilities as an attempt to get rid of the protection policy.<sup>27</sup> Indeed, that action will help in achieving the protection policy objective since it induces many positive effects for the economy such as the diffusion of technology, management experience, labour training, etc. Dumping policy of foreign producers that distorts the domestic market and increases their competitive position against domestic producers, is another valid argument for protection policy and it could be used as an attempt to overcome the policy.<sup>28</sup>.

As it has been said before, the protection policy costs the government the least. In fact, in the case of using tariffs, the policy would be costless as well as serve a source of revenue for the government. This revenue would go to the importers or foreign producers when the method of protection is a quota system. However, a quota system is more efficient in restricting imports than tariffs, but needs more administration efforts. Since we talked about the advantage of using one method of protection or another, it is worthy

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26 Ibid, p.634.

27 Johnson, H., p.295.

28 According to (Gandolfo, 1986, p.I,131), "dumping is an international price discrimination which takes place when a producer sells a commodity abroad at price lower than that charged in his domestic market". In some cases the price would be less than the costs, especially when there is a subsidy to offset the difference. He mentioned three types of dumping:

a- Sporadic dumping which occurs when a producer, who has unsold stock, tries to sell it abroad to avoid spoiling the domestic market;

b- Predatory dumping where the producer undersells competitors on international market in an effort to eliminate them.

c- "Persistent dumping is that started off by a producer who enjoys a certain amount of monopolistic power and exploits the possibility of price discrimination between domestic and foreign markets in order to maximise profit".

mentioning here that the choice between the use of protection policy, as an incentive method, and any other alternative incentive policy, such as subsidies, is a subject of controversy among the economists. Nevertheless, we would rather not discuss it here and give some references for more details.<sup>29</sup>

## 2.6 The Objectives of Incentives Policy

Many incentive policies specify their objectives, either explicitly or implicitly through the criteria for the provision of the subsidy. These objectives may be as broad as consistency with the country's development plans, or more specific such as increasing employment rate, output of certain products, etc. However, it is more difficult to find a theoretically meaningful relationship between the system of incentives and the policy objective it is designed to achieve. But knowing the factors that affect and determine the policy objectives and their relationship with the system of incentives can explain how the incentives can affect the objectives.

It is not possible to review all the objectives that developing countries seek to achieve through the introduction of incentive policies. Therefore, this section aims to shed some light on some of these objectives.

### 2.6.1 THE STIMULATION OF INVESTMENT

It can be said that this objective is a very broad one since most of the other objectives are affected in one way or another by investment. For instance, the incentive programme

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<sup>29</sup> For more details see: Balassa, B., 1978., Baldwin, R., 1970., Bryce, M., 1965., Gandolfo, G., 1986., Ramaswami, V., 1971., Winters, L.A., 1985.

that aim to increase the employment level cannot be isolated from affecting investment.

The principal method of promoting the growth of an economy is by expanding the general level of investment in that economy. It is evident, however, that most developing countries, generally speaking, suffer from the lack of investment in both capital and labour. "It is the characteristic of underdeveloped countries that their level of investment is inadequate for imparting the momentum of steady growth in productive efficiency that is essential to a progressive economy".<sup>30</sup> There are two crucial problems facing the achievement of the required level of investment. The first one, is the lack of sufficient funds required to maintain that level of investment. The second one, is the investors attitude toward the risk associated with investment. The effort of developing countries to overcome these two problems has been made through investment incentives. These incentives include, loans at moderate interest rates provided by domestic development banks, tax concessions, and different subsidies. The aim of these incentives is not only to increase the domestic investment level, but also to attract foreign investment. Lent argues that investment incentives in developing countries are mainly designed to attract foreign capital.<sup>31</sup>

It is argued that the important factor that affects the investment decision of investors, and therefore stimulates investment in any country, is a proper investment climate. Investment climate is a term that has been used to indicate the existence of many elements which contribute to the confidence in the security of investment in a country. Such

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<sup>30</sup> Al-Saigh, N.M. 1979. p.61.

<sup>31</sup> Lent, G., 1967, p.250.



elements include political and economic stability, investment regulations, size of the market, provision of infrastructure, etc. According to this argument, if the investment climate is appropriate, then, investors will undertake the investment, and the provision of incentives is needless and may only be a way of wasting resources. Needless to say in reality this argument does not stand. In a report by the U.S Advisory Committee on Private Enterprise in Foreign Aid, the following statement has been cited, "... the characteristic reaction of businessmen who have sensed the unfamiliar risks posed by the less-developed world has been to turn elsewhere for opportunities. This is not to imply that once the climate were improved, all the conditions to attract foreign investment would be satisfied. A favourable climate must be thought of as being necessary, but not a sufficient condition for attracting foreign investment. The improvement of climate, therefore, is only a first step in persuading businessmen to investigate the many opportunities in the less-developed world".<sup>32</sup> Bryce considers the provision of incentive policies as an important investment climate factor.<sup>33</sup> The deficiencies in a country's investment climate can be solved in the long run and the government's attitude and performance with respect to private business is an important indication. It is believed that the provision of incentive policies is a signal in that direction.

#### 2.6.2 INFANT INDUSTRY PROTECTION

Industrialization has been seen as the way of achieving

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<sup>32</sup> Agency for International Development, " Foreign Aid Through Private Initiative, (Washington, 1965), Cited in Lent, G., 1967, p.250.

<sup>33</sup> Bryce, M., 1965, p.93.

economic development. The concept of development and the process of industrialization have often been treated as synonymous. Therefore, a lot of developing countries have chosen the industrialization path as the strategy for development. Nevertheless, their economies compared to developed countries are still behind. "A country wishing to develop through industrialization may see opportunities in several lines of manufacturing to begin the process. With little experience in these new lines of production, domestic capitalists, managers, technicians, workers are likely to be relatively inefficient compared to producers in more advanced industrial countries and are likely to remain so for several years".<sup>34</sup> The concept of infant industry originate mainly from economies that face these conditions. Westphal defines an infant industry as "any newly established types of activity for which the economy's existing endowment of skills and human capital does not provide immediate technological mastery".<sup>35</sup> The products of such industries can not be competitive at first. To ensure the success of the industrialization path and to protect it from the competition of developed countries producers, governments of developing countries adopt many incentives such as subsidies and protection policies. The chance of these industries to survive is very little without the existence of these incentive policies. "... unless the government either subsidize these fledgling industries or protect them from competing imports by imposing tariffs or import quotas, the infant industries have little chance of being born, let a lone maturing into efficient competitors".<sup>36</sup> Galenson argues that the inability of the investor to foresee

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<sup>34</sup> Gillis, M., and Others, 1987, pp.433-434.

<sup>35</sup> Westphal, L.E., 1981. p.2.

<sup>36</sup> Gillis, M., and Others, 1987, p.434.

the long run gains and to obtain finance for the interim period makes the infant industry a valid case for incentives.<sup>37</sup> It is argued that new industrial enterprises, even, in developed countries cannot achieve normal levels of efficiency, productivity, and profitability during the first years of operation. Even though this argument is true, the costs and risks that surround these new investments are minimised due to the developed economies they operate in.

It is assumed that the infant industries, eligible for the incentives, have the potential to be profitable in the long run. Consequently, the need for incentives is temporary and they would be withdrawn as soon as the new industry reaches a normal level of efficiency. It is vital that the approximate period of the provision of incentives is known in advance in order to enable the investors to take the necessary steps to reduce costs and be prepared to live without the incentives. The decrease of the costs in production is supposed to happen as a result of both, the achievement of economies of scale, and learning by doing. According to a report by Arthur D. Little Inc., the economies of scale argument has less validity in small countries, that apply the protection policy, since the size of domestic market is so limited, and thus, it is difficult to reduce costs to a competitive level.<sup>38</sup> The accumulation of experience and knowledge, which is going to be attained through the passage of time by the new industry, will definitely help in reducing the costs. The diffusion of experience and knowledge from the new industry to other industries is an important benefit which validates government assistance to such industry.

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<sup>37</sup> Galenson, A., 1984, p.3.

<sup>38</sup> Arthur D. Little, Inc., "A Programme for The Industrial and Regional Development of Peru, (Cambridge, Mass., 1960, pp.21-22), Cited in, Bryce, M., 1965, p.235.

### 2.6.3 THE MOBILIZATION AND ALLOCATION OF RESOURCES

Market mechanism in economic theory is assumed to allocate goods, services, and factors of production in the economy perfectly. It has many advantages which favour it over other alternatives, such as the direct control by the government. These advantages are, the free climate in the market which encourages private economic activities, the ability of the market to allocate many products between consumers in response to their preferences, and many inputs that producers need, and its flexibility and ability to adapt to any economic changes automatically.<sup>39</sup> Nevertheless, economists have identified a number of cases where the market system, left to itself, may not operate efficiently.<sup>40</sup> These cases are known as market failures. If these failures are identified in developed countries, the situation in developing countries is more worse. Markets in these countries are considered to be imperfect tools for allocating goods, services, and resources, and governments' intervention to correct market failures is very important.<sup>41</sup> One of the central issues in development economics is the allocation of resources among their most valuable uses. The developing countries face this problem in many ways. For instance, the utilization of labour in these countries is relatively inefficient comparing with developed countries.<sup>42</sup> Markets should allocate production factors among their most efficient uses. Production factors should be able to move freely in

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<sup>39</sup> Gillis, M., and Others, 1987, p.100.

<sup>40</sup> Ibid.

<sup>41</sup> Todaro, M., p.466.

<sup>42</sup> Ibid, p.38.

order for them to be fully utilised. Where factors are immobilised or too costly to be employed, their utilization would be below the optimum level. Unless the government intervenes to encourage and promote the use of such factors, part of the country's resources will be idle. The underutilization of labour is one of the principle causes of the low standard of living in developing countries, and it takes two forms: underemployment, where labourers work less than they could, and unemployment.<sup>43</sup> The concentration of labour in one area or sector because of the rigidities and/or the high cost associated with its mobilization, is one reason of the underutilization of labour. Hence, governments offer many kinds of incentives to encourage the movement of the labour force among sectors to attain the maximum possible utilization of that resource.

Another example of the problem of resource allocation is the difficulties in the use of some natural resources which lead to the abandonment of these resources even though they might have a high value to the economy or the society. The use of idle natural resources is one of the benefits that new industry can bring to a country's economy.<sup>44</sup>

#### 2.6.4 REGIONAL DEVELOPMENT

The balance in development between the regions of a country is a desirable goal that countries would like to attain. In the framework of neoclassical economics, the regional inequalities is a temporary phenomenon that will be eliminated over the time, as long as, there is perfect mobility of production factors, a free market economy, and

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<sup>43</sup> Ibid, pp.38-39.

<sup>44</sup> Bryce, M., 1965, p.270.

profit seeking investors.<sup>45</sup> It assumes that any overemployment of capital or labour will cause their returns to diminish, and therefore, induce a movement of these factors among the regions until their marginal products are equal everywhere. However, the inequality between the regions in many aspects, is a reality in many developing countries. These aspects include, infrastructure facilities, education and health provision, and economic investment. The differences in economic conditions can be explained by investors preference for a region. It can also be explained by market imperfections which cause inequality in resource allocation or by natural causes such as geographical remoteness. The economic differences between rural and urban areas, in developing countries, is a very good example of such a problem. Government intervention is necessary to overcome such problems. This intervention takes the form of government investment in many activities, and the form of assistance through incentive programmes to encourage private business in underdeveloped areas.

#### \* 2.6.5 OTHER OBJECTIVES

It can be said that the aforementioned objectives, more or less, are the general and most common objectives of many incentive systems. Yet, there are many others that should be mentioned. One of them is self-sufficiency. Some developing countries are interested in securing the supply of their basic needs, such as food products. They argue that the dependence on other countries in fulfilling their needs put them under the pressure of the international markets and the exporting countries. Therefore, they raise the importance of being independent economically and they consider it as important as

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<sup>45</sup> Hamid, N. and, K. Hussein, 1974, p.256.

political independence. In the real world with the increase in interaction between economies on a global scale and the development of transportation network, the self-sufficiency would be too costly, unless the country has some degree of comparative advantages in producing the desired product.

Economic diversification is another important objective that a number of developing countries seek to achieve. These countries depend on one or two products as their main source of income. Their basic needs for foreign exchange is obtained through the export of these products. Fluctuations in international market prices have affected, in a large degree, those countries who depend on one single commodity as their main source of income. In some cases the discovery of some substitutes for that commodity creates further difficulties for these countries. Therefore, decision makers in countries which depend on a single commodity, have followed a policy of diversification in order to avoid the effects of their single commodity market fluctuations. The diversification policy is one that is time taking, costly, and it needs a lot of effort.

Lastly, the existence of some projects that yield high benefits for the public is another objective behind the introduction of incentives policy. Some projects have good external economies which make their subsidisation desirable. External economies refer to the benefits that stem from a project other than the intended ones. For instance, when the government builds a hydroelectric dam to generate electricity, many people will benefit from the dam in many ways, in addition to its main purpose, such as reducing the flood danger, increasing the level of irrigation water, and creating recreational areas. Many economic investments have externalities, whether good or bad. The latter are called external diseconomies. An example of external diseconomies is the pollution associated with many industrial projects. It is very difficult to measure the externalities and charge those

who are involving with them. In addition to that, the differences between social and private views regarding the costs and benefits of an investment, might prevent many projects from being undertaken, since the private investor considers them, for example, very costly even though society believes that they are very beneficial. The market system fails in balancing the social and private preferences. "Because of externalities, many projects that developing countries need, and which would be profitable to society, may not appear profitable under a pure market system in which all investment decisions are left to private individuals. The level of investment may fall below the social optimum because private investors ignore the external economies and supplementary benefits of projects in calculating prospective returns".<sup>46</sup>

## 2.7 The Administration of Incentives

The importance of administrative considerations is obvious. The effectiveness of incentive policies depends, to a large extent, on the efficiency of their administration. We will review in this section some of the administrative issues which arise in handling incentive policies. The section falls into two parts. The first deals with some administrative shortcomings that cause a limitation on the role the incentives should play, while the second part is devoted to another important issue - the criteria for granting the incentives.

### 2.7.1 THE ADMINISTRATIVE SHORTCOMINGS

These shortcomings stem, mainly, from two things.

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<sup>46</sup> Thirlwall, A., 1983, p.177.



Either from the nature of the system itself, such as its regulations; or from the practice of the people who are responsible for its operation. It is difficult to distinguish between the two, since each has a feedback effect on the other; however, the latter is the most common shortcoming which exists in many developing countries.

The great impact of these shortcomings has led Galenson to argue that "the administrative requirements and procedures for obtaining investment incentives can have as great impact as the incentives themselves".<sup>47</sup> The investor might be discouraged to apply for the incentives when he has to deal with a lot of requirements, such as the paper to be submitted and the agencies to be consulted, which consume his time and money. In Columbia, many small firms found the tax exemption worthless, because of the extent of the paperwork that they had to deal with.<sup>48</sup> In the case of Cameroon, the applicant is required to prepare sixty copies of an application for investment incentives, and to consult four ministries.<sup>49</sup> In Guatemala the applicant was required to consult seven agencies and to publish excerpts from his application three times so as to make sure that any opponent is informed.<sup>50</sup> The inefficient administration system which prevails in many developing countries makes these requirements worse than they seem to be. Galenson argues that severe requirements and ponderous and long procedure might reduce or even cancel out the benefits the investor will gain from the incentives.<sup>51</sup> In Columbia, the lack of a clear definition of responsibilities and

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<sup>47</sup> Galenson, A., 1984, p.26.

<sup>48</sup> Bilsborrow, R.E., and R.C. Porter, 1972, p.400.

<sup>49</sup> Galenson, A., 1984, p.26.

<sup>50</sup> Lent, G., 1967, p.287.

communication between the involved agencies, which the applicant must deal with in order to enjoy the tax exemption, have caused inefficiency and confusion that limit the positive impact of the tax incentive policy.<sup>52</sup> The time for preparing the requirements and consulting the agencies, is not the only factor that concerns the applicant. In addition is the delay in monitoring and reviewing his application so that the decision on his eligibility for the benefits be reached. Some countries have attempted to speed up the process by establishing a maximum statutory period for action. However, with many agencies involved in regulating or conferring benefits on enterprises, it is very difficult to stick with that period.

Another important factor that limit the role of the incentives, in attaining their desired objectives, is the insufficient follow-up procedure. The investor might undertake a different project than the one he has proposed, when he applied for the incentives, if there is no supervision on his activity. Therefore, the follow-up procedure is important and should be consorted with a penalties system for those who do not fulfil the obligations agreed to.

As we have said earlier, the shortcomings can proceed from the system of incentives itself. For example, the lack of coordination between the incentives provided by many agencies, on one hand, and between them and other regulations and policies, on the other, could cause many problems, which could be avoided has there been some sort of coordination. For instance, if there is imbalance between the provision of incentives to two sectors, it is possible to have the case where the resources are drawn to the sector that has more

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<sup>51</sup> Galenson, A., 1984, p.26.

<sup>52</sup> Bilsborrow, R.E., and, R.C., 1972, p.400.

incentives, out of the other sector. Moreover, in the case of an indiscriminating protection policy which aims to protect local industries, the new high prices of imports will increase the costs of production for local export industries and hence affect the benefits of other subsidies they receive from the government. The possibility of having more incentives, than the amount required to accomplish the desired objectives, increases with the lack of coordination between incentives.

No less important is the coordination between incentive policies and other governmental regulations and policies. The lack of it creates many difficulties for investors, and in some cases, the contradiction occurs and cancels out the role the incentives are expected to play. Take for example, the contradiction between the incentives, which are designed to attract foreign investment, and the regulations that restrict foreign ownership in the country, the capital repatriation, and the entry into specific industries or sectors. It is obvious that many foreign investors will not be interested in investing under some circumstances even with the existence of the incentives. Therefore, it is as important as the incentives themselves that the government designs a comprehensive incentives policy that takes into consideration all these possibilities.

Further shortcomings, that emerge from an incentives system, can be mentioned briefly to include: the bias in its regulations due to the lack of thorough evaluation of the system and the influence of political pressure; the instability and uncertainty that results from frequent changes in the incentives; and the confusion and inefficiency which usually happen when there is no precise selection criteria.

## **2.7.2 THE DISBURSEMENT OF INCENTIVES CRITERIA**

The criteria for providing the incentives is a very important issue, and it is usually a reflection of the government's objective behind initiating the incentives. As long as there is a proper and precise criteria for disbursing the incentives, the success in achieving the desired objectives can be high. Depending on that criteria, the incentives that can be adopted are of two kinds; the general incentives, and the specific incentives.

### **2.7.2.1 GENERAL INCENTIVES**

In providing the incentives, the government might refuse to discriminate between investors and decide that any firm or investment, new or old, has the right to apply for benefits from the existing incentives system. The provision of the incentives under such a broad base is believed to ease their availability, and hence can be taken into consideration in the investor's accounts when he plans his activities. Moreover, with no detailed involvement in his affairs, as a requirement for benefiting from the incentives, general incentives have more ability to stimulate his investment.

General incentives are used mostly to accomplish macroeconomic objectives such as increasing the general investment level in the country, improving the distribution of income, improving the employment opportunities, etc. Among the countries that have a broad criteria and thus a general incentives system, is the Cameroon. The criteria for granting incentives is that any firm or investment, to be eligible for the incentives, should be of special importance to the country.

It is argued that general incentives are reasonably certain to achieve the desired objective to some extent.<sup>53</sup> In

fact, any incentive policy will stimulate an activity in one way or another. The question is, whether that investment or activity is of some kind of importance to the economy or not? Moreover, would it be undertaken without the incentives? And more of such questions. Lent argues that the general criteria for granting the incentives "may be more costly in revenue loss...and.. may fail to attract those industries which are most essential to economic development, and may subsidize secondary and tertiary industries which may already be well supplied".<sup>54</sup> Although the costs of such incentives are known, their benefits to the country are difficult to evaluate. One of the advantages of the general incentives policy is that it is easy to administrate.

#### 2.7.2.2 THE SPECIFIC INCENTIVES

In contrast to the general incentives, the specific incentives have a more narrow criteria which restricts their awarding to those firms and/or investment believed to be of particular importance to the country. They can be classified into three categories.<sup>55</sup> The first method is to provide the incentives to the new firms and/or new investment in selected industries or sectors. However, the choice of the selected industries or sectors is a difficult task and involves the risk of omitting some other important sectors or industries from the list. The second method would be to leave the subject to an assigned committee which decides whatever criteria it thinks best for providing the incentives. In this case, investors apply to that committee, and submit their

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<sup>53</sup> Usher, D., 1977, p.128.

<sup>54</sup> Lent, G., 1967, p.286.

<sup>55</sup> Usher, D., 1977, p.128.

applications and proposals of projects or investment to be supported, and it is up to the committee to decide their eligibility for the incentives. This committee is usually an advisory board that has representatives of government agencies who review the proposals and make recommendations to higher executive councils for the final decision. Therefore, it is very important for the incentives to be effective that the members of the committee are qualified staff. This method reduces the loss and concentrates the incentives on the real needs of the economy. However, it is limited by the lack of trained staff and outside influence, which exists in many developing countries. The third approach is to set up certain criteria such as, labour-capital ratio, particular product, export orientation, etc., and award the incentives to any firm or investment that meet one or more of these criteria. Galenson<sup>56</sup> argues that all these criteria fail to list efficiency as a criteria for provision of incentives. He suggests the choice of the economic rate of return as a criteria and claims that it will ensure the achievement of efficient investment.

We conclude by saying that the specific incentives approach has many advantages such as being less expensive, in comparison with the general incentives approach; easier to be evaluated; more efficient in stimulating investment; and finally, more accurate in achieving the investment essential for the economy. In addition, it has many disadvantages such as, requiring more administration efforts, discriminating between the beneficiaries and their competitors, and the possibility of failure as a result of incorrect selection criteria.

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<sup>56</sup> Galenson, A., 1984, pp.42-43.

## CHAPTER THREE

### METHODS OF ESTIMATING THE IMPACT OF INCENTIVE POLICIES : LITERATURE REVIEW

#### 3.1 Introduction

As we said before, incentives policies are utilised by many governments to enhance and stimulate investment activity of the private sector, in addition to other objectives. Generally speaking, the performance of the incentive programmes in achieving their objective has been measured in terms of their impact on production, investment, and adoption of new technology. The studies which aim to evaluate the impact of these incentives face serious methodological problems caused mainly by the absence of a direct relationship between the designed incentives (inputs), and the desired objective (output). Most of the studies in this subject, micro or macro, are descriptive, and therefore lack strong validity in their results.<sup>1</sup>

To understand how incentives stimulate the private sector activities and affect its investment decision, it is necessary to find out how the private sector behaves in response to events. The firm theory is the basic framework to start with to find out how the incentives work. From that start point we move on to review, briefly, some models which explain investment behaviour of the firm. Moreover, some studies

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<sup>1</sup> David, Cristina C., 1984.

evaluating the impact of fiscal incentives on private investment and their methods will be reviewed.

### 3.2 Theoretical Background

In economics literature, various theories were put forward by economists to explain how firm behaves in response to economic events. The behaviour of the firm is explained through the objective the firm seeks to achieve. Many assumptions have been suggested toward the firm's objective. These include: profit maximisation, sales maximisation, constrained sales maximisation, and others. Our assumption here follows that of profit maximisation theory. According to this assumption, firm chooses both its input and its output with the sole goal of achieving maximum economic profits. The firm seeks to make the difference between its total revenues and its total economic costs as large as possible. So, the profit ( $Z$ ) is defined as the difference between the revenue derived from the sold product ( $R$ ) and the cost of producing it ( $C$ ):

$$Z = R - C$$

The derived revenue ( $R$ ) equal the produced unit ( $Q$ ) multiplied by its market price ( $P$ ), while the production cost equals the price of the utilised factors such as, labour ( $L$ ), capital ( $K$ ), or

$$Z = PQ - wL - cK$$

where  $P$ = price of output  
 $Q$ = output  
 $w$ = price of labour  
 $L$ = labour input  
 $c$ = rental cost of capital



K= quantity of capital

The firm's decision in choosing the optimum combination of inputs which produces output (Q) that maximise the profits, is very important. The firm maximises its profit by producing at a certain level where the marginal revenue (MR) equals marginal cost (MC), i.e. where the revenue raised from selling an extra unit is equal to the cost of producing that extra unit, or

$$MR = dR/dQ = dC/dQ = MC$$

Changes in the prices of output and inputs affect the profit. In fact more factors enter the picture than the prices of outputs and inputs. Profit maximisation assumption implies that any government intervenes to achieve certain goals should concentrate on enhancing the profitability of the firm to attract it to undertake the desired activity. Therefore, the incentives provided by the government are directed toward making the desired activity profitable to the firm which affect positively the firm's investment decision.

### 3.2.1 THE FIRM'S INVESTMENT DECISION

The investor's decision to invest depends, mainly, on the expected earnings of current expenditure. He can use a number of techniques to estimate these earnings and, hence, to make investment decision. The only method that adequately takes account of an inter-temporal nature of such decision is the discounted cash flow (DCF). This method has two versions: the net present value (NPV) method, and the internal rate of return method (IRR).

According to first method, the firm (or investor) estimates first the net cash flow it assumes will be

associated with the investment,  $I$ , in each year of the project's life, and discounts it by a discount factor which reflects the capital cost to the firm (interest rate is usually used); to obtain the present value of that stream. Present value, then, is subtracted from the initial capital cost of the project,  $C$ , to obtain the net present value; i.e.,

$$NPV = \sum_{t=0}^n \frac{I}{(1+d)^t} - C$$

This represents the investment value after all cash flows and their timing have been allowed for. If the net present value (NPV) is positive, then the investment is profitable and a profit-maximising firm will undertake it.

The alternative approach, known as the internal rate of return (IRR) method, again estimates the net cash flows but calculates the discount rate ( $r$ ) that will reduce the present value of this stream to equal the initial capital cost; i.e.,

$$PV = \sum_{t=0}^n \frac{I}{(1+r)^t} = C$$

If this return  $r$ , generated by the investment is above the cost of capital  $d$ , then the investment is profitable and will be carried out by a profit-maximising firm. So, any change that affects either the cost of capital or the cash flow will result in changing the investor's decision.

In reality, numerous difficulties arise for firms in applying DCF techniques. The components of DCF techniques, namely: cash flows, initial cost of capital, and the cost of funds, are all affected by many factors, i.e., taxation. Not only does this influence the value of capital projects which the firm is going to undertake, but it can also systematically

affect the durability of the chosen capital stock. Some other factors such as uncertainty and inflation complicate the matter and have noticeable effects on investment appraisal and on its level and type. Moreover, identifying the cost of capital is also difficult, both conceptually and in practice.

Therefore, for such reasons and others, it was normal to find the determination of investment behaviour is one of the controversial issues in economic literature. The difficulty in determining the factors affecting investment behaviour and how they (the factors) work, have not been solved yet in a proper way. Our task next is to review briefly some investment models which aim to explain the investment behaviour of the firm.

### 3.2.2 THE NEOCLASSICAL MODEL OF INVESTMENT

The neoclassical model of investment is based on the work of the economist Dale Jorgenson.<sup>2</sup> The starting point of the model is the assumption that firm operates so as to maximise the discounted value of the firm's cash flow in the current and all future periods. Therefore, the firm, assuming perfect competition in all markets, will invest up until the point where the additional capital cost of increasing the capital stock equals the additional revenue it generates; i.e.,

$$cdK = pdQ \quad (1)$$

where  $c$  is the cost of capital,  $K$  is the capital,  $p$  is the price of output, and  $Q$  is the output. Rearranging the optimality condition's equation, we can have the marginal product of capital as follows,

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<sup>2</sup> Jorgenson, D., (1963), (1967), (1972).

$$\frac{dQ}{dK} = \frac{c}{p} \quad (2)$$

The production function form should be specified so as to derive the optimum capital stock which meets the above mentioned conditions. The model assumes that production function of the firm takes the form of a Cobb-Douglas production function,

$$Q = AK^{\alpha} L^{\beta} \quad (3)$$

The marginal product of capital which is derived from the Cobb-Douglas function is,

$$\frac{dQ}{dK} = \alpha \frac{Q}{K} \quad (4)$$

By using equation (2) we have,

$$\frac{c}{p} = \alpha \frac{Q}{K} \quad (5)$$

where,  $\alpha$ , is the elasticity of output with respect to capital.

The desired capital stock is given therefore by,

$$K^* = \alpha \frac{Qp}{c} \quad (6)$$

Where,

p = Price of output

Q = Output quantity

c = Rental price of capital

$\alpha$  = Elasticity of output with respect to K,

and the desired capital stock is proportional to output value deflated by the price of capital services. The main determinants of the desired capital stock are, output, price of output, and cost of capital. The optimal capital stock will rise with the increase in Q or p, or with the decline in c. According to Jorgenson, c, the implicit rental value of capital services supplied by the firm to itself, or what he called "the user cost of capital" is the crucial element in determining the desired capital stock. Generally, the value of c depends on the, price of capital goods, rate of depreciation, financial cost of capital, firm's rate of discount, and the government fiscal measures.

To complete the Neoclassical theory of investment behaviour it is necessary to involve the timing in the derivation of the desired capital stock. For a given change in the determinants of  $K^*$ , it is assumed that it takes time before the decision to invest is made and the capital goods can be delivered. Furthermore, it may take time until a delivered piece of capital can be usefully incorporated into the production process. These considerations lead to the following specification of the net investment ( $I_n$ ) as a distributed lag of current and past changes in the desired capital stock,

$$I_n = \sum_{j=0}^{\infty} \tau_j \Delta K^*_{t-j} \quad (7)$$

where  $\Delta$  represents a first-difference and the  $\tau$ 's are fixed

parameters. To complete the investment model, the gross investment ( $I_g$ ) equals the sum of net investment and replacement component, which is a fixed proportion of the existing capital stock,

$$I_{g_t} = \sum_{j=0}^{\infty} \tau_j \Delta K_{t-j}^* + \delta K_t \quad (8)$$

To summarise, investment in period  $t$ , depends on capital stock at the beginning of the period, and the changes in the desired level of capital stock in previous periods. The form of relationship depends on the parameters of the distributed lag function and the rate of replacement. The desired capital depends in turn on the value of output, the rental value of capital input, and the elasticity of output with respect to capital.

The impact of incentives on the investment would be through their effect on the rental value of the capital input. Incentives change the rental value of capital which changes the desired level of capital and induce net investment (or disinvestment), bringing the capital stock up (or down) to its new optimal level.

The Model was the base for many studies which have revised and extended the model in several directions.<sup>3</sup> Many economists have criticised the neoclassical approach. Some argue that the Cobb-Douglas production function might not be the right one to describe the production behaviour. They

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<sup>3</sup>For Further Readings See :  
 Bergstrom, V., and J. Sodersten, 1981.  
 Bischoff, C.W., 1969.  
 Coen, R., 1971.  
 Eisner, R. and M. Nadiri, 1968.  
 Fledstein, M., 1974.  
 Helliwell, J. and R. Glorieux, 1970,  
 Rowley, R.G.R., 1972.

suggest the use of a C.E.S production function as a better approximation of the production function.<sup>4</sup> Cobb-Douglas function imposes a unit elasticity of substitution while the C.E.S. production function accepts all values. Others question the presumption that the desired capital stock can be derived from a production function. Usher argues that "the process of investment can not be adequately described as a movement along a production function".<sup>5</sup> Another criticism is about the assumption that the perfect competition prevails in the product, capital, and factor markets which is unrealistic, particularly, in developing countries. Lund argues that the effect of profit or liquidity in Jorgenson framework is excluded by the assumption of a perfect competition in capital market.<sup>6</sup> Finally, the evaluation of the incentives impact on investment is known through their effects on the rental value of the capital. This evaluation does not reflect precisely the impact of incentives alone since other factors such as, the output, affect the investment also through its impact on the desired capital ( $K^* = \alpha PQ/C$ ).

### 3.2.3 THE Q-THEORY MODEL

The Tobin's 'Q' concept defined as the ratio of the market value of the firm (V) to the replacement cost of its assets (K), or

$$Q = V/K$$

has been utilised by a number of studies to analyse the

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<sup>4</sup> See Eisner and Nadiri, 1968; and R.G. Rowley, 1972.

<sup>5</sup> Usher, D., 1977, p.143.

<sup>6</sup> Lund. P., 1976.

investment behaviour. This variable is seen by Tobin and Brainard<sup>7</sup> as an important determinant of investment. They stated the following, "The neoclassical theory of corporate investment is based on the assumption that the management seeks to maximize the present net worth of the company, the market value of the outstanding common shares. An investment project should be undertaken if and only if it increased the value of the shares. The securities markets appraise the project, its expected contribution to the future earnings of the company and its risks. If the value of the project as appraised by investors exceeds the cost, then the company's shares will appreciate to the benefit of existing stockholders. That is, the market will value the project more than the cash used to pay for it. If new debt or equity securities are issued to raise the cash, the prospectus leads to an increase of share prices."<sup>8</sup>

It has been argued that this Model is similar to the Neoclassical Model mentioned above in certain respects. An investment function containing  $Q$  can be derived from a 'desired stock of capital' Model which employs such a traditional concept as the cost of capital. The great advantage of the  $Q$  theory is that  $Q$  is readily observable, at least in principal, whereas the cost of capital is not. Moreover,  $Q$  involves the future expectations of the firm's manager or owner because it contains the stock market's valuation of the firm's assets.

Hay and Morris<sup>9</sup> show the similarity between the two models by using a Joregenson-type firm to find its stock

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<sup>7</sup> Tobin, J., 1969.  
Tobin, J., and W.C., Brainard, 1977.

<sup>8</sup> Tobin and Brainard, p.242.

<sup>9</sup> Hay, D.A., and D.J. Morris, 1991, p.441.



market valuation, assuming a constant price and quantity of output, wage rate, and labour force, through time. The stock market valuation of such a firm is,

$$V = \sum_{t=1}^n \frac{pY - wL}{(1+c)^t}$$

where Y is output, w is wage rate, and L is labour force. By Euler's theorem,

$$Y = \frac{\partial Y}{\partial K} K + \frac{\partial Y}{\partial L} L$$

By assuming that the labour is paid its marginal product, V would be,

$$V = \frac{p(\partial Y / \partial K) K}{c}$$

The marginal product of capital which is derived from the Cobb-Douglas function is,

$$\frac{dY}{dK} = \alpha \frac{Y}{K}$$

therefore,

$$V = \frac{\alpha pY}{c}$$

According to Q definition,

$$Q = \frac{V}{K} = \frac{\alpha p(Y/K)}{c}$$

where K is valued at replacement cost. In the Jorgenson model, the optimal capital stock is

$$K^* = \alpha \frac{pY}{c}$$

therefore,

$$K^* = QK$$

The desired investment is a function of the difference between  $K^*$  and  $K$ ,

$$\begin{aligned} I &= \tau (K^* - K) \\ &= \tau (Q - 1)K \end{aligned}$$

therefore,

$$\frac{I}{K} = \tau (Q - 1)$$

The proportionate growth of the capital stock ( $I/K$ ) is directly related to  $Q$ , and as they said, it is entirely consistent with the neoclassical approach. They added that the firm, which aims to maximise its profit, will invest whenever  $Q$  is above one, disinvest if  $Q$  is below one, and be in capital stock equilibrium condition when  $Q = 1$ .

According to Hay and Morris, the  $Q$ -Theory has its own limitations. By using the stock market valuation, what we actually observe is the value of existing capital related to its replacement cost, and that is in fact nothing more than the average value of  $Q$ . However, if the firm's aim is to maximise the profit generated from the new investment, market valuation of the new capital should be greater than its cost, and that means that it is the marginal value of  $Q$  which is relevant. When we have a constant return to scale and exogenous product prices, these two could be the same. It should be born in mind that the ' $Q$ ' Theory is more general than the one constructed by Hay and Morris and different assumptions can produce different investment functions

dependent on Q.

#### 3.2.4 THE ACCELERATOR THEORY

According to the Accelerator Theory, net investment is related to the rate of change of output. If the capital stock K is fully utilized, and the capital/output ratio  $\alpha$  is a constant, then net investment ( $I_n$ ) can be expressed in the following way:

$$K_t = \alpha Y_t$$

$$K_t - K_{t-1} = \alpha (Y_t - Y_{t-1})$$

$$I_t = \alpha (Y_t - Y_{t-1})$$

$$I_t = \alpha \Delta Y_t$$

Net investment in year t is then a constant proportion of the change in output that year. This very simple theory of investment received a number of criticisms. First, the Accelerator Theory assumes that there is no excess capacity and that is rather suspect. If the firm has a spare capacity, then a rise in output ( $\Delta Y_t$ ) can be met from the existing capital stock, with no need for new investment. Second, the assumption of a constant capital/output ratio,  $\alpha$ , is becoming less and less plausible. Third, it is also very important for the firm to make sure prior to making an investment that the upsurge in demand and in output is not a temporary phenomenon. Furthermore, expectations of future demand play a vital role since future changes in output affect the capital stock. Unless the firm accurately forecasts output changes some time in advance, the increase in investment will not occur simultaneously with the increase in output. The simple reason is that it takes time to order, receive and install the new

capital goods. We should expect some sort of lagged response, with an increase in output preceding changes in investment. Another explanation for using a lagged response is that the firms may use past observations on output to forecast how it is likely to move in the future.

### 3.2.5 THE CAPITAL STOCK ADJUSTMENT MODEL

To overcome some of the problems of the simple Accelerator Theory, the Capital Stock Adjustment Model was initiated. It simply states that investment is positively related to the expected level of output and negatively related to the existing capital stock. Therefore, any rise in investment will consequently depend not only on the expected level of output (demand) but also the current size of the capital stock. Specifically,

$$I_t = b Y_{t-1} - cK_{t-1}$$

where,

$I_t$  = gross investment in the current year,

$b, c$  = constant coefficients,

$Y_{t-1}$  = last year's level of output,

$K_{t-1}$  = capital stock at the end of the preceding year.

If it is assumed that the expected volume of output is roughly equal to that experienced in the previous year,  $Y_{t-1}$ , then the higher  $Y_{t-1}$  is, the greater gross investment will tend to be. However, the greater the inherited capital stock  $k_{t-1}$  is, the less need there will be to add to the capital stock, or even to replace the worn-out equipment. Although the Model has attempted to explain the movement of investment with regard to any inherited capital stock, it still shares a previous Model its limitations.

The impact of the incentive policies on both Models

depends on the extent of changes in output resulting from the provision of incentives. It is difficult to trace the exact effect of the incentives alone since many factors affect the output, not only the incentives.

### 3.2.6 INVESTMENT MODEL FOR DEVELOPING COUNTRIES

The economic literature about the investment behaviour of the private sector has been studied in detail, but the focus has almost exclusively been on industrial countries. Many difficulties inhibit a detailed study of the private investment in developing countries. These difficulties include, among many things, the lack of data on capital stock, the absence of well-functioning financial markets, the relatively large role of the government in capital formation, lack of necessary information, in addition to other market imperfections. Nonetheless, some attempts have been made, recently, by some economists to incorporate features of the investment models studied before into investment models for developing countries.

#### 3.2.6.1 The Study Of Sundararajan And Thakur<sup>10</sup>

The study of Sundararajan and Thakur aims to examine the relationship between public and private investment in a developing country through building a dynamic model of investment, savings, and growth. The model was tested and simulated for two countries in which the public sector has played a significant role, namely, India and Korea. They argue that the public investment has an influence on private investment through four channels: competing with the private investment for scarce physical and financial resources which will cause a negative influence; increasing the productivity

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<sup>10</sup> Sundararajan, V., and S., Thakur, 1980.

of the private sector capital by creating infrastructure which reduces its investment requirements; raising the demand for private sector output due to the increase in public investment; and raising the aggregate output and saving which might offset the crowding out effect.

The private investment function in their Model has been derived by modifying the Neoclassical theory of investment in order to incorporate some of the channels through which public investment influences private investment. They attempted to show that private investment in a developing country depends not only on the expected output and the user cost of capital, but also on the capital stock of the public sector and the investible funds available to the private sector. These variables capture important channels of influence from public investment to private investment.

Without going in detail, the desired level of capital stock  $K^*$  in the model is derived from a Cobb-Douglas production function. The capital stock of the public sector is introduced, in the desired capital stock function, to represent its impact in lowering the cost of producing private sector output. For example, if the government provides some sort of infrastructure facilities, then, it is expected that the private sector's capital requirements are lowered by that type of public investment; otherwise the private sector should provide such facilities. The desired capital stock of the private sector, then, can be represented as,

$$KP^* = d_0 - d_1 (U_t / W_t) + d_2 QP_t^* - d_3 KG_t$$

where,

$(U/W)$  = expected rental-wage ratio,

$QP^*$  = the planned level of private sector output,

$KG$  = the public sector capital stock,

The planned private sector  $QP^*$  is assumed to be affected by current and past levels of output, as well as of the public sector capital stock. The latter is introduced to reflect the assumption that an increase in public capital stock will raise private sector output expectations of potential additional demand for private sector products when these public investment projects mature. Therefore,

$$QP^* = A_0 + a QP_{t-1} + A_1 KG_t$$

The adjustment between the actual and desired level of private sector capital stock is assumed to be partial. The speed of that adjustment depends on the availability of total financing to the private sector relative to the required investment. The available finance is defined as the difference between aggregate saving,  $S$  (including foreign saving), and public sector investment,  $IG$ ; since this difference is merely the gross private investment,  $PI$ . The private sector investment function is,

$$PI = B_0 + B_1 (U/W) + B_2 a QP_{t-1} + B_3 KG \\ + B_4 [(S-IG)/PI] + B_5 KP_{-1}$$

They expected the signs of the coefficients  $B_2$  and  $B_4$  to be positive, and of  $B_1$  and  $B_5$  to be negative. Nevertheless, the sign of  $B_3$  is indeterminate. If it is positive, then the positive demand-inducement effect of public investment is larger than the opposite effect, owing to public investment aiding private sector production.

Their findings showed that the public investment in India crowded out, partially, the private investment and dampened growth. In Korea, it promoted private investment and stimulated growth. The response of investment to changes in

output was strong in both countries. The relative cost of capital was found to have a strong positive efficiency effect on capital in Korea, but only a weak negative substitution effect on investment; while in India, both effects were found to be strong.

### 3.2.6.2 THE STUDY OF WAI AND WONG<sup>11</sup>

Another study was carried out by Wai and Wong where they examined a modified version of the flexible accelerator theory of investment with particular reference to developing countries. Similar to the previous Model, they emphasise the positive impact of public investment on private investment with almost the same arguments. They also emphasise the importance of investible funds available to the private sector. In addition, the foreign capital inflow to the private sector is a significant component in their analysis.

As in the Neoclassical Model, they identify the gross private investment as,

$$PI = \beta ( KP^*_t - KP_{t-1} ) + \delta KP_{t-1}$$

where,  $KP^*$ , is the desired capital stock,  $KP$  is the actual capital stock,  $\delta KP$  is the replacement investment which is proportional to the existing capital stock, and the coefficient  $\beta$  depends positively on the change in bank credit ( $\Delta BC$ ) and net capital inflow to the private sector ( $CF$ ), both in relation to the discrepancy between the desired capital stock and the existing capital stock.

Thus,

$$\beta_t = f\left( \frac{\Delta BC_t}{KP^*_t - KP_{t-1}}, \frac{CF_t}{KP^*_t - KP_{t-1}} \right)$$

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<sup>11</sup> Wai, U.T., and C.H. Wong, 1982.



The two equations, with the assumption that the desired capital stock is proportional to the private sector output (QP) and that the second equation is linear, yield the investment function as follows,

$$PI = a_0 + a_1 QP + a_2 \Delta BC_t + a_3 CF_t + a_4 KP_{t-1}$$

They assume also that the private sector output is a linear function of government investment (IG) and private investment. Moreover, the change in domestic credit and the net capital inflow to the private sector could be treated as one variable (FP) as long as their costs are not significantly different. Therefore, the private investment becomes,

$$PI = a_0 + a_1 IG_t + a_2 F_t + a_4 KP_{t-1}$$

The F is defined so as to include, the change in domestic credit of the banking system plus net capital inflow to the government, and the change in domestic credit of the banking system plus net capital inflow to the private sector (FP) in year t. To observe the financial crowding out effect, therefore, a recursive model is used to assess the contributory effect and the crowding out effect of government investment.

The model was applied to five developing countries, namely, Malaysia, Greece, Thailand, Mexico, and Korea. The main finding of the study tended to confirm that, government investment, the change in bank credit to the private sector, and capital inflow to the private sector, played important roles in determining private investment.

### 3.2.6.3 THE STUDY OF BLEJER AND KHAN<sup>12</sup>

Blejer and Khan have developed a framework for studying

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<sup>12</sup> Blejer and Khan, 1984.

private investment in developing countries similar to the previous two studies but it has been extended to include the role of government policy and to derive an explicit relationship between the principal policy instruments, such as changes in bank credit and government investment, and private investment. The financial crowding out as well as real crowding out which might result from government investment have been given a special importance in the model. Moreover, the model distinguishes between public investment that is related to the development of the private sector such as infrastructure, and that of other kinds, in assessing their impact on private investment.

The developed model is in essence a variant of the flexible accelerator model modified to incorporate the difficulty in measuring the capital stock, calculation of rental price of capital, definition of production function, and imperfection in the financial and labour markets in developing countries. The emphasis, therefore, is placed on the effects of the resources constraints, both financial and physical, faced by private investors in developing countries.

The starting point of the Model is the assumption of the accelerator Model that the desired capital stock is proportional to expected output,

$$K^* = \alpha Q_t^e$$

To exclude the factor price from the specification of the model, they assume that the production function has fixed proportions among factor inputs. The parameter  $\alpha$  is assumed to be constant, while  $K^*$  is allowed to be affected by changing economic conditions.

The adjustment in the capital stock, as a result of the difference between the desired stock in period  $t$  and the actual stock in the previous period, is lagged partial

adjustment.

$$\Delta K_t = \beta ( K_t^* - K_{t-1} )$$

where  $K$  is the actual private capital stock, so that  $\Delta K_t$  is net private investment, and  $\beta$  is the coefficient of adjustment,  $0 \leq \beta \leq 1$ .

Since the obtained data is only gross investment, and to eliminate private capital stock variable from the specification because of data constraint; they developed, after some manipulations, the following gross private investment function,

$$IG_t = [1-(1-\delta)L] \beta K_t^* + (1-\beta) IG_{t-1}$$

where  $\delta$  is the rate of depreciation,  $L$  is a lag operator. By substituting for  $K_t^*$  we have,

$$IG_t = \beta a [1-(1-\delta)L] Q_t^e + (1-\beta) IG_{t-1}$$

The private investment responses to the gap between desired and actual investment is measured by the coefficient  $\beta$ . It is assumed that the coefficient varies systematically with economic factors that affect the capability of the private investors to achieve the desired level of investment. The investors' response is assumed to depend on three main factors, namely, the stage of cycle, the availability of financing, and the level of public sector investment. The crowding out, therefore, affects the speed of adjustment rather than changing the desired level of real private investment directly.

On the basis of many arguments regarding the effect of these variables on investment through the adjustment coefficient, they developed a private investment function as

follows,

$$IG_t = \beta a[1-(1-\delta)L] Q_t^e + \beta c_1 AT \\ \beta c_2 \Delta BC + \beta c_3 GK + (1-\beta) IG_{t-1}$$

where AT is the difference between actual and trend output representing the cyclical factor,  $\Delta BC$  is the change in real bank credit to the private sector plus real net private capital flows, and GK is the real public sector investment. The expected output,  $Q_t^e$  is defined as,

$$Q_t^e = \frac{\lambda Q_{t-1}^e}{[1-(1-\lambda)(1+g)L]}$$

where  $\lambda$  is the coefficient of expectations,  $0 \leq \lambda \leq 1$ , and  $g$  is the growth rate of output, equal to  $g_1$ . The final investment function,

$$IG_t [1-(1-\lambda)(1+g)L] = \lambda b_0 a [Q_{t-1} - (1-\delta)Q_{t-2}] + [1-(1-\lambda) \\ (1+g)L] \cdot [b_1 AT + b_2 \Delta BC + b_3 GK \\ + (1-b_0) IG_{t-1}]$$

The estimated equations of the model were four in the same form as the above equation except for the public investment variable, GK, which was allowed to take different values to show the different possible effects which the public investment might have on private investment.

The main results of the econometrics tests, with variants of this model on a pooled time-series for 24 developing countries, showed that the private investment in developing countries was constrained by the availability of financing,

and the public investment appeared to play an important role in altering the private investment patterns. This econometric test has demonstrated the empirical validity of the model.

### **3.3 The Impact of Incentive Policies on Investment**

Having reviewed, theoretically, the investment behaviour and its relation to the incentive policies, the following sections will survey some studies which were carried out to evaluate the incentives' impact on investment. Moreover, the evaluation methods that were utilised by these studies will be discussed. The methods to be covered are not the only methods, but at least the most frequently used ones. Moreover, it should be borne in mind that most of the studies, in this subject, are concerned with the impact of the fiscal incentives, specially tax incentives, on investment. Reviewing such studies will reveal the effectiveness of these fiscal incentives, as a tool used by the government, in accomplishing the desired objectives.

The methods, which we are going to review, henceforth, can be classified into four approaches. First one is the Accounting Approach. The second is the Field Research Approach. The third is the Rate of Return Approach. And the last one is the Regression Analysis Approach.

#### **3.3.1 THE ACCOUNTING APPROACH**

This crudest method concentrates, in analysing the impact of fiscal incentives, on determining the magnitude of the change in the desired objective, which the policy makers seek to attain through the incentives; as a result of the introduction of those incentives. For instance, suppose the government provides subsidies to encourage the expansion in the level of investment in the country. To measure the impact

of these subsidies, investment contribution to the gross national product will be investigated to find whether it increases or decreases after the introduction of the subsidies. If it is increasing, then the subsidies are effective, and vice versa. Similar evaluation can be done for other incentives. Among the studies that evaluated the fiscal incentives in such a way, is the study by Katz<sup>13</sup> about the Mexican fiscal and subsidy incentives. The subject of his paper was to measure the extent to which the increase in real manufacturing output in the period of 1950-1965, under the import-substitution industrialisation policy, resulted from the introduction of fiscal and subsidy incentives. He reviewed the history of fiscal incentives and subsidies and found the Mexican experience in using the subsidy and other fiscal devices for promoting industrialisation, was not extensive. Moreover, during the studied period, their use was less than before. Having said that he concluded that the government financial incentives were marginal at best in aiding Mexico in its internal industrialisation.<sup>14</sup> Using the same approach, Hamid and Hussain<sup>15</sup> found the tax holiday policy used by the government in Pakistan, to encourage the investment in backward regions, has failed in achieving its goals since the share of the investment in these regions remains very low while the developed regions recorded an increase in their share. A more analytical study by Tanzi<sup>16</sup>, on Ecuadorian experience with tax incentives, indicated that the number of firms benefiting from the incentive law increased leading to an increase in the total investment, but

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<sup>13</sup> Katz, B., 1972.

<sup>14</sup> Ibid, p. 358.

<sup>15</sup> Hamid, N. and K. Hussein, 1974.

<sup>16</sup> Tanzi, V., 1969.

the average investment per enterprise remained relatively small. To measure whether this increase was an additional investment or a substitution to part of it, he compared the investment, which benefited from the incentives, with the total private investment and found that more and more investment were moving toward privileged areas while the ratio of total private investment to GDP remained unchanged. Thus he concluded that the tax incentive legislation did not induce any additional investment. On the other hand, these incentives succeeded in stimulating the industrialisation in the country since the manufacturing ratio to GDP has increased for the same period. However, the success was at the probable cost of slower rates of growth of other sectors, because of the movement of investment from these sectors to the industrial sector, the privileged sector. He suspected two factors to have an effect on the development of the industrial sector, namely, the increase of per capita income and the financial incentives, and it was difficult to determine the extent of the impact of tax incentives. Usher<sup>17</sup> argues that the agencies administering the incentive programmes judge the success of these programmes by comparing the employment (the benefit) in the subsidized firms, with the revenue forgone in terms of tax incentives (the cost), in light of the value of created jobs to the country. The question to be asked, of course, is how to measure that value? It is a very broad concept.

Although the results of these studies using the accounting approach may give some indications about the impact of the incentive policies, it would be very difficult to accept them as an accurate measure of the impact of these policies. Many deficiencies surround such an approach. An important deficiency, which also exists in other methods, is

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<sup>17</sup> Usher, D., 1977.

the assessment of possible negative effects that might be occur to the sectors or industries other than the intended one.

The factors affecting the desired objective are many and it is not acceptable to assume that the introduction of incentives is the main one and conclude from that the exact effect of the incentives. Even if we accept that it is the main factor, it is not right to judge their effectiveness from the change in a desired objective since there might exist some problems that limit the effectiveness. For instance, the long and complicated procedures to obtain the subsidy are one factor affecting the effectiveness of the incentives.

This method does not tell any thing about the causes of the ineffectiveness of the incentives. Moreover, when many incentives are provided, it is difficult to know which one is critical, and therefore consider it as a good incentive, and which one is ineffective, and therefore it is better to be terminated. A good example of that is what Tanzi<sup>18</sup> stated earlier that it is impossible to say that the tax incentives in Ecuador were the most important in achieving the growth of the manufacturing sector since other influences, including the financial incentives and the increment in per capita income, might have participated in the sector's growth.

### **3.3.2 THE FIELD RESEARCH APPROACH**

This approach uses the Interview/Questionnaire technique in evaluating the impact of incentive policies. Its advantage is its ability to trace the impact of incentives directly from the beneficiaries by questioning them, through a personal interview or a designed questionnaire, about the influence of these incentives on their investment decisions. However, it

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<sup>18</sup> Tanzi, V., 1969, p.231.



would be difficult to question all of them, and therefore, a representative sample of these beneficiaries is usually chosen for that purpose. This method, as any method, has some limitations. It would be difficult for the beneficiaries to determine precisely how the incentives alone have affected their past investment decisions. Moreover, it is also difficult to quantify the magnitude of the incentive's effects. Another problem is the choice of the precise wording of questions and identification of the right person to ask. The low responding rate associated, usually, with this method is another limitation. These limitations with some others such as, the unrepresentative sample selection, inadequate sample size, and in-correct weight of the answers; can be avoided, or at least minimised, by careful research practice.

We turn now to review some studies which used this method and find out their results about the impact of incentive policies. Azhar and Sharif<sup>19</sup> designed an interview containing fourteen questions and directed it to a representative sample from fourteen different industries. The forty respondents of the study were asked to answer the question of that interview without telling them the purpose of the interview. The role of tax incentives in determining the selection of the type and place of an industry was the aspect to be studied by the interview. They found that the tax holiday schemes in Pakistan played a minor role in determining both, the type of industry to be undertaken by the investor, and the location of the industry. Only eight firms of the forty, 20%, reported that the tax holiday affected their investment decisions. The factors affecting their investment decisions were the high expected profits, the previous experience, and the availability of the infrastructures, rather than the tax holiday. Another study carried out by King<sup>20</sup> about Mexico,

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<sup>19</sup> Azhar, B.A. and S.M Sharif, 1977.

using the same approach, showed the insignificant role of the tax exemption programme in the development of industrialisation in that country. The results of the study indicated the superiority of import duties and licences policies to tax exemption. An earlier study about Mexico too, conducted by Ross and Christensen<sup>21</sup>, had a similar conclusion. Only one firm of the twenty four in the sample, almost 4.5%, who benefited from the tax incentives, mentioned that their investments were undertaken because of the tax exemption. Another fourteen firms, or 58.3%, said their investment decisions would not be different if the tax exemption was not provided. Chen-Young's<sup>22</sup> study, of fifty five import-substituting firms in Jamaica, found only two firms, 4%, to be affected in their investment decision by the tax incentives. The important factors that affected their decisions to invest in Jamaica were the tariff protection policy and the attitudes of the Jamaicans toward domestic investment. In Singapore, Hughes and Seng<sup>23</sup> mentioned that tax concession had no role to play in attracting foreign investment since foreign investors were interested in long-run more than short-run profit. What attracted these foreigners were the administration assistance and facilities of the government, and the good infrastructure in the country. A survey<sup>24</sup> of U.S firms's opinions regarding the factors affecting their decisions to invest in developing countries showed that the tax incentives were not among them. On the other hand, the study stated that the government of

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<sup>20</sup> King, T., 1977.

<sup>21</sup> Ross, G.S. and J.B. Christensen, 1959.

<sup>22</sup> Chen-Young, P.A., 1967.

<sup>23</sup> Hughes, H. and You Poh Seng, 1969.

<sup>24</sup> Robinson, H., 1961.

these countries considered the tax incentives as the main policy to attract those investors. A similar conclusion has been reached in another study by Reuber.<sup>25</sup> His interview study, involving eighty projects owned by foreign investors, suggested that the tariff policy was the most important, while other incentives, including the tax concessions, were less important. The last study to be mentioned, which used this approach, is of Goodman<sup>26</sup> whose results showed that the tax incentives, provided by the government of Brazil to attract the investment to backward regions in the north-east of the country, was the main factor influencing the choice of plant location there.

We conclude this section by adding some points that have merged from reviewing the previous studies. The inclusion of some questions that add some information such as the size of investment, market orientation, and so on, will be very helpful in explaining the final results. For instance, where tariff protection policy is preferred by the majority to other policies, it would not be surprising if that majority is import-substitution industries; but it would be more interesting to know the characteristics of other firms who preferred tax incentives to tariff policy. In some cases the opinions of the minority are more important if they are the big investors in the country. All previous studies draw their evidence, about the effectiveness of the incentive policies, from the beneficiaries. However, the full picture will not be clear without knowing some more information about those businessmen who are not benefiting from the incentives in terms of their number, attitudes toward the incentives, the impact of the provision of the incentive on their activities;

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<sup>25</sup> Reuber, C.L., 1973.

<sup>26</sup> Goodman, D.E., 1972.

and other relevant questions.

### 3.3.3 THE RATE OF RETURN APPROACH

It is assumed by this method that the crucial element in deciding to invest is the minimum expected rate of return (profit), and that the ex-post profitability reflects the firm's earlier expected rate of return. Evaluating the impact of incentives, according to this approach, would be through calculating the net present value of a firm's profit, including the tax exemption and without it, and comparing the values with a critical minimum rate of return which a firm requires to undertake the investment. This comparison yielded three cases:

a. The net present value of the firm's profit with tax exemption (NPVw), is less than the critical minimum rate of return (Q); and at the same time, the net present value of the firm's profit without exemption (NPVo), is less than the critical minimum rate of return too. In this case, the investment is not profitable and the provision of incentives is not sufficient to attract the investor to undertake that investment, and therefore, the incentives are ineffective.

b. The (NPVw) is greater than (Q), and (NPVo) is greater than (Q) too, then, the investment is profitable and will be undertaken regardless of the incentives, and therefore, they are also ineffective.

c. The (NPVw) is greater than (Q), and (NPVo) is less than (Q), then, the investor will undertake the investment only when a tax incentive is provided since it makes the investment profitable. In this case the incentives are effective.

The country study of Bilsborrow and Porter<sup>27</sup> evaluating the effectiveness of the tax exemption in Colombia used the following formulas:

$$V_o = - \frac{1}{r} [ -r + p(1-i)(1-e^{-rb}) ]$$

$$V_b = - \frac{1}{r} [ -r + p(1-e^{-rb}) ]$$

$$Q = r/1-e^{-rb}$$

where,

$V_o$  = present value of the profit without tax exemption,

$V_b$  = present value of the profit with tax exemption,

$r$  = discount rate,

$i$  = tax rate,

$b$  = investor horizon years,

$p$  = anticipated real net cash inflow of investment  
(profit),

$Q$  = critical quantity (critical minimum rate of  
return),

According to Bilsborrow and Porter it is necessary to find the condition where the present value of an investment is negative without the tax exemption, but positive with it, i.e.

$$V_o < 0 < V_b$$

this condition is:

$$p(1-i) < r/1-e^{-rb} < p$$

After tax	Critical	Before tax
profit rate	quantity	profit rate

Bilsborrow and Porter did not calculate the value of ( $Q$ ) for each firm because, as they said, it was impossible to know the discount rate,  $r$ , and the investment horizon,  $b$ . They added that with nominal interest rates in Colombia varying

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<sup>27</sup> Bilsborrow, R.E. and R.C. Porter, 1972.

from 15%, to 35%, and an inflation rate of roughly 10%; the real interest rate lies between 5% to 25%. Investment horizon is in the range of 3 - 10 years, with five years most likely. Therefore, they concluded that the critical quantity (Q), might be anywhere between 10% (with, r, low and , b , high), to 40% (with, r, high and , b, low).

If the tax exemption induced an increase in the profit rate from any per cent below the lower 10% to be within the range, for example 25%, then it is effective. However, the tax exemption is ineffective , if we have one of the following two cases :

- the tax exemption does not increase the profit to a level between 10% and 40%; or

- both before tax and after tax profit rates were above 40% limit.

Applying that to the Colombian case, they found that for nearly half of the firms in their sample, both before tax and after tax profit rates were above the 40% ( for sixteen firms); or, below the 10% ( for nineteen firms). Nevertheless, to overcome the deficiency of assuming the same critical quantity for all exempted firms, which is unlikely since each firm has different activities than the others and therefore different factors which affect its own critical quantity such as, risk level, tariff protection, competition of non-exempted firms, in addition to investment horizon and discount rate; the authors chose the average profit rate of the industry where the firm operates (two or three digit standard industrial trade classification), and compared each individual firm profit with it. If the firm's profit rate, without the exemption, is greater than the industrial average, or, less than the average, even with the tax exemption; then, the tax incentive is an ineffective policy. It would be an effective policy, only, when the profit rate of the firm is greater than the industrial average with the tax exemption and

less than it without the exemption. Of the forty Colombian firms, only four (10%) have been found to be stimulated to invest by the tax exemption.

Azhar and Sharif<sup>28</sup> have employed the same approach in analysing the impact of tax incentives in Pakistan. In their study, the value of the critical quantity,  $Q = r/1-e^{-rb}$ , has been calculated for each firm in the study. The result that they reached was that only eight firms (20%), out of the forty firms in the representative sample, were found to be influenced by the tax incentives when making their current investment decision.

This approach has certain limitations. Perhaps the most important one is that the critical part of the analysis, to determine the effectiveness of the incentives, is the calculation of the profit rate which is an ex-post profit rate. In reality, however, most of the investor's decisions to invest have been based on, possibly, different ex-ante profit expectations. Moreover, it is assumed by this method that the profit maximisation is the firm's objective, while in many cases it is not the only objective, or necessarily, the overriding one. Even if profit maximisation is the objective, the calculated profit rate, which is based on the firm's own accounts, might be understated, or it might be a windfall and therefore cannot be accepted to indicate the real impact of the tax incentives. Lastly, the evaluation of other incentives policies by this method is difficult to undertake.

#### 3.3.4 REGRESSION ANALYSIS APPROACH

In this approach the evaluation of the impact of

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<sup>28</sup> Azhar and Sharif, 1974, p.410.

incentive policies will be done through building an econometric model, macro or micro, which tests the relationship between the introduced incentive programmes and the economic variables which ought to be affected by them. The estimation of the effectiveness of the incentive policies by this method faces the problem that, in many cases, the relationship between the incentives and the desired objective is indirect, and therefore, the outcome does not reflect the actual results. However, some econometric studies have been undertaken to evaluate the impact of one or more types of incentives, on one, or more objective.

Among these studies is the work of Hall and Jorgenson<sup>29</sup> which aimed to study the relationship between the tax policy and investment expenditures in USA. This work is considered to be the base for many studies that have been undertaken to determine the impact of tax incentives and subsidies upon investment using the Neoclassical Model. Their work is based on the Neoclassical Theory of investment, mentioned earlier, that has been developed by Jorgenson, himself, in previous works.

The impact of the incentive policies on the investment would be through the effect of these incentives on the rental value of the capital input. The incentives change the rental value of capital which in turn changes the desired level of capital which induce net investment ( or disinvestment ), bringing the capital stock up ( or down ) to its new optimal level. Their empirical work was on evaluating the tax incentives in USA where they concluded that these incentives were effective in affecting the investment behaviour in that country, particularly, in structures and equipment.

The work of Hall and Jorgenson has been the basis for many other studies, which have revised and extended the model

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<sup>29</sup> Hall, R. and D. Jorgenson, 1967.



in several directions.<sup>30</sup> However, all these studies have been applied to developed countries cases, but none has been done on data of developing countries.

Another study, which utilised an econometric approach, was carried out by Anderson.<sup>31</sup> He argues that most of the studies on investment behaviour include the financial factors through the inclusion of real interest rates. Therefore, his model was concerned with allowing these factors to play a more explicit role in determining the investment expenditures. He adds that the "central features (of the Model) are an investment expenditure equation depending upon output and financial variables and equations determining the internal financing decision (profit retentions) and the external financing decision (loans and share issues)."<sup>32</sup> He found that the change in profits associated with a change in output had a significant impact on investment expenditures, and therefore, he suggested that the investment would be more successfully stimulated by policies which increase aggregate demand rather than those attempting to raise overall profitability. This conclusion indicates the importance of output subsidies in stimulating investment. Another study was carried out by Corker and others<sup>33</sup> to study the behaviour of business fixed investment in the United States in the 1980s. The base of the study was the standard neoclassical model of investment. The output and the cost of capital were the primary explanatory variables. The fiscal incentives affect the investment through affecting the cost of capital. Their finding

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<sup>30</sup> For Further Readings See :  
Bergstrom, V., and J. Sodersten, 1981.  
Fledstein, M., 1974.  
King, M.A, 1972.

<sup>31</sup> Anderson, G.J., 1981.

<sup>32</sup> Ibid, p. 148.

suggested a significant, but distinctly subsidiary, impact of tax incentives on the growth of investment in U.S.A.

Another econometrics study was done by Lim<sup>34</sup> to evaluate the effectiveness of fiscal incentives in less developed countries in attracting direct foreign investment. The study was a cross-sectional one of twenty seven LDCs for the period of 1965-73. He argues that the level of direct foreign investment will be affected, not only by the incentives, but also by the proven record of economic performance, measured by the level of economic development and the rate of growth, and the presence of natural resources. Without going into more details about his study, his results showed that the provision of incentives did not encourage a higher level of direct foreign investment. The proven record of economic performance and the presence of natural resources were the most important factors.

An evaluation study on the impact of credit incentives on the expansion of small and medium enterprises of the manufacturing sector in Korea, was carried by Leite and Vaez-Zadeh.<sup>35</sup> It showed the positive impact of these incentives on investment activities of those enterprises. Their model consisted of three equations, namely, change in fixed assets, change in inventories, and change in working capital; where the independent variables are: interest rate, value added, change in financing variables, and lagged variables. Lastly, Harber<sup>36</sup> undertook a study regarding the impact of the fiscal incentive system in Brazil on the behaviour of the Northeastern's economy of the country. He

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<sup>33</sup> Corker, R., O. Evans, and L. Kenward, 1989.

<sup>34</sup> Lim, D., 1983.

<sup>35</sup> Leite, S.P. and R. Vaez-zadeh, 1986.

<sup>36</sup> Harber, Jr.P., 1983.

was concerned about the effect of the changes in the fiscal incentive system on the Northeast's relative position , in addition to some other issues. His study was a macroeconometrics one where he developed two models; one is a two region aggregate demand model composed of nine structural equations which are consistent with the standard Keynesian aggregate demand model; and the other one was a two region potential output model, which is in the tradition of the 'Harrod-Domar' growth models and composed of nine equations too. Among his results, he found that the changes in the incentive system worsened the relative position of the Northeast regions of Brazil.

We conclude by mentioning some problems associated with the use of the econometric's model approach as an analysis method, in general, and in evaluating the impact of incentive policies, in particular, in the case of developing countries. The most important is the availability of the data necessary for making the analysis possible. Even when the data are available, their accuracy is another issue to be borne in mind. In many studies about developing countries, it happens that some variables are excluded, despite their importance, because of the unavailability of the data. In some countries, the data regarding the incentives might be exaggerated by the government as an attempt to show the generosity of the government to the investors. The inadequate methods of collecting data in developing countries are a main reason for most of the problems. These problems limit the accuracy of the results of the studies about the exact impact of the incentive policies on economic activities. Another limitation of this approach is that it tells only whether the incentives are effective or not, but does not say anything about how to make the incentives effective, if they are ineffective; or how to make them more effective, if their effectiveness is not strong enough.

### 3.4 The Case of Saudi Arabia

In this section we review some studies that were carried out to evaluate the incentive policies impact in Saudi Arabia. Although there has not been any comprehensive study that covers all the incentives provided by the government for the private sector in the country, reviewing some of the existing studies is necessary to benefit from their valuable points and to avoid their shortcomings.

Among these studies, is a study done by Ba-Sheikh<sup>37</sup> to examine and analyse the operation of the Saudi Industrial Development Fund, and the problems facing the projects financed by it. The study pointed out some positive relationship between the loans extended by the SIDF and the benefited industrial projects, though, the work was directed mainly towards examining the operation and administration of the SIDF, and the attitudes of the beneficiaries regarding them. The examination was done through a survey carried out in 1983, which included two questionnaires directed to team leaders and project officers working in the SIDF, and to owners or managers of private projects who obtained loans from the SIDF.

The study was an attempt to find out the deficiencies limiting the role of the Fund in developing the private sector. Therefore, it is very limited study in assessing the impact of the industrial incentives on the activity of industrial sector. Moreover, the survey was directed to the benefiting private projects only and excluded the opinion of other projects which might be as valuable as the beneficiaries'.

Another study was done by Al-Obaid<sup>38</sup> in his study about Agricultural Development in Saudi Arabia. The objectives of

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<sup>37</sup> Ba-Sheikh, A., 1985.

the study were to identify the problems and constraints facing agriculture in Saudi Arabia, and to provide an assessment of the effects of government policies and planning efforts in agriculture.

Among the policies which have been evaluated by the study were the agricultural incentive programmes. A field research survey and some regression analysis of time-series data concerning some policies, were used as a methodological approach. The findings were that the incentive programmes such as land distribution, loans, and subsidies contributed greatly to the recent growth of agricultural production in Saudi Arabia. Yet some weaknesses regarding these policies were revealed by the study. These include, low rate of credit recovery, negative effects of the subsidy programme on the utilisation life of machinery and equipment and on production of some crops, income inequality between the regions, and the overuse of water resources.

Although the study found good points regarding the impact of agricultural loans and subsidies on the agricultural sector through analysing, quantitative data obtained by a field research survey, and a time series data; the evaluation results of the study is limited for many reasons. First, the study was concerned with reviewing and evaluating all policies connected to the development of the agricultural sector, and hence, agricultural incentives impact on agriculture sector were not analysed in much details. Second, the study did not investigate the incentives impacts on the agriculture sector in terms of its relation to other private sectors. Thirdly, the loans and subsidies provided by some government agencies were not included in the study.

Another study was carried out by Almoneif<sup>39</sup> and aimed to evaluate the role of agricultural subsidies in developing the

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<sup>38</sup> Al- Obaid, A., 1987.

agricultural sector. The study analysed the performance of the agricultural sector and found that, as a result of direct and indirect government support programmes such as loans and subsidies; planted area enlarged, production of some agricultural products increased, and there was an expansion in using new technology.

Yet, the study's evaluation process to the existing subsidy programme was carried out through applying some efficiency and equity standards. These include, increasing production with the least possible costs, reducing the reliance on imports of agricultural products to achieve self-sufficiency, and achieving a balanced development between rural and urban areas.

The findings of the study showed some problems associated with the introduction of agricultural incentives. First, agricultural production was concentrated on one crop, wheat, as a result of the generous subsidies provided to farmers producing it. This led to an increase in government expenditures in terms of, buying wheat, expanding grain silos, and paying other subsidies; to an increase in consumption of water, to a reduction in soil quality, and to an increase in the number of inefficient producers.

The second problem was the increase of the import volumes of agricultural inputs, in addition to the increase in imported food stuffs. The country was still considered to be one of the big importing countries of such materials, despite the fact that there is a self-sufficiency in some agricultural products.

The third was the increase of the gap between the rural and urban areas, as a consequence of directing most of the loans and subsidies toward large capacity agricultural projects instead of small farmers.

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39 Almoneif, M., 1988.

The deductive method used by the study in analysing the agricultural subsidies lessened the validity of its results, in spite of their importance. The increase of production and cultivated area, for example, can be attributed to many factors such as the improvement of infrastructure which encouraged agricultural investment, not only to the subsidy programmes. By the same token, the results reached by the study through applying the equity and efficiency standards could be ascribed to the effect of many factors.

Having reviewed the relevant theories and studies about the incentives policies, in terms of their impact measurement methods, and the experience of some countries, we are in a position now to decide upon the appropriate methodological approach for evaluating the incentives policy in Saudi Arabia. Before we do so, it is important to review the incentives applied in the country, and to discuss some important issues related to the subject such as, the government participation in the economy. Both issues are important in determining the items to be included in the evaluation process, and in choosing the appropriate methodological approach. Thus, the next chapter reviews the role of the government in the economy, while the chapter following it discusses the incentives provided by the government to support private sector activities. Chapter Six is, then, devoted to discuss the methodological approach of the study.

## CHAPTER FOUR

### THE ROLE OF THE GOVERNMENT IN SAUDI ECONOMIC DEVELOPMENT

#### 4.1 Introduction

Kingdom of Saudi Arabia was established in 1932 as a nation state. The country at that time was one of the poorest nations in the world. The majority of the population lived in small villages in houses built of mud-brick, and earned a living from subsistence agriculture. The nomads travelled across the desert in search of grazing area. Trade was an important activity. Revenues from Hajj and Umrah, the major and minor pilgrimages to Makkah, were the most important source of income for the government.

In 1938, oil was discovered in the eastern region. But it was not, however, of much help in alleviating the poverty of the country until the end of World War II when the royalties the government received from the foreign oil companies, the concessionaires of producing and marketing the oil, increased. The total revenues of the country was less than \$ 4 million until 1944. It increased to \$ 85 million by the year 1948 with 60% of it derived from oil. Therefore, the year 1948 could be considered as the turning point in the history of Saudi Arabian economy.<sup>1</sup>

In 1960, Saudi Arabia was one of five founders of OPEC.

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<sup>1</sup> Ministry of Planning(MOP),"Third Development Plan", p 8.



The establishment of this organisation was the starting point of many changes which followed in the relations between the OPEC members and the concessionaires. One consequence of these changes, for Saudi Arabia, was the accruing of 100 per cent ownership of ARAMCO (Arabian American Oil Company), the main concessionaire company in Saudi Arabia, by the Government in 1980-retroactive to 1976.

The boom in oil prices in the 1970s was the main factor behind the rapid changes in Saudi Arabia. The increase in oil revenues enabled the government to launch ambitious programmes which improved the well-being of the citizens and the infrastructure of the country. Table 4.1 shows the changes in oil production and revenue in different periods. This revenue rose sharply from \$57 millions in 1950, to \$22,574 in 1974, and reached its peak of \$101,813 millions in 1981.

The role of the government in developing the economy is of two types: through direct government investment, in both the oil and non-oil sectors; and through government investment in social overhead capital, which covers infrastructure and human resources. Planning was the tool that has been used by the government to develop the economy, financed by huge expenditure programmes. The active role of the government in the Saudi economy through planning and budgeting, sustained by oil income, led to the dominance of government and the oil sector in the economy. The growth and development in all economic sectors is very much influenced by the activities and policies of the government. There are two main sectors in the economy: the oil sector and non-oil sector. According to the fourth development plan the non-oil sectors include all activities except hydrocarbon-related exploration, production, refining and other processing operations which are the activities of oil sector.<sup>2</sup> It is believed that the oil sector

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<sup>2</sup> Ibid, " Fourth Development Plan ",p.75.

will continue to play a highly significant role in the economy for a long time to come.

The aim of this chapter is to provide a general background about the extent and the nature of government participation in the economy. To achieve that aim, the chapter is divided into two parts. Part one reviews the development plans that have been adopted by the government since 1970 as a means of developing the economy. Then, the second part gives some example of the government participation in both, the oil and non-oil sectors.

## 4.2 Development Planning

Comprehensive planning is a method used by many developing countries to develop their economies. Saudi Arabia is no exception in that respect. The government has felt the need to adopt comprehensive planning programmes to develop its economy due to the inability of the domestic private sector to lead the development process. In addition, the fact that the oil wealth accrued exclusively to the government, led to the conclusion that the government has to assume, at least temporarily, the leading role in planning and promoting economic growth and development.

In 1970 the country entered the era of planning process, and since then, four five-year development plans have been completed. The main strategic economic objectives of these plans, with some variation in emphasis, can be summarised as follows:

- 1- Building and improving the infrastructure of the country to meet the needs of development. This infrastructure includes a road network, airports, seaports, telecommunication networks, electric utilities, water and sewage networks, industrial estates, etc.

- 2- Promoting economic growth through public and private

economic activities. The public sector should undertake those investment projects which are beyond the ability of private sector. The private sector should be encouraged to participate in the development process.

3- Expanding and developing social services such as education, health care, and youth welfare all over the country. It is the aim of the plans to build educational institutions from elementary school to universities and make them accessible, free of charge, to the vast majority of the population. Other social services are to be provided under the same principles.

The plans, which are prepared by the Ministry of Planning, are indicative in nature and the Ministry has no authority to impose them on economic units. They are more of a set of guidelines than an elaborate binding set of specific projects that have to be implemented in certain sequence. They are flexible enough to allow changes along the way as new information or financial conditions become of significance.

The close coordination between the government ministries had made possible the realisation of most of the targets of the plans. Of special importance is the coordination between the Ministry of Finance and National Economy, which prepares the country's general budget, and the Ministry of Planning, since the former is not obligated to set budgetary allocations according to the plan. The abundance of financial resources from oil exports, however, was the main factor in achieving the Plan targets, and even exceeding them.

#### **4.2.1 THE FIRST DEVELOPMENT PLAN 1970-1975**

Given the primitive state of the economy at the inception of the First Plan, emphasis was heavily put on developing the basic infrastructure and expanding social services. Nevertheless, the Plan was comprehensive in so far

as projects to promote growth in all sectors of the economy were planned through which the standard of living of the Saudis was to be raised.

In terms of financial conditions, the Plan started after two fiscal years, 1968, 1969, which witnessed a deficit in the country's overall balance of payment amounting to SR 360 million, and SR 527 million, respectively.<sup>3</sup> The financial difficulties are attributed, mainly, to consequences of the Arab-Israeli War in 1967 which increased defense expenditures and aid to the Arab countries affected by the War. Therefore, the Plan was very modest in size. The total outlay of the First Plan was SR 41.3 billion divided into a recurrent expenditure of SR 22 billion, and a project outlay of SR 18.4 billion. Projected revenue of the Plan ranged between SR 33.8 to SR 37.4 billion.

Table 4.2 shows a summary of financial allocations for the Plan. A large share, 23.1 per cent of the total planned outlay, accrued to defence which indicated the determination of the government to increase the kingdom's military ability as a measure to stabilise the country. The importance of developing human resources, and hence reducing the country's dependency on expatriates, made the share of social services in total outlay the second highest, after defence, with a total share of 22.5 per cent. Third came the development of infrastructure where transport and communication in this Plan accounted for 18.1 per cent of the total outlay.

The plan projected the GDP to increase at an annual average rate of 9.8 per cent. Oil and non-oil GDP were reckoned to grow at an annual average rate of 9.1, and 12.0 per cent respectively.

The unexpected increase in oil prices in 1973, which in turn increased the revenue available to the government, led to

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<sup>3</sup> SAMA, "Annual Report", 1975, p.51.

the fulfilment of more than the Plan's targets. Table 4.3 displays the projected and actual expenditures, the actual government revenue, and the annual growth rate of GDP, at constant and current prices, during the years of the First Plan. The total revenues during the First Plan amounted to SR 180.6 billion, while the actual expenditures reached SR 86.5 billion. The real GDP registered a great success as it grew at an average rate of 13.2 per cent per year, instead of the Plan's projected rate of 9.8 per cent. The oil sector grew at an average annual rate of 14.9 per cent, compared with the projected rate of 9.1 per cent, and the obvious reason was the change in oil prices. In contrast, the non-oil sector grew at an average annual rate of 11.0 per cent which was less than the projected rate by one per cent. The reason might be the physical bottlenecks imposed by the inadequacy of the infrastructure, especially the seaport which could not handle the increased volume of imports.

#### 4.2.2 THE SECOND DEVELOPMENT PLAN 1975-1980

In contrast to the First Development Plan, The Second Development Plan was formulated under no financial constraints. The concern at that time was the small absorptive capacity of the economy which became dominant both in the development strategy and in the management of the country's economy. Therefore, elimination of constraints which had been experienced during the First Plan, particularly the infrastructure constraints, was given a great emphasis in the Second Plan.

Regarding the expenditures on the plan, a total of SR 498 billion was planned to be spent during the years of the Plan of which SR 331.6 billion was for projects, and SR 166.6 billion for recurrent expenditure. As Table 4.4 shows, administration and defence expenditures represent 23.4 per

cent of the total expenditures, followed by physical infrastructure development and economic resource development with 23 per cent and 18.5 per cent respectively.

But by the end of the last year of the plan, the actual expenditures of that plan reached an amount of SR 700 billion, which is almost nine times that of the first plan. More was spent on developing the infrastructure so as to increase the absorptive capacity of the economy.

For the development of the non-oil sector, so as to help in diversifying the economy, initial steps were taken to introduce medium and long term programmes designed to promote energy intensive industries. In addition, different incentives programmes, such as interest-free loans, and subsidies, which aimed at stimulating private sector investment were initiated.

In this Plan, the overall GDP annual growth rate was projected to be 10 per cent. However, the low performance of the oil sector, which grew only at 4.8 per cent per year against the 9.7 per cent planned rate, caused the total GDP to grow at only 8.0 per cent annually. In contrast, the non-oil sector registered the highest average annual growth rate which was 15.1 per cent, compared with a target rate of 13.3 per cent. It is believed that the elimination of the physical bottlenecks imposed by the inadequacy of the infrastructure during the Second Plan, was the main cause of the high growth rate of non-oil sector. Table 4.5 displays more details about the planned and actual growth rates of the economic sectors during the Second Plan.

The Second Plan can be considered a successful one when it is compared with the First Plan, due to the fact that many infrastructure problems were tackled during the Plan period which enhanced the absorptive capacity of the economy. Moreover, the actual growth rate of non-oil sector which exceeded the projected rate, indicates the Plan's success in

diversifying the economy. However, the Second Plan witnessed two problems which were: the rapid increase in foreign labour force, due to both, the huge infrastructure investment that had been undertaken during the Plan period, accompanied by a shortage in Saudi labour force; and the inflation which was a result of the rapid increase in the purchasing power and excess demand for goods and services accompanied by a supply shortage. That inflation was under control by the last year of the Plan.

#### **4.2.3 THE THIRD DEVELOPMENT PLAN 1980-1985**

While the first two plans concentrated mainly on developing the infrastructure of the country, and hence increasing the absorptive capacity of the economy; the Third Plan's major objective was to promote structural change in the economy through emphasis on resource development and growth in the producing sectors. In addition, human resource development received great attention in the Plan due to the increase in the foreign labour force in the country.

The total expenditures of the Plan were estimated to be around SR 782 billion, where 33.4 per cent and 31.8 per cent of the total expenditures were allocated to the development of economic resources and physical infrastructure respectively. Table 4.6 gives more details about the allocation of the total expenditures of the Plan, and it is clear from that Table how much attention the development of economic resources was given in the Third Plan.

The actual expenditure of the Plan reached a total of SR 1.21 billion, which is almost 54 per cent increase over the estimated figure. The Plan witnessed a reduction in oil revenue during the last three years of its time, as a result of the decline in demand in the oil market during that period. However, the surplus obtained during the previous two plans

made it possible to implement plan projects despite the reduction in government revenues from oil. Table 4.7 shows the government revenue and expenditure during the Third Plan.

The projected annual average growth rate of total GDP was 3.2 per cent. But because of the fluctuations in oil prices which affected the oil sector causing its GDP to decline at an average growth rate of 14.6 per cent per annum against a projected rate of 1.4 per cent, the total GDP grew at a negative rate of 5.8 per cent annually which indicates the strong impact the oil sector has on the economy. As Table 4.8 indicates, the non-oil sectors registered an average growth rate of 5.1 per cent per year which is close to the planned rate which was 6.2 per cent. Among the non-oil sectors, the agricultural sector made great progress in the Third Plan for it increased at an annual average rate of 8.7 per cent compared with a projected rate of 5.4 per cent yearly.

#### **4.2.4 THE FOURTH DEVELOPMENT PLAN 1985-1990**

The Fourth Plan was formulated under great changes in the financial circumstances of the country. The anticipation, at that time, of more reduction in oil revenues made the total planned expenditure to be SR 1000 billion, which is about 23 per cent below the actual expenditures level for the third plan. Of that amount, civilian expenditure, which includes expenditure on development agencies, subsidies, government administration costs, and foreign aid; were estimated to be around SR 687.5 billion, of which SR 500 billion were for development agencies. The actual expenditures of that Plan was less than the estimated figure by 20 per cent, that is around SR 800 billion. As Table 4.9 shows, the actual development expenditure was SR 324.1 which accounts for 64.8 per cent of the planned development expenditure. Moreover,



the Table compares between the Plan and the actual distribution percentage of the development expenditure, where human resource development captured 35.3 per cent of the expenditure against a planned share of 27.1 per cent. On the other hand, the share of expenditure on economic resource development declined from a planned share of 26.1 per cent to an actual of 19.9 per cent.

The objectives of the fourth plan were mainly a continuation of those set out in the Third Plan, with more emphasis on the diversification issue where the growth of non-oil sectors was to be increased in order to reduce the dependency on crude oil as the main source of national income. The encouragement of the private sector investment as the principal mechanism for achieving economic diversification was one goal of the Plan.

The projected growth rate of the total GDP was estimated to be at an annual average rate of 4.0 per cent. For the oil sector's GDP, the estimated growth rate was 5.6 per annum; while for the non-oil sectors, the annual average rate was planned to be 2.9 per cent. The fall in both oil production and prices caused the Gross Domestic Product's growth rate to grow at an annual average rate of 0.1 per cent, which was less than the target rate. Oil GDP grew at an annual rate of 1.0 per cent compared to a targeted growth rate of 5.6 per cent. Non-oil sector's annual average rate was 0.8 per cent during the Fourth Plan years. Among the non-oil sectors, the agricultural sector registered a growth rate of 13.8 per cent compared to a projected growth rate of 6.0 per cent.<sup>4</sup>

The experience of the Fourth Plan re-emphasize the strategic importance of the fundamental long term goal of economic diversification in reducing the dependence of the economy on oil revenues. That experience revealed the

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<sup>4</sup> MOP, " Fifth Development Plan ", pp.25-26.

significance of government expenditures in the economy and its impact on the economic sectors. And of clear evidence was the impact that the government budget deficit in 1986-87, which amounted to SR 69 billion, has had on the performance of the economy in that year.

#### 4.2.5 THE FIFTH DEVELOPMENT PLAN 1990-1995

On December 31, 1989, the Saudi Council of Ministries approved the Fifth Development Plan to cover the period through 1995. Although the Plan re-affirms the broad objectives of the Fourth Plan, its central themes reflect a change in the planners' view of how to achieve these objectives. It is declared in the Plan that "In the past, the momentum for economic growth and development has been provided predominantly by strongly expanding government expenditures, but this method of stimulating economic activity will not be revived in the Fifth Plan. Instead, the Fifth Plan will affirm a new phase of development in which the institutional dimension will be emphasized and where progress will be achieved as much through private sector initiative, (stimulated by government policy action), as through government expenditure".<sup>5</sup>

Ten main strategic themes have been identified by the Plan as a means of achieving the Plan's objectives. These are: stabilisation of the economy through the steady growth of government expenditure; development of both government and private institutions; extension of the private sector's role by encouraging investment through an appropriate combination of regulatory and institutional initiatives, information dissemination, financial and other incentives; intensification of structural change through growth; improving quality,

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<sup>5</sup> MOP, "Fifth Development Plan 1990-1995", p.47.

efficiency and competitiveness; intensified utilisation and development of Saudi human resources; maintaining welfare and quality of life of Saudi society; achieving balanced growth; acceleration of scientific and technological development; and strengthening and expanding international linkages.<sup>6</sup>

The total government expenditure in the Fifth Plan is set at SR 753 billion in current prices. The civilian expenditure amounts to SR 498 billion, representing 66 per cent of total government expenditure. Table 4.10 shows the allocation of that amount among the different sectors, where 72 per cent of the total civilian expenditures is to be spent by development agencies.

The Plan aims to achieve an average annual growth rate of total GDP at 3.2 per cent. Oil sector GDP is expected to grow at an annual rate of 2.7 per cent. Non-oil sector GDP is projected to grow at an average annual rate of 3.6 per cent. More attention has been given to the growth and development of the producing sectors, namely, agriculture, industry, electricity, and construction. It is targeted that the agricultural sector achieves an average annual growth rate of 7.0 per cent. The industrial sector is targeted to grow at an average annual growth rate of 6.5 per cent, where petrochemical industries alone grow at an annual growth rate of 8.0 per cent, oil refining grow at an average annual rate of 5.4 per cent and other manufacturing at 7.5 per cent per year.

The big challenge the Plan is going to face, during its years, which will determine the ability of the Plan to achieve its objectives, is the consequence of the Iraqi invasion of Kuwait on August 2nd, 1990, the so-called Gulf crisis. The financial obligations of the country toward the costs of the war of liberating Kuwait will restrict the ability of the

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<sup>6</sup> Ibid, p. 48.

government to spend on domestic development programmes unless the conditions in the international oil markets change in favour of high oil prices.

#### 4.3 Government Participation in the Oil Sector

The dependence of the country on one single commodity, oil, has led the economy to be largely dominated by the oil sector. The oil sector, as we said before, includes all activities that are directed towards the exploration, production, refining and marketing of oil and natural gas; in addition to construction associated thereof.

The oil sector has set the pace of overall economic activity. Oil is extracted and utilized by the government in public interest. There is no private ownership of oil or oil concessions (except the old concessionaries). Therefore, the oil sector is a source of revenue which the government spends on developing the economy; a sector that employs a large number of people; and a sector that supplies the raw materials for many industries such as, petrochemicals.

The contribution of the oil sector to the total Gross Domestic Product (GDP) has exceeded 50 per cent for the period between 1963 and 1983. The boom in oil prices in the 1970s made the oil sector's share reach a peak of 83.3 per cent in 1974, where the share of mining of crude oil and natural gas in the total product of the oil sector was 94 per cent. The trough was reached in 1989 when its share declined to less than 30 per cent, due to the drastic changes in oil markets. Therefore, it is normal to see the annual average growth rate of the total GDP fluctuates in the same direction as the fluctuation of the oil sector growth rate.

Knowing that the country contains by far the largest oil reserves in the world, the oil sector will continue to play an important role in the Saudi economy. The proven oil reserves

in the country was estimated to be 315 billion barrels in 1989.<sup>7</sup> Along with its crude oil, Saudi Arabia has the potential for exporting more natural gas liquids than any other nation. ARAMCO proven natural gas liquids reserves in 1988 were estimated to be 177,294 million cubic feet.<sup>8</sup>

There are four companies working in oil sector; PETROMIN, SAUDI ARAMCO, GETTY OIL, And AOC. Getty and Aoc are two small private companies. The government of Saudi Arabia signed in 1949 a concession agreement with Getty oil company for a period of 60 years. The concession area is relatively small(5,200 square km., compared with 219,800 sq.km. to ARAMCO),<sup>9</sup> and covers a part of Saudi-Kuwait neutral zone. Getty started production in 1954 and began its operation of Mina Saud refinery in 1958. The Getty's share of oil productions is relatively small. In 1988, its total production was 35.2 million barrels, compared with 1,830 million barrels to ARAMCO. Its exports in 1988 were 700 thousands barrels of crude oil, and 22,6 million barrels of refining oil.<sup>10</sup>

The Arabian Oil Company (AOC) started its work in Saudi Arabia in 1957 with a concession agreement for a 40 year period. Its oil production and reserves are larger than of Getty's, but they are, relatively, of poorer quality. Its production began in 1961, and its refinery at Khafji started the operation in 1968.

The petrochemical industries based on natural gas and the oil resources, which are run through Saudi Arabian Basic Industries Corporation (SABIC), are considered to be a part of non-oil sector activity, and therefore we delay the discussion

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<sup>7</sup> Ibid., p. 179.

<sup>8</sup> SAMA,"Statistical Summary", 1989, p.110.

<sup>9</sup> Ibid., p.108.

<sup>10</sup> Ibid, p.105.

about them to the assigned section.

PETROMIN and Saudi ARAMCO are the largest companies that work in oil sector in Saudi Arabia. Both of them are owned by the government. The two following sections are devoted to a brief review about them.

#### **PETROMIN**

The General Petroleum and Mineral organisation (PETROMIN) was established in 1962 by the government as a national oil company. It is attached to the Ministry of Petroleum and Minerals and was intended not to be a commercial enterprise but to serve the best interests of the country. The assigned role of the organisation was to develop and administrate petroleum, gas, and mineral resources and related projects in the country. It is allowed to engage in joint-stock ventures with other companies to achieve its objectives. Although the work of the organisation is concentrated in petroleum and mineral activities, it has undertaken some industrial investments such as establishing a fertiliser plant in Dammam (SAFCO) which was the first such plant in the Kingdom, and a steel-rolling mill (SULB) in Jeddah which also was the Kingdom's first. These industries then reverted to the Ministry of Industry and Electricity under the supervision of Saudi Arabian Basic Industries Corporation (SABIC).

One of the achievements of PETROMIN was the completion of the East-West crude oil pipeline (Petroline) in 1982. Petroline links the Ghawar oil field in the Eastern Province with Yanbu seaport at the western coast of the country. Its length is 1,270 km, with an initial capacity of 1.85 million barrels a day which has been extended to 3,2 million barrels per day in 1987. Another oil pipeline that has been established by PETROMIN is the one between Khurais and Riyadh with an initial capacity of 300 thousand barrels per day and

it is 141 km long.<sup>11</sup>.

PETROMIN has established up to now, eighteen projects in the Kingdom. Among them are, three petroleum refineries for export, and they are in Yanbu, Jubail, and Rabigh; producing motor fuel, jet fuel, diesel oil, gasoline, liquid petrol gas, kerosene, fuel oil, naphtha, and other petroleum products. Further, three petroleum refineries for satisfying the local needs such as motor gasoline, aviation gasoline, industrial fuel oil, asphalt, etc.; are located in Riyadh, Jeddah and Yanbu. A lubrication oil refinery and a number of plants to produce the final products of lubricants are among these projects. A new refinery in Qassim was planned to start its production process in 1991. The installed capacity of PETROMIN's refineries rose more than seventy nine fold, from 12,000 barrels per day in 1970, to 951,000 barrels per day in 1987, while the production increased from two million barrels in 1970, to 330 million in 1987.<sup>12</sup> The total petroleum products of both refineries in Yanbu and Jubail in 1987 was 142,349,494 barrels. For domestic refineries in Riyadh, Jeddah, and Yanbu, the total was 143,446,270 barrels for the same year. The total products of lubes and greases in 1987 was 3,363,996 barrels of lubes, and 2000 metric tons of greases.<sup>13</sup> Some of these projects are joint-ventures with Saudi and non-Saudi companies such as MOBIL and SHELL.

Marketing of petroleum products domestically and abroad is one job of PETROMIN. Moreover, it is in charge of marketing crude oil and gas. In 1967 PETROSHIP was established to undertake all crude oil and petroleum products shipped abroad. In 1988 the Saudi Arabian Marketing and

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<sup>11</sup> The information about the oil pipelines is obtained from: MOP, "The Achievements of Development Plans", 1989, p.143.

<sup>12</sup> Ibid., p.52.

<sup>13</sup> All figures are obtained from : Saudi Consulting House, 1990, p.284.

Refining Company (SAMAREC) was established to improve and strengthen the marketing process. This company has the responsibility of marketing, and distributing oil and petroleum products, in addition to the supervision of oil refineries. Moreover, the works of PETROMIN services Department (PETROSERVE) are now its responsibility. The work of PETROSERVE includes, all welfare services for PETROMIN's workers such as security, training, communication, housing etc.; in addition to computer and project research.

In the minerals field, PETROMIN established the Arabic Drilling Company (ADC), in 1964, as a joint-venture company to undertake all drilling activities that aim to explore minerals, underground water and oil in addition to wells maintenance, in the Kingdom and overseas. The foreign partner is the Forex company in France. Another joint-venture company was established in 1965 with another French partner to carry-on all necessary studies related to the searching of the natural resources in the country, beside other engineering and civil-engineering studies.

In 1983 the work in Mahad Al Dhahab gold mine was started, and full production was achieved in 1988. The rich ore of this mine, yields gold, silver, copper, and zinc. Work is taking place in two other projects which are located at Al Masana and Sukhaybrah. Both projects are expected to yield gold, silver, copper, and zinc.

#### **SAUDI ARAMCO**

Saudi Arabian Oil Company (Saudi ARAMCO) is the new name for the Arabian American Oil Company (ARAMCO) after the completion of the process of transferring the ARAMCO's assets to the Saudi government.

Standard Oil company of California (SOCAL) signed a concession agreement to search for oil, with the Saudi government on May 29, 1933. In 1944 the company changed its



name to ARAMCO. The concession agreement has been changed many times and the status of ARAMCO has also changed continually since the first concession agreement was signed. In addition to SOCAL, three other oil companies owned ARAMCO, namely, Texaco, Exxon, and Mobil.

In 1980 the company was owned completely by the Saudi government with the formal date of transfer made retroactive to 1976. The sales of ARAMCO in 1981 amounted to SR 14 billion; and its employees were around 60,000.<sup>14</sup>

Saudi ARAMCO is responsible for exploring, developing, producing, and marketing of crude oil. That includes all types of activity related to oil industry and other related industries such as oil refinery, construction, gas gathering and treatment, and transportation inside the country and overseas.

The total commercial oil fields discovered by ARAMCO until 1987 were 52 oil fields, in addition to one commercial gas field. Moreover, the total company's network of flow lines and pipelines reached 20,540 km in 1987. With regard to training, the company has one of the largest training programmes of its kind, where there are about 1,720 full-time members of staff working in five main training centres and four satellite training centres.<sup>15</sup> ARAMCO produced 1,830 million barrels of crude oil in 1988, which account for 97% of the total crude oil production in the Kingdom.<sup>16</sup> The remaining 3% was produced by Getty and AOC. Most of ARAMCO'S oil exports go through Ras Tanura, Yanbu and Jua'ymah marine terminals. The Ras Tanura refinery, run by the company, is the largest refinery in the country. Its producing capacity, in 1987, was 500 thousand barrels of refined products per day,

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<sup>14</sup> Johany, A.D., and others, 1986, p. 35.

<sup>15</sup> MOP, "Achievements of Development Plans", p.156.

<sup>16</sup> SAMA, "Statistical Summary", 1989, p.41.

and its total production for the same year was 139,4 million barrels.<sup>17</sup>

The company, currently, is involved in designing and building an extensive gas gathering, treatment and transportation(GTT) facility to provide industrial projects with fuel for energy and feedstock.

#### 4.4 Government Participation in The Non-Oil Sector

The major components of the non-oil sector are agriculture, manufacturing, construction, transportation and communication, and services. It can be said that the government has an investment in all these major sectors with different degrees of involvement in different times. There are two main reasons behind the government involvement in the non-oil sector activities. First, the government's strong desire to diversify the economy to reduce the overwhelming dependency on oil. Second, the unwillingness of the private sector to undertake some investment, either because of the high risk associated with it, or because of high financial requirements of such investment which is beyond the private sector's capability. Therefore, government efforts for developing the non-oil sector include its direct investment in addition to the provision of different incentive programmes which aim to minimise the difficulties associated with investment in that sector.

The contribution of the government non-oil sector to the total GDP has reached its maximum share in 1983 with a 21.5 per cent. Regarding the contribution of the government non-oil sector in the Gross Domestic Fixed Capital Formation(GDFCF), which represents the outlays that are made to increase the size of the fixed capital assets of the

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<sup>17</sup> MOP, " Achievements of Development Plans ", p.156,225.

economy; the sector's share was averaged at, approximately, 50 per cent for the period from 1970 to 1986( in constant prices of 1979-80), due to the government's effort in developing the country's infrastructure.

It is difficult to rely on the non-oil GDP to trace the extent of government involvement in the non-oil sector activities, since much government investment in the non-oil sector is classified under the private non-oil sector activities, such as the petrochemical industries, rather than under government non-oil sector.

The following sections are devoted to a brief discussion of government participation in the three major sectors, namely, agriculture, industry, and transportation and communication.

#### **4.4.1 AGRICULTURAL INVESTMENT**

Agriculture has the potential for making a substantial contribution towards the diversification of the economy and lowering the dependence of the country on foreign supplies for its food needs. Moreover, agriculture is the traditional work of many Saudis in the country. Therefore, the government decision to support the development of the agricultural sector was no surprise. This support has taken three forms: (1) establishing the necessary agricultural services and infrastructure, such as dams, agricultural roads, and training and research centres; (2) encouraging agricultural private investment by providing various kind of subsidies, such as loans, and input and output subsidies; (3) undertaking some agricultural enterprises, alone or jointly with the private sector. An example of a joint-stock company is the Saudi Fishing Company where the government owns 40% of the total capital. Regarding agricultural projects which are run by the government alone, three projects are worth mentioning: Haradh

Project, Grain Silos and Flour Mills Organisation(GSFMO), and Al Hassa Project.

#### **HARADH PROJECT**

In 1964, the government established the King Faisal Settlement Project at Haradh. The aim was to settle 1,000 bedouin families. With the assistance of foreign companies, the project was completed in 1971 with total cost of 100 million Saudi Riyals(SR). The completed work includes 50 water wells, 4,000 hectares reclaimed land, construction of an irrigation and drainage system, and a power station.

Due to the failure of the project in achieving its main goal, that is, bedouin settlement, its objectives were reformulated. The new aim was to establish a commercial agricultural enterprise, and therefore, the project was to be operated by the Ministry of Agriculture and Water(MAW).

In 1977 Ministry of Agriculture and Water established the Haradh Agricultural Company as a joint-venture with Mastouck, an Irish firm, to enhance the profitability of the project. However, this new company did not succeed in accomplishing the desired objective. Therefore, the project has been turned over completely to the management of the National Agricultural Development Company (NADEC). This company was established in 1981 as a joint-stock company, to invest in all agricultural activities, with a total capital of SR 400 million of which the government owns 20 per cent. The company succeeded in growing wheat on a large scale in the project, in addition to livestock and dairy production.

#### **GSFMO <sup>18</sup>**

The Grain Silos and Flour Mills Organisation(GSFMO), is

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<sup>18</sup> Grain Silos & Flour Mills Organization, 1990.  
Ibid, 1989.  
Ibid, 1987.

an autonomous body that was established in 1972 with the aim of attaining a strategic balanced stock-pile of cereals in accordance with the Kingdom's needs. It was under the supervision of the Ministry of Commerce and the Minister was the Chairman of the Organisation. The GSFMO was entrusted with the implementation of the wheat price support programme.

The country's success in reaching self-sufficiency in wheat production led to the stoppage of wheat imports completely. Therefore, it was found that it is more appropriate to transfer the GSFMO to the Ministry of Agriculture and Water, which was done in 1985, and the Minister of Agriculture and Water was appointed as the new chairman of GSFMO.

The new objectives of the organisation were set to be: constructing an entire industry for grain storage, flour production, and animal feed industry, in addition to other related agro-industries; marketing the products of the organisation domestically and overseas; purchasing the grains, and maintaining a strategic stockpile of grain to meet the Kingdom's requirements for six months.

The organisation has established ten projects in the Kingdom. These projects include, grain silos and flour mills, equipments for loading and unloading the grains, animal feed factories, factories for filtering and filing of seeds, and production lines for wheat products such as burgle, (jareesh), and (harees).

The daily production capacity of these projects is, 5,400 thousand tons of flour, 1,169 thousand tons(q/sixteen hours) of animal feed, while the storage capacity is 2,380,000 million metric tons. The daily flour production is, 216,000 thousand of 45 kg. bags, 72,000 thousand of 5 kg. bags, 188,640 thousand of 2 kg. bags, and 122,400 thousand of 1 kg. bags.

## **AL HASSA PROJECT**

Al Hassa is the largest oasis in the country covering an area of about 180 square kilometres. It is a major area for production of dates( around 3 million palm trees). Moreover, it is an area rich with water resources. There are at least 350 water wells and natural and man-made artesian springs. However, these water resources were a source of problem for the local farmers since some of them are saline water. The salinity of soil makes the problem more worse. Moreover, the sand marching, which the area encounters, causes the cultivated area to be less than the potential one.

In 1962 the government started a project, that aimed to stop the marching of the sands, by planting assorted trees(5 million during the 1970s), erecting sand fences, altering dune shapes, and coating the sand with oil.

In 1967 work started on the irrigation and drainage system. The aim of this project was to overcome the problems caused by the traditional irrigation system through substituting it with modern system; beside building a drainage system to discharge the used irrigation water so that it would not contaminate the water table. The project was completed in 1972, with a total cost of SR208 million. It is under the management of the Irrigation and Draining Authority(HIDA), which is an autonomous institution.

The length of the irrigation and drainage system is 900 miles of concrete canals. Another 1,000 miles of network roads were established throughout the project. The project serves 52,000 farms. It brought 12 thousands hectares under cultivation, in addition to the 8 thousands hectare which were under the traditional system.

### **4.4.2 INDUSTRIAL INVESTMENT**

In the view of the government, the industrial sector has

a prominent role to play in the growth and diversification of the economy. The industries in the country are of two types; hydrocarbon based industries and non-hydrocarbon industries. Because of the huge capital requirements of the hydrocarbon based industries, and its connection to the crude oil sector; most of these industries have been organised by the government. The other industries are run by the private sector. The hydrocarbon industries are under the auspices of SABIC.

#### **SABIC**

Saudi Basic Industries Corporation(SABIC), was established in 1976, under the authority of the Ministry of Industry and Electricity, as a Saudi joint stock company for the purpose of establishing basic industries which utilise and upgrade the Kingdom's natural resources, particularly natural gas and natural gas liquid. This includes petrochemical, fertilizer and other hydrocarbon-based industries, iron, steel and aluminium industries. It can also undertake any activities which are necessary for the achievement of its objectives. These activities include industrial, commercial, and financial endeavours.

SABIC's activities enjoy all the exemption and privileges granted to national industries such as interest-free loans, import duties exemption, raw materials and utilities subsidies.

The capital of SABIC is SR 10,000 million, divided into 10 million shares, totally paid by the government. The intention of the government is to sell 75 per cent of the shares to the public and retain the remaining 25 per cent. What has been sold to the public up to now is 30 per cent of the shares.

SABIC's projects are large-scale and capital intensive. Most of them are joint-ventures with a number of leading

multinational industrial corporations. The capital investment in first generation industrial projects amounts to approximately SR 38 billion, and the work force is around 7,000 employees; while for the second generation projects the capital is expected to exceed SR 16 billion.<sup>19</sup>

SABIC has established and developed up to now, fifteen industrial complexes in Aljubail, Yanbu, Dammam, and Jeddah. All these complexes have started the production. Of these complexes, ten are petrochemical complexes, three are for producing fertilizers, and two are for producing steel and iron (see Table 4.11 for more details). In addition to these projects, SABIC owns shares in four Gulf companies; namely, Bahrain Aluminium Smelter (ALBA) 20%, Bahrain-based Gulf Aluminium Rolling Mill (GARMCO) 20%, Bahrain-Based Gulf Petrochemical Industries Company (GPIC) 33%, and Bahrain-Saudi Aluminium Marketing Company (BALCO) 25%. In the field of marketing, SABIC owns two marketing companies, namely, SABIC Marketing Ltd., which is charged with the task of selling SABIC's products as well as other related industrial output, and SABIC Marketing Services Ltd., responsible for rendering a variety of marketing services such as shipment, transportation, and insurance, plus customer technical services.

#### JUBAIL AND YANBU INDUSTRIAL CITES

Jubail is a small marine village on the east coast with a small fishing port. Its population was 5000 inhabitants in the early 1970s. Yanbu is another small village of two parts, Yanbu Alnakal with a few farms, and Yanbu Albahr which is the port that had long been a point of entry for pilgrims travelling to or from Medina and on to Makkah.

In 1975, the Royal Commission for Jubail and Yanbu was

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<sup>19</sup> SABIC, "SABIC 1406H-1986 AD", p.9.



established for developing the infrastructure facilities necessary to transform these two cities into planned industrial complexes and associated urban communities. The infrastructure programmes include building airports, seaports, public utilities, transportation and communication networks, desalination plant, water cooling system, sites for primary, secondary, and supporting industries, hospitals, schools, etc. The infrastructure of the industrial cities of Jubail and Yanbu is established on a site covering 1,030 and 80 sq km, respectively. It is expected that by the year 2010, the two cities will accommodate 290,000, and 150,000 people respectively.

The infrastructure projects at the two industrial cities, Jubail and Yanbu, have been completed and they are now ready to accommodate new industrial investment. The industries to be located in the two cities are of three types; Petroleum-based and energy-intensive primary industries, secondary industries which depend on products of primary industries, and supporting and light industries which produce the products needed by other industries or projects.

While the secondary supporting and light industries are open investment opportunities for the private sector, the development of the primary industries in the twin cities is the responsibility of SABIC and PETROMIN. PETROMIN is sponsoring the oil refineries, lube oil plant, oil bulk storage facilities and the sulphur plant. SABIC sponsors all the other primary industrial enterprises. The vast majority of SABIC projects are located in the twin cities, Jubail and Yanbu. PETROMIN, also, has its big refineries in those two cities. The total projects which are in operation now in Jubail is 78 plants, and in Yanbu, the total is 29 plants.

In the field of training, there is one training center in each city which provides basic and advanced training in vocational skills. The capacity of each center is 1000

students. The Saudisation of the labour force in both cities is the objective of the Royal Commission, and the training centre was set to help achieve that objective.

#### 4.4.3 TRANSPORTATION AND COMMUNICATION

Transport and communication are a very important infrastructure for any economic development. In the case of Saudi Arabia, which has a vast land area, the provision of such infrastructure was a major priority in the development process in the country. Therefore the government has responded by establishing many agencies that have the responsibility of building an efficient transport and communication network.

Most of the work in this sector has been accomplished during the first three development plans which finished in 1985. This includes, roads and highways, railways, airports, seaports, post, telephone, telex, etc. The roads network in the country has increased from 8,440 km of paved road, and 3,500 km of agricultural roads, to 34,352 km and 66,500 km, respectively. The total expenditures on building these roads was SR 110 billion in 1988.<sup>20</sup>

The established airports in the country are 23 and three of them are international airports. They serve around 24 million passengers yearly, and are run by the Presidency of Civil Aviation, which is under the authority of the Ministry of Defence and Aviation.

The telephone lines in the Kingdom increased from 29,000 in 1970 to 1,500,000 lines in 1989.<sup>21</sup> The telephone services are under the control of the Ministry of Telephone, Post, and Telex.

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<sup>20</sup> Saudi Consulting House, 1990, p.169.

<sup>21</sup> MOP, "Fifth Development Plan 1990-1995", p. 9

Saudi Ports Authority is a government agency that has been established in 1976 for the purpose of developing the seaports facilities in the country. The Authority has succeeded in achieving its objectives during the last fifteen years. It now runs five main seaports, and five other secondary seaports. The total berths of the main seaports is around 129. The Authority now depends on its revenue to finance its expenditure, with a surplus revenue transferred to the government budget.

Public transportation in the country is dominated by three government organisations, namely: SAUDIA, SAGRO, and SAPTO. Saudi Arabian Airlines(SAUDIA), the national carrier, was established in 1945 to operate as a commercial enterprise within and outside the country. The domestic service is monopolised by SAUDIA and other airlines are not allowed to compete with it. The company provides its services to around 10 million passengers a year through 50 international and 23 domestic stations. Its fleet consists of 106 planes including Boeing 747-300, Airbus A-300, -600. Traistar, etc. SAUDIA enjoys free airport facilities in the country, and the expenses of building and operating these facilities are paid by the Ministry of Defence and National Aviation.

Saudi Arabian Government Railroads Organisation (SAGRO), provides rail services between Dammam, the seaport at the east coast, and Riyadh, The Capital, with one stop at Hofuf, the second city in the eastern province. This is the only railroads in the country with a length of 450 km. The primary role of the railroads is transporting imported goods from the Dammam port to Riyadh. After the completion of the dryport in Riyadh in 1981, the use of the railroads increased and SARGO responded by increasing the services from two to four trains daily. However, the Gulf problems have caused a slow down in the activities in Dammam seaport, and in turn in SAGRO'S activities.

Public passenger transport on roads is provided by the Saudi Arabian Public Transport Company(SAPTCO), which has been established in 1979, in addition to some private companies. Its local services cover more than 80 cities and villages, with around 1,112 buses of different sizes. Its inter-city passenger volumes in 1989 were 1.9 million, while intra-city volumes for the same year were 40 million passengers. The company has expanded its current services to include new lines between Saudi Arabia and some neighbouring countries.

#### 4.5 The Extent of Government Economic Participation

The availability of adequate financial resources in the hands of the government, due to the fact that oil wealth accrues exclusively to it; has enabled the public sector, which encompasses all government activities in Saudi Arabia, to play a dominant role in accelerating welfare oriented development of the Saudi economy. Government efforts to overcome centuries of inertia and underdevelopment through re-injection of oil wealth in the country's economy have taken many forms, such as those which have been mentioned previously.

The aim of this section is to trace the extent of government participation in the economy. In order to do so, we will review some statistical data that reveal the contribution and size of the public sector in the economy. The direct weight of that sector is best seen in its contribution to the Gross Domestic Product (GDP).

Table 4.13 shows the share of the public sector in GDP in current prices for the period 1962-1987. It is useful to divide that period into three sub-periods to emphasise the role which some factors have played in shaping the structure of each sub-period. The first period includes the years from 1962 to 1972. This period was characterised by stable oil

prices and production. The second period which is from 1973 to 1981 witnessed a sharp rise in oil prices in late 1973, and again in 1980. The period from 1981 to 1987, the third period, was characterised by a sharp decline in oil prices and production.

A general look at the data indicates the dominant role of the public sector in the economy for the entire period (1962-87). Its share in the nominal GDP has been more than 60.0 per cent for most years and averaged to 71.1 per cent for the entire period. In real terms, the public sector's real share in total GDP was more than 65.0 per cent for most of the time, and averaged to 73.5 per cent for the entire period of 1969-1987, as is shown by Table 4.14.

During the period 1962-1972, the nominal GDP was modest in size, however, its value increased from SR 8,604 million in 1962, to reach an amount of SR 33,779 million in 1972. The share of the public sector averaged to 66.6 per cent of the total GDP for the entire period.

In the second period, the nominal GDP of 1973, which was SR 66,938, was double that of 1972, and reached its peak in 1981 with an amount of SR 536,427 million. The public sector's contribution to GDP increased from SR 26,664 million (78.9 per cent of total GDP) in 1972, to SR 57,907 million (86.8 per cent of total GDP) in 1973, and reached a peak of SR 435,470 million (81.2 per cent of total GDP) in 1981. The average share of the public sector in nominal GDP was 82.2 per cent for the second period, and in real terms the share averaged to 83.2 per cent of the real GDP (at 1984 prices).

Although the third period has witnessed a declining share of the public sector in total nominal GDP, because of the decline in oil sector production as a result of the drop in oil prices; its share still remains above 53.8 per cent. Public sector production dropped from SR 342,796 million (74.7 per cent of nominal GDP) in 1982 to an amount of SR 144,160

million (53.8 per cent of nominal GDP) in 1986, and started to increase in 1987 where it was SR 150,274 million (55.2 per cent of nominal GDP). In general, the average share of the public sector in nominal GDP was 61.0 per cent for the period of 1982-87, and in real terms was 64.2 per cent.

It can be concluded that the public sector has been the prime force behind economic growth in Saudi Arabia, and constitutes a major component of its GDP. To trace the magnitude of public sector investment in the economy, we look at its contribution to the gross domestic fixed capital formation (GDFCF). "Gross domestic fixed capital formation represents outlays that are made to increase the size of the fixed capital assets of the economy".<sup>22</sup>

As shown in Table 4.15, the country's nominal gross domestic fixed capital formation rose from SR 2.7 billion in 1969 to SR 121.0 billion in 1982 as the pace of development accelerated over this period. In real terms, the total GDFCF rose from SR 14.5 billion in 1969 to SR 121.1 billion in 1981, as Table 4.16 indicates.

The public sector contribution to the total nominal GDFCF rose from SR 1.6 billion (50.3 per cent of the total) in 1969, to SR 86.0 billion (71.4 per cent of the total) in 1981, and started to decline afterward till it reached an amount of SR 6.43 billion (53.5 per cent of the total) in 1987 due to the completion of most of the infrastructure projects. The average share of public sector contribution was 65.0 per cent for the entire period of 1969-87. Of the real GDFCF, the public sector contribution rose from SR 9.0 billion (68.6 per cent of the total) in 1969, to SR 86.2 billion (71.2 per cent of the total) in 1986, with an average rate of 72.6 per cent for the entire period of 1969-87.

Again, capital formation in Saudi Arabia has been

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<sup>22</sup> MOP, "Achievements of Development Plans", p.34

affected to a great extent by the public sector investment. Public sector contribution to the gross domestic fixed capital formation has not been less than 60.0 per cent of the total GDFCF for most of the period from 1969 to 1987.

This chapter has provided us with a full picture of government investment in the Saudi Arabian economy. It is very clear that the government, during the last three decades or so, has been the main force behind economic development in Saudi Arabia. That is very normal, and expected, for a government like the one of Saudi Arabia, backed by enough financial resources which made these achievements possible.

**TABLE 4.1**  
**OIL PRODUCTION**  
**AND REVENUES 1950-1987**

YEAR	OIL PRODUCTION (MILLION BARRELS PER DAY)	OIL REVENUES (US \$ MILLION)
1950	0.55	57
1960	1.32	334
1970	3.80	1,21
1971	4.77	1,885
1973	7.60	4,340
1974	8.48	22,574
1975	7.07	25,676
1976	8.75	30,754
1977	9.20	36,540
1978	8.30	32,233
1979	9.53	48,435
1980	9.90	84,466
1981	9.81	101,813
1982	6.48	70,478
1983	4.54	37,351
1984	4.08	31,470
1985	3.17	18,322
1986	4.78	13,554
1987	4.12	17,489

**Sources:**

- 1- Ministry of Planning, "Third Development Plan 1980-1985", p. 11.
- 2- Saudi Arabian Monetary Agency(SAMA), Research and Statistical Department, " Statistical Summary", 1989, pp.102-103.



**TABLE 4.2**  
**FIRST PLAN OUTLAY (1970/71-1974/1975)**  
**(SR MILLIONS)**

SECTORS	RECUR. EXPEND.	% OF TOTAL	PROJ. EXPEND.	% OF TOTAL	TOTAL	% OF TOTAL
Public Admin.	6794.6	29.6	922.8	5.0	7717.4	18.6
Defence	3980.0	17.4	5575.0	30.3	9555.0	23.1
Soc. Services	77631.1	33.9	1535.7	3.4	9298.8	22.5
Development & public utilit	1246.9	5.4	3325.4	18.1	4572.3	11.1
Transport & communicat.	1767.3	7.7	5709.2	31.1	7476.5	18.1
Industry	321.8	1.4	776.7	4.2	1098.5	2.7
Agriculture	973.8	4.2	493.9	2.7	1467.7	3.6
Trade and Se- rvices	83.5	0.4	43.8	0.2	129.3	0.3
<b>Total</b>	<b>22931.0</b>	<b>100</b>	<b>18382.5</b>	<b>100</b>	<b>41314</b>	<b>100</b>

Source : Ministry of Planning, " First Development Plan  
1970-1975", p.43

**TABLE 4.3**  
**FIRST PLAN ACTUAL GOVERNMENT REVENUE**  
**AND EXPENDITURE VERSUS PROJECTION**  
**(BILLION RIYALS)**

TYPE	70/71	71/72	72/73	73/74	74/75	TOTAL	PROJ.
GOVERNMENT REVENUES	7.9	11.1	15.4	44.8	101.4	180.6	33.8
GOVERNMENT EXPENDITURES:	6.4	8.8	10.1	19.4	42.2	86.5	41.3
RECURRENT	4.1	4.9	5.9	9.2	27.2	51.3	22.9
PROJECTS	2.3	3.4	4.9	10.3	15.0	35.2	18.4
GDP (annual growth rate)							
curr. prices	31.6	23.3	48.9	150.4	26.4	56.12	37.4
const. prices	14.2	15.5	20.0	14.9	1.5	13.2	9.8

Source: SAMA, Annual Report, 1978, table 4, p.46

**TABLE 4.4**  
**SECOND DEVELOPMENT**  
**PLAN OUTLAYS (BILLION RIYALS)**

SECTOR	RECURRENT	PROJECTS	TOTAL
Economic Resource devel.	4.5	87.6	92.1
Human Resources Develop.	43.9	36.2	80.1
Social Development	18.1	15.1	33.2
Physical Infrastructure Development	12.5	100.4	112.9
Sub Total Development	79.0	239.3	318.3
Administration & Defence	32.7	83.7	116.4
External assistance, Emergency funds, Food Subsidies, & General Reserve.	54.9	8.6	63.5
Total	166.6	331.6	498.2

Source : SAMA, Annual Report, 1975. p. 53.

**TABLE 4.5**  
**ANNUAL GROWTH RATE DURING THE SECOND PLAN**  
**(Constant price of 1980, SR Billion)**

Sectors	1975	1980	Planned	Actual
<u>Productive Sectors</u>	26897.7	57854.6	13.0	16.6
Agriculture	2505.8	3259.4	4.0	5.4
Mining	779.1	1497.5	15.0	17.1
Manufacturing	3303.4	6753.3	14.0	15.4
Utilities	117.5	350.1	15.0	24.4
Construction	20291.9	45994.3	15.0	17.7
<u>Services Sectors</u>	39825.4	77112.5	13.3	14.1
Trade	6439.1	17447.1	15.0	22.1
Transport	7756.1	20227.5	15.0	21.1
Finance	7137.8	13144.2	9.7	13.0
Other services	2741.3	5257.3	14.0	13.9
Government	15751.1	21036.4	12.9	6.0
Total non-oil GDP	66723.1	134967.1	13.3	15.1
Oil sector	176076.3	222374.4	9.7	4.8
Gross Domestic Pro.	242799.4	357341.5	10.0	8.0

Source : Ministry of Planning, " Third Development Plan 1980-1985 ", p. 49.

**TABLE 4.6**  
**TOTAL EXPENDITURE OF THE THIRD PLAN**

SECTOR	Amount	% of Total
Economic resource development	261.8	33.4
Human resource development	129.6	16.6
Social development	61.2	7.8
Physical infrastructure development	249.1	31.8
Sub total development	701.7	89.4
Administration, subsidies, and contingency reserve	81.0	10.6
<b>TOTAL</b>	<b>782.7</b>	<b>100.0</b>

Source : Ministry of Planning, " Third Development Plan 1980-1985 ", p. 88.

**TABLE 4.7**  
**GOVERNMENT REVENUE AND EXPENDITURE**  
**DURING THE THIRD PLAN**  
**(SR Billion)**

TYPE	1980/81	1981/82	1982/83	1983/84	1984/85	TOTAL
<b>REVENUES</b>						
Oil	319.3	328.6	186.0	128.0	118.0	1,079.9
Other	28.9	39.4	60.2	62.8	57.0	248.3
<b>Total</b>	<b>348.2</b>	<b>368.0</b>	<b>246.2</b>	<b>190.8</b>	<b>175.0</b>	<b>1,328.2</b>
<b>EXPENDI- TURES:</b>						
Project	123.1	140.7	125.7	112.7	100.0	602.2
Other	113.5	144.0	119.2	110.5	120.0	607.2
<b>Total</b>	<b>236.6</b>	<b>284.7</b>	<b>244.9</b>	<b>223.2</b>	<b>220.0</b>	<b>1,209.4</b>

Source : Ministry of Planning, " Fourth Development Plan 1985-1990 ", p. 25.

**TABLE 4.8**  
**GROSS DOMESTIC PRODUCT BY SECTOR**  
**IN THE THIRD PLAN**

SECTORS	Value (current prices)		Average Annual Growth (const prices) <sup>1</sup>	
	1979/80	1984/85	Planned	Actual
	SR million		Per cent	
Producing Sectors				
Agriculture	4648.3	10575.3	5.4	8.7
Mining	1360.7	1594.5	9.8	5.7
Manufacturing	6466.5	13533.6	18.8	14.1
Utilities	270.8	(-1486.9) <sup>2</sup>	29.5	24.0
Construction	43107.6	45541.4	(-2.5)	(-1.4)
Services Sector				
Trade	17759.6	27591.5	8.4	8.8
Transport	15748.6	23430.6	12.9 <sup>3</sup>	7.1
Real Estate	10962.3	12394.9	7.3	2.1
Finance	4574.5	16695.6		13.1
Other services	5260.4	11057.1	3.0	7.9
Government	23383.8	54700.1	7.2	5.8
Sub-Total				
Non-oil sectors	133543.2	215627.7	6.2	5.1
Oil sectors	250046.6	142488.5	1.4	(-14.6)
G.D.P	383589.6	358116.2	3.2	(-5.8)

1 based on 1979/80 prices.

2 Negative value added in 1984/85 reflects subsidized producer prices.

3 Planned growth for real estate and financial services combined.

4 Less imputed bank service charges.

Source : Ministry of Planning, " Fourth Development Plan 1985-1990 ", p.15.

**TABLE 4.9**  
**ALLOCATION OF DEVELOPMENT EXPENDITURES**  
**IN THE FOURTH PLAN<sup>1</sup>**

Sectors	Distribution		Actual Expenditure	
	Plan (%)	Actual <sup>2</sup> (%)	Value (SR Billion)	% of Plan
Economic Resources	26.1	19.9	64.5	49.3
Human Resources	27.1	35.3	114.2	84.4
Health and Social Development	17.9	18.2	59.1	65.9
Transportation and Communication	15.4	15.6	50.6	65.8
Municipalities and Housing	13.5	11.0	35.7	53.0
Total	100.0	100.0	324.1	64.8

1 Excludes government-owned specialised credit institutions, i.e. Real Estate Development Fund, Public Investment Fund, and Saudi Industrial Development Fund, and the specialised credit schemes.

2 Estimates for the two years of the plan.

Source : Ministry of Planning, " Fifth Development Plan ", p.25.

**TABLE 4.10**  
**GOVERNMENT (CIVILIAN) EXPENDITURES**  
**IN THE FIFTH PLAN (IN CURRENT PRICES)**

SECTORS	SR BILLION	PER CENT
<u>Development Agencies</u>		
Economic resources	56.5	11.3
Human resources	139.9	28.1
Health and Social Services	63.9	13.0
Transportation and Communication	52.6	10.5
Municipalities and Housing	44.8	9.0
Sub-total	357.7	71.9
<u>Other Government Agencies</u>		
Religious & juridical	13.4	2.7
Other Agencies	17.7	3.6
Sub-total	31.1	6.3
Other Expenditures — { General items	88.4	17.7
Subsidies	20.4	4.1
Sub-total	108.8	21.8
Total Civilian Expenditures	497.6	100.0

Source : MOP, " Fifth Development Plan", p. 97.

**TABLE 4.11**  
**SABIC INDUSTRIES AND AFFILIATES**

Project	Foreign Partner	Products	Annual* Capacity
<b>Metal :</b>			
1-Saudi Iron & steel Co.(HADEED)	DEG, West Germany(WG)	Steel Rods & Bars	800
2-Jeddah Steel Rolling Mill Co.(SULB)	Korf Handel, WG	Steel Rods & Bars	140
<b>Fertilisers :</b>			
3-Saudi Arabian Fertilizer Co.(SAFCO)	None	Urea	330
		Sulphuric Acid	100
		Melamine	20
4-Al-Jubail Fertilizer Co. (SAMAD)	Taiwan Fertilizer Co.	Urea	500
<b>Petrochemicals :</b>			
5-National Chemical Fertilizer Co.(IBN BAYTAR)	None	Ammonia	500
6-Saudi Methanol Co. (AR-RAZI)	Mitsubishi	Chemical grade Methanol	600
7-National Methanol Co. (IBN SINA)	Celanese & Texas East., USA	Chemical grade Methanol	700
8-Saudi Petrochemical Co.(SADAF)	Shell, USA	Ethylene-(Eth.)	656
		Eth. Dichloride	454
		Ethanol	281
		Styrene	295
		Caustic Soda	377
9-Al-Jubail Petrochemical Co.(KEMYA)	EXXON, USA	LLD Polyethylene	270

Table continued ---->

**Table 4.11**  
**SABIC Industries and Affiliates**

Continued

Project	Foreign Partner	Products	Annual Capacity *
10-Saudi Yanbu Petrochemical Co.(YANPET)	None	Ethylene	455
		Eth. glycol	220
		LLDPolyethylene	205
		HD Polyethylene.	91
11-Arabian Petrochemical Co.(PETROKEMYA)		Ethylene	500
	Mitsubishi	Polystyrene	100
12-Eastern Petrochemical Co.(SHARQ)		Butent-1	50
		LLD Polyethylene	130
		Ethylene Glycol	300
<u>Supporting Ind. :</u>			
13-National Industrial Gases Co.(GAS)	None	Nitrogen	146
		Oxygen	438
<u>Intermediate Ind. :</u>			
14-National Plastic Co. (IBN HAYYAN)	APICORP; NES-	Vinyl Chloride Monomer	330
		Polyvinyl Chlo.	200
15-Saudi European Petrochemical Co.(INB ZHR)		Methyl tertiary butyl-ether (MTBE)	500
	TE OY,Finland & ENICHEM CO. Italy.		

Source: SABIC 1406 H - 1986 AD, pp.24-25.  
 \*( In 1000 Tons). LLD = Linear Low Density.  
 HD = High Density



**TABLE 4.13**  
**THE CONTRIBUTION OF THE PUBLIC SECTOR IN TOTAL**  
**GROSS DOMESTIC PRODUCTS IN CURRENT PRICES**  
**(SR MILLION)**

YEAR	TGDP	PSGDP	PSGDP % IN TGDP
1962	8604	5496	63.9
1963	9205	5742	62.4
1964	10258	6382	62.2
1965	11776	7463	63.4
1966	13143	8257	62.8
1967	14657	9243	63.0
1968	15975	9870	61.8
1969	16612	11248	67.9
1970	19540	13871	71.0
1971	25250	19053	75.4
1972	33779	26664	78.9
1973	66938	57907	86.5
1974	120397	106205	88.2
1975	155534	131735	84.7
1976	190603	155006	81.3
1977	221396	173962	78.6
1978	244415	185880	76.0
1979	339147	267796	79.0
1980	438345	397310	82.2
1981	536427	435470	81.2
1982	459007	342796	74.7
1983	392139	264175	67.4
1984	347425	217427	62.3
1985	310032	179051	57.7
1986	267846	144160	53.8
1987	272041	150275	55.2

TGDP = Total Gross Domestic product.

PSGDP= Private Sector GDP

**SOURCE:**

- 1- Ministry of Planning, " Achievements of The Development Plans (1970-1989), 1990, p.210.
- 2- Saudi Arabian Monetary Agency, " Annual Report", selected issues.

**TABLE 4.14**  
**THE CONTRIBUTION OF THE PUBLIC SECTOR IN TOTAL**  
**GROSS DOMESTIC PRODUCTS AT 1984 CONSTANT PRICES**  
**(SR MILLION)**

YEAR	TGDP	PSGDP	PSGDP % IN TGDP
1969	157,475	126,922	80.6
1970	178,177	147,369	82.7
1971	209,799	178,837	85.2
1972	253,738	219,753	86.6
1973	302,265	263,846	87.3
1974	326,849	284,314	87.0
1975	336,621	288,502	85.7
1976	373,747	316,243	84.6
1977	403,262	336,026	83.3
1978	418,785	343,227	82.0
1979	448,849	364,135	81.1
1980	483,007	387,526	79.7
1981	485,915	378,362	78.0
1982	414,852	294,630	71.0
1983	374,613	245,218	65.5
1984	347,425	217,427	62.3
1985	321,157	189,728	59.1
1986	360,493	233,699	64.8
1987	343,366	215,525	62.8

**SOURCE:**

1- Ministry of Planning, " Achievements of The  
Development Plans (1970-1989), 1990, p.213.

**TABLE 4.15**  
**THE CONTRIBUTION OF THE PUBLIC SECTOR**  
**IN TOTAL GROSS DOMESTIC FIXED CAPITAL**  
**FORMATION IN CURRENT PRICES**

YEAR	TGDFCF	PSGDFCF	PSGDFCF % IN TGDFCF
1969	2,697	1,600	59.3
1970	2,792	1,671	59.8
1971	3,198	1,960	61.3
1972	4,451	2,963	66.7
1973	7,045	5,029	71.4
1974	12,958	8,534	66.0
1975	26,053	17,230	66.1
1976	44,001	29,899	67.9
1977	61,564	43,503	70.6
1978	74,606	55,096	73.8
1979	91,576	69,240	75.6
1980	106,237	78,718	74.1
1981	120,427	86,013	71.4
1982	121,000	85,313	70.5
1983	109,898	69,405	63.1
1984	96,492	55,868	58.0
1985	76,492	41,077	53.8
1986	66,144	34,111	51.6
1987	63,783	34,164	53.5

TGDFCF = Total Gross Domestic Fixed Capital Formation.

PSGDFCF= Private Gross Domestic Fixed Capital Formation.

SOURCE:

1- Ministry of Planning, " Achievements of The Development  
Plans (1970-1989), 1990, p.223.

**TABLE 4.16**  
**THE CONTRIBUTION OF THE PUBLIC SECTOR**  
**IN TOTAL GROSS DOMESTIC FIXED CAPITAL**  
**FORMATION AT 1984 CONSTANT PRICES (SR MILLION)**

YEAR	TGDP	PSGDP	PSGDP % IN TGDP
1969	14,472	9,931	68.6
1970	14,163	9,733	68.7
1971	15,258	10,579	69.3
1972	18,978	13,781	72.6
1973	26,502	20,260	76.4
1974	33,333	23,986	72.0
1975	43,526	29,480	67.7
1976	62,973	44,152	70.1
1977	79,360	57,462	72.4
1978	82,863	61,437	74.1
1979	93,527	70,552	75.4
1980	108,527	80,125	73.8
1981	121,154	86,227	71.2
1982	120,283	84,418	70.2
1983	108,891	68,342	62.7
1984	96,492	55,868	58.0
1985	73,584	39,608	53.8
1986	63,704	32,853	52.0
1987	62,422	33,435	53.6

**SOURCE:**

1- Ministry of Planning, " Achievements of The  
Development Plans (1970-1989), 1990, p.224.

## CHAPTER FIVE

### GOVERNMENT INCENTIVE POLICIES FOR PRIVATE SECTOR IN SAUDI ARABIA

#### 5.1 Introduction

Although the public sector in Saudi Arabia dominates overall economic activity, a fact which is the natural outcome of the enormous oil revenues accruing to the government, the private sector still operates under the conditions of a free market and relatively little government interference. The government always repeats its belief in a free economy and each development plan has emphasized the government's commitment to behave in accordance with that principal.

Another very important issue which the government always emphasises, and urges the private sector to help in achieving, is the diversification of the investment in the country to reduce the overwhelming dependency of the economy on one single commodity (oil) as a main source of income. The investment opportunities in the country are very wide, and a significant participation of the private sector is very important to assist in developing the country.

The government's efforts to attract private investors to invest in the local economy include, among other things, the provision of many incentive policies such as lending facilities, different types of subsidies, protection policy, etc. These programmes, according to the Minister of Finance and National Economy, are intended to "strengthen the free

economic system and deepen its roots in the country; limit the effects of worldwide inflation by increasing domestically produced commodities and services; maximising the use of available resources, achieve high growth rates and increase per capita income; augment economic returns and raise profit rates; encourage investment of Saudi capital; diversify local production and expand the agricultural and industrial base; and distribute wealth to the greatest number of people".<sup>1</sup> The aim of this chapter is to review all the incentives which the government provides for the private sector in Saudi Arabia in respect of their types, objectives, agencies which provide them, factors affecting their existence or termination, and other important issues.

## 5.2 Agricultural Incentives

It is no surprise that the agricultural sector in Saudi Arabia has received high priority in government development plans, as agriculture plays a vital role in Saudi Arabia for economic as well as social reasons. Agriculture possesses considerable potential for development. In order to develop that sector, the government has extended many development programmes such as, building dams and agricultural roads; electrical facilities for rural areas; agricultural education and training; agricultural research centres; input and output subsidies; land grants; and lending facilities.

The Ministry of Agriculture and Water (MOAW) started dam construction in 1956, and by 1988 the total number of constructed dams reached one hundred and eighty. The total storage capacity of these dams amount to 448 million cubic meters. At present eight dams are under construction, the most important of which is the Bisha dam which will be the

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<sup>1</sup> Saudi Business, April 16, 1983, pp 14-15.

largest dam in the kingdom. It is a concrete type with a total height of 113 meters, total length of 507 meters, water storage capacity of 325 million cubic meters, and a total cost of SR 229.8 million. The total length of agricultural roads, that have been completed by the end of 1986, reached 59,226 kilometres.<sup>2</sup>

In the field of education and training, there are three agricultural colleges in Riyadh, Qassim, and Hofuf, in addition to the Technical Agricultural School at Buraydah. Moreover, the MAW and SAAB (Saudi Arabian Agricultural Bank) provide educational, training, and services programmes through over 93 extension offices and 13 agricultural research stations.<sup>3</sup>

We now review the lending facilities and subsidies provided by the government to the farmers, firms, societies, and projects within the agricultural sector.

#### 5.2.1 SAUDI ARABIAN AGRICULTURAL BANK (SAAB)

The Saudi Arabian government realised early the need to create credit institutions that would extend medium and long-term credit for agricultural concerns. Therefore, in 1962 the government established the Saudi Arabian Agricultural Bank (SAAB) as a first specialised credit institution in the country. However, it was not until 1964 when SAAB started its lending facilities.

The capital of the bank was SR 10 million in 1964, and has increased year after year, due to the expansion in its activities, until it reached an amount of SR 15,816 million in

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<sup>2</sup> SAMA, "Annual Report ", 1987, pp 86-100.  
Ministry of Agriculture and Water (MOAW), 1989, iss. no 4, pp 50-52.

<sup>3</sup> MAW, 1984, pp 88-89.

1987. The bank is located in Riyadh with 70 branches and offices around the country.<sup>4</sup>

The main purpose of the bank is to provide interest-free loans and subsidies to farmers and farming companies in order to promote the development of the agricultural sector in Saudi Arabia including, cultivation, raising, storing and marketing of crops, livestock, poultry, fishing and forest products; land reclamation; provision of water facilities needed to serve the previous goals.

#### 5.2.1.1 LENDING POLICY<sup>5</sup>

The loans provided by the bank are of four types, short-term loans, medium-term loans, long-term loans, and loans to agricultural projects; and could be given either in cash or kind. All the loans are free of interest and the amount of each loan, or the total amount of loans occurring on a farmer, may not exceed SR 20 million. Moreover, each loan must be guaranteed by one or more of the following:

- mortgages;
- bank guarantee;
- personal guarantee; or
- golds or jewellery.

Short-term loans are provided to farmers to finance their purchase of insecticides, seeds, fertilizers, fuel, poultry and livestock feed, and broiler chicks, in addition to the expenses of tilling activities, wages, transport, installation and maintenance. The period of such loans may not exceed one

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<sup>4</sup> Saudi Consulting House, 1990, p 147.

<sup>5</sup> Information here and on "The Subsidies", are obtained from :  
SAAB, " SAAB In Twenty Years", (undated).  
----, 1987.  
----, Annual Reports.  
----, 1990.  
MAW, 1984.  
MOP, " Achievements of Development Plans ", 1990.



year.

Medium-term loans are given for a period not exceeding ten years. These loans are extended to provide agricultural machinery, pumps and irrigation equipment, well drilling, wind breaks; land reclamation, construction and repair of farm buildings, grain silos, fishing boats and gears, bee-hives and bee-keeping equipment, etc.

Long-term loans are extended for the purpose of reclamation and development of vast land. The period of these loans is twenty five years. Until now, the bank has not yet extended such loans.

Loans to agricultural projects are the only loans which have a grace period (one to two years). Their period is ten years and are provided for the following agricultural projects:

- Dairy production projects,
- Agricultural greenhouses projects,
- Sheep raising and flattening,
- Poultry projects,
- Wheat and other grain projects,
- Animal feed projects,
- Bee-keeping projects, and
- Fish farming projects.

The administration procedures for the normal loans include:

- filling out an application;
- providing an ownership or leasing certificates for the land;
- obtaining a permission for well drilling with full description of the drilling operation; or
- providing a certificate that shows the level of the existing water, its salinity grade, irrigation and draining system, and other related information;
- and, Personal identification for individuals, or

registration certificate for the firms.

For agricultural projects, the procedures include the above requirements in addition to;

- a feasibility study for the project;
- and, a permission from MOAW to establish the project;

The approval of the loan depends on the Bank's evaluation study of the application, which includes a field investigation of the farm or the project.

The rate of financing, for all these loans, is dependent on the amount of the loans or other obligations occurring on a farmer. If the loan's value, after deducting the amount of the subsidy, or other obligations occurring on the farmer is equal or less than SR 3 million, then the rate of financing is 75% of total costs of the project (the rate was 100% if the amount is less than SR 0.5 million, and 80% if its more than SR 0.5 million and less than SR 3 million, prior to 1987). If they are more than SR 3 million, then the rate of financing for the first three million will be 75% of the total cost, and 50% for the additional amounts ( the rate was 60% of the total costs, if the loan or other obligations occurring on the farmers are more than SR 3 million prior to 1987).

The costs here refer to the total cost of the materials (such as agricultural machinery, seeds, fertiliser, etc.) which the farmer is eligible to receive a loan for. The regulations of the bank state that the type, extent, and amount of any such material depends on the size, the nature, the location, etc. of the project or the farm. Therefore, if a farmer needs some equipments which he is not eligible to receive a loan for, then, their cost (the equipment) will be deducted from the total cost and the financing rate will be related to the new total cost. For example, if the farm's area is between 5 to 10 hectares, then the farmer is eligible to have a ploughing machine of 100 horse power or less, and the farmer pays the difference if he wants to buy one with

more power. Moreover, with a farm of such size, he is not eligible to have a harvester.

Payments procedures depend on the type and value of the loan. If the loan is in cash, such as in the cases of well drilling expenses, purchasing of seeds, purchasing of fertilizers, etc.; then the farmer will receive the entire amount of the loan, if its value is less than SR 25,000, at the time of signing the contract.

If the value of the loan is SR 50,000 or less, then the farmer receives SR 25,000 in advance, and the remaining amount after finishing 50% of the work.

When the loan is SR 100,000 or less, then the first SR 25,000 is paid in advance, another SR 25,000 is due after accomplishing 50% of the work, and the rest of the amount will be after finishing the whole work.

Loans of SR 0.5 million or less will be paid in three equal instalments , after finishing 30% of the work, after finishing 70% of the work, and after finishing the complete work.

Loans of more than SR 0.5 million are divided into five equal payments; 20% of the loan is paid when the farmer finishes 20% of the work; the second 20% is after completing 40% of the work; the third is after completing 60% of the work; the fourth payment is after completing 80% of the work; and the last 20% is after accomplishing the entire work.

The payment procedures of loans for agricultural projects (the fourth type of loans) are the same as the procedures for the loans over SR 0.5 million.

In the case of loans which are provided in kind such as engines, pumps and irrigation equipments, tractors, dairy equipments, farming machinery, and ploughing and levelling; the payment is through a cheque payable to the dealer of these commodities.

Lending operations, as we said earlier, started in 1964,

two years after the establishing date. The values of the loans, during that year, reached an amount of SR 4.5 million for a total number of 645 loans, as it can be seen from Table 5.1. The medium-term loans composed 98.8 per cent of that total amount, or SR 4.49 million.

The loans have increased remarkably, in term of both numbers and values, after 1974 due to the increase in oil revenues. Compared with 1964, the number of loans in 1974 increased by 2,419.5 per cent to reach a total number of 16,251 loans, while the loans value increased by 3,133.3 per cent to reach an amount of SR 145.5 million.

The loans number and values continued to increase in the following years and reached its highest point in 1982 when the number of loans was 38,886 and the value was SR 4.2 billion, which is 933 times more than the amount credited in the first year. This increment is attributed mainly to two reasons, the increases in oil revenues during these years on one hand; and the expansion in agricultural projects, particularly wheat projects, in response to the generous government wheat subsidies initiated in 1978, on the other hand.

The effect of the change in oil revenues on the amount of loans extended by SAAB, can be seen very clearly when we compare the years which witnessed the high oil revenues, starting in 1974, with the other years. Moreover, the government commitment to buy the wheat produced from the farmers at high prices, have made many farmers to produce wheat in favour of other products and hence the demand for agricultural loans increased. The total wheat crop area in the Kingdom in 1988 is estimated at 720 thousand hecatare, while the total crop area in the Kingdom for the same year was 1.160 million, which indicates the extent of wheat production.<sup>6</sup>

In 1989/1990, SAAB disbursed 4,142 agricultural loans with total amount of SR 854.3 million, as Table 5.2 shows.

According to the Annual Report of the Bank, the loans of SR 400 thousand or less form 92.3 per cent of the total loans, while the remaining 7.7 per cent (317 loans) has a value over SR 400 thousand and their total value was 50 per cent of the total extended loans during 1989/1990.<sup>7</sup> That means that the big farmers gained the lion's share of the loans since they have the advantage of having big plots.

Table 5.1 shows the general credit movement of the Agricultural Bank from 1964 to 1990. The total number of the loans was 345,789 loans, with total amount of SR 23,955 million. During the first ten years 1964-73, the Bank extended loans amounting to SR 158.8 million, representing 0.007 per cent of the total extended loans. From 1974 to 1984, another SR 18,775 million were distributed, representing 79 per cent of the total. The remaining 21 per cent, or SR 5,020 million were extended during the period 1985-89. So, it is clear that the large amount of loans was extended during the era of high oil revenues, 1974-1984.

Medium-term loans constituted the major share of loans for the entire period 1964-1989. Their value was 23.7 billion which is 98.8 per cent of the total. Medium-term loans are extended to provide engines, pumps, irrigation equipment, agricultural machinery, grain silos, etc., which means that most of the loans were offered to purchase agricultural capital goods.

Concerning the composition of agricultural credit during the period 1964-1989<sup>8</sup>, agricultural projects came first accruing SR 6 billion, or 25.2 per cent of the total loans. In second was well drilling achieving 19.7 per cent, or SR 5

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<sup>6</sup> MAW, 1990.

<sup>7</sup> SAAB, "Twenty Sixth Annual Report", p.22.

<sup>8</sup> SAAB, " Annual Report", different issues.

billion. Irrigation equipment accrued 16.2 per cent, agricultural machinery 14.5 per cent, and engines and pumps accrued 13.1 per cent of the total loans extended. So, the loans extended to purchase irrigation equipment, well drilling, engines and pumps, totalled SR 11.8 billion, or 49 per cent of the total. The dependence of agriculture in Saudi Arabia on underground water is the main reason for this large share of loans devoted for these purposes.

The loans distributed by the branches and offices of the Bank from 1964 to 1989, show that the central region, represented by Riyadh, Buraidah, and Al-Kharj branches; accrued SR 13 billion, or 55 per cent of total loans extended. Second comes the Northern region, represented by Hail, Jowf, and Tabouk branches, which accrued SR 4 billion, or 17 per cent. Western region's share was 14 per cent, or SR 3.3 billion, and comes third.<sup>9</sup>

Table 5.3 shows that the number of agricultural projects financed by the Bank until 22-7-1990 reached 1,623 operating projects, and 307 under-construction projects. Again, the Central Region had the major share with a total number of 871 operating projects and 139 under-construction projects, or more than 52 per cent of the total. Next is the Northern Region which had 340 operating projects and 111 under-construction projects, or 23.4 per cent. Eastern Region comes third with 228 operating projects and 23 under-construction projects, or 13 per cent of the total number of projects financed by SAAB.

Regarding the projects activities, Table 5.3 shows that there were 674, and 244 operating and under-construction projects, respectively, produce wheat, wheat+forage, and Forage+fruits. Poultry projects were 599 and 27 operating

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<sup>9</sup> SAAB, "Twenty Sixth Annual Report", 1990, pp 36-38.  
SAAB, "Annual Report", Different issues.

projects and under-construction projects, respectively. Additionally, there were 139 and 131 livestock raising and greenhouses projects respectively. More specifically, wheat projects were 105 operating and 7 under-construction, wheat+forage projects were 388 operating and 29 under-construction, forage projects were 65 operating and 47 under-construction, forage+fruits operating projects were 101 plus 152 were under-construction, and 7 fruits projects were operating while 9 others were under-construction.<sup>10</sup>

Loans collection has a significant economic impact as it affects the period of turnover allocated for agricultural loans. The more loans are collected at their date of maturity, the more beneficial the policy becomes. The decline in oil revenue in the 1980s forced the Bank to depend, more than before, on its financial resources to ease its lending operation, rather than to expect government financial support. The general ratio of loans collection from 1964 to 1989/1990 was 75.7 per cent. The total amount receivable from the starting date of the Bank in 1964, was SR 13,243 million, and by 1989/90 SR 10,028 million was received.<sup>11</sup> The collection rate fluctuated during the period 1964-1985 from as high as 89 per cent in 1965, to as low as 55.8 per cent in 1981. From 1986, the published data of the collection rates were different from those published previously because of the change in the estimation method. Therefore, the data is not reliable and does not reflect reality. For instance, the collection rate in 1981 was 55.8 per cent according to the SAAB's Annual Report of that year. Yet, in the 1989/90 Annual Report it was 86 per cent.

Many factors affect the farmer's ability to repay the

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<sup>10</sup> SAAB, 1990, p 2.

<sup>11</sup> SAAB, 1990, p 25.

loans. One is the possibility of facing problems such as, a natural disaster, shortage of water, crop disease. Another is the possibility of having loss since high risks are associated with agricultural investment. Most of the SAAB's loans do not have a grace period. Moreover, its loans' value are based on the size of cultivated land, and the subjective judgement of its employee. This could result in providing a farmer with loan over his real needs, and making him unable to repay the debt.

#### 5.2.1.2 SUBSIDY POLICY

In addition to lending facility, SAAB acts as a fiscal agent for the government in implementing a large part of the agricultural subsidy programme. The programme was designed to encourage the adoption of modern agricultural inputs to increase agricultural output, to support and increase farmers' income, and to hold down the prices of agricultural products for consumers.<sup>12</sup> These subsidies are provided equally to traditional and commercial farmers, as well as Saudi and joint ventures agricultural firms.

The Bank provides six types of subsidies, namely: agricultural machinery subsidy, engine and pump subsidy, dairy farm equipment subsidy, animal feed subsidy, poultry raising equipment subsidy, transportation of imported cows. Two other subsidies, fishing and offshoots of date palm, were granted by the Bank once and three, respectively, and thereafter by the Ministry of Agriculture and Water (MOWA).

Agricultural machinery subsidy programme began in 1973. The programme covers ploughing machinery and its accessories, levelling machines, harvesters, combines, winnowers and balers. The amount of subsidy is 45 per cent of the official

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<sup>12</sup> MAW, 1984, p 114.



price, fixed by MOAW, payable to the dealer. This fixed price is calculated on the basis of CIF value at the port of disembarkation. Additions to that value such as, loading and unloading costs, transportation and installation costs, margin profit, etc., are paid by the farmer.

The purpose of the programme is to reduce the cost of these machinery to encourage their use in farming instead of the traditional methods. This leads to an efficiency in agricultural production and a high rate of agricultural growth.

Lending programme provides loans to purchase machinery, however, only 169 loans were demanded for such purpose during the first ten years of lending operation, totalled SR 18.6 million. In 1974, as a result of the subsidy programme, loans to purchase agricultural machinery rose to 152, amounting SR 19.9 million. It increased to 1,125 loans the next year, with extended loans reaching SR 47.5 million, and continued to increase in the following years.

That low demand for agricultural machinery, in the first year of the programme, is attributed to many factors such as, MOAW leasing facility of agricultural machines, the small number of imported machinery and the lack of spare parts and maintenance, the small size of agricultural holdings, and the difficulty associated with the use of these machines by the farmers. After 1973, these factors have been changed.

Engine and pump subsidy programme started in 1974 when the Council of Ministers authorised granting such subsidy at the rate of 50 per cent of the official price of the engines and pumps determined by MOWA. The programme covers agricultural engines, deep pumps, centrifugal pumps, and electric and ploughing pumps.

As we said earlier, farmers in Saudi Arabia depend, mainly, on underground water for their irrigation needs. Therefore, engine and pump are very important equipments in

their production process. The programme is intended to reduce the cost of these equipment to make them available to all farmers in the Kingdom.

Any farmer who wants to obtain such a subsidy has to submit an application to SAAB including all necessary information about the requested engine or pump such as, type, trade mark, year of manufacturing, serial number, the price, etc. SAAB's officials decide on whether the price quoted by the dealer or the farmer, in case he obtained a license from MOAW to import them, is in accordance with the price established by MOAW. If so, then SAAB pays 50 per cent of the engine or pump cost to the dealer or to the farmer if he is the importer.

Concentrated feeds subsidy has been authorised by the Ministers Council in 1973 to include soya beans, maize, cotton seed cake, sesame, sunflower, and ground-nut. Concentrated animal feed means those concentrates containing 36-47 per cent of protein, vitamins and antibiotics.

The rate of subsidy is 50 per cent of the CIF cost prices at the port of arrival, provided that the price is not higher than the price of animal feed produced by the Grain Silos and Flour Mills Organisation (GSFMO).

The subsidy is paid to the importer, whether a farmer, dealer, manufacturer, or GSFMO in case the farmer buys the feed from it. The programme is intended to improve the quality of animal feed to promote the development of animal wealth and products, and therefore to achieve self sufficiency.

Subsidy to poultry farm equipment has been granted since 1974, and includes: drinking troughs, automatic feed troughs, incubators, hatchers including related electric equipment, animal feed mixers, automatic cages with all its accessories, slaughtering and freezing and cooling equipment, egg handling and cleaning equipment, and cartons for packing chicks, bags

for packing feed, and cages for travelling hens. This subsidy programme is designed to improve and develop the poultry projects and products to achieve a self sufficiency in eggs and white meat.

SAAB provides such subsidy for projects being approved by MOAW. Farms having less than 2000 birds, whether for laying or for meat, are not eligible for such a subsidy. The subsidy rate is 30 per cent of the CIF cost prices at the port of arrival, if the equipment is financed by the owner. If the equipment is financed by a loan from SAAB, then the subsidy rate is 20 per cent.

Dairy equipment subsidy was initiated in 1974 to encourage private investment in this important sector. The programme includes: automatic milking equipment and containers for storing and refrigerated milk, containers for milk transport and refrigerated vehicles for the transport of dairy products, automatic equipment for milk processing and weighing, automatic equipment for packing of the processed milk and dairy by-products, laboratory equipment for quality control.

The farmer is eligible for 30 per cent of the CIF cost of such equipment if he pays them from his own resources. If the project is financed by the Bank, then the rate of subsidy is 20 per cent. The farmer should obtain an approval from MOAW for his project to be able to benefit from such subsidy.

Subsidy for transporting highly productive cows is an additional subsidy for dairy farms. The total air transport charges from the country of origin to the port of arrival is paid by SAAB upon the approval of MOAW. MOAW requires that; the consignment is of at least fifty cows, the cow breed meet the Ministry specifications, and that the dairy project satisfy the MOAW conditions and specifications.

The total subsidies granted by SAAB, since the beginning of the subsidy programme in 1973 until 1989/90, was SR 8,941

million as Table 5.4 shows. The total subsidies in 1973/74 was SR 9.9 million, and increased in by 368 per cent the next year to reach SR 46.3 million. It continued to increase gradually until it reached a peak of SR 1.4 billion in 1984/85, and declined thereafter to reach SR 259 million in 1989/1990.

The distributed subsidies between the different purposes indicates that engine and pump achieved SR 3,317 million of the total subsidies, or 37 per cent. The second was the animal feed subsidy which reached SR 2,905 million, or 32.5 per cent. Third is the agricultural machinery subsidy with 27 per cent, or SR 2,411 million. So, 96.5 per cent of the total subsidies was paid for these three purposes.

The distribution map of the subsidies between the regions for the period 1973-84, and for 1986, 1988, 1989, indicates that the Central Region, represented by Riyadh, Buraidah, and Alkharj branches, achieved 51 per cent of the total subsidies during these years. The Western Region is next with 22 per cent, and the Northern Region with 12 per cent.

#### **5.2.2 MINISTRY OF AGRICULTURE AND WATER (MOAW)**

MOAW is the responsible authority and the main policy maker for the development of agriculture and water resources in Saudi Arabia. It was an attachment agency to the Ministry of Finance, and became a ministry in 1953. Its responsibility includes all activities such as, construction, production, land development, services, research and studies, training, investment support and undertaking, which are connected to agriculture and water.

The preparation and implementation of plans and programmes which aim to achieve steady and balanced agricultural development, the provision of financial and technical services to create a suitable environment for

agricultural investment, and the design of policies and regulations toward the optimum use of water and agricultural resources; are among the functions of the Ministry.

We do not intend to discuss the Ministry's responsibilities toward agriculture, but to review the direct incentives it provides to the farmers. These incentive programmes include, free land distribution, and different subsidies.

#### 5.2.2.1 LAND DISTRIBUTION PROGRAMME

The cultivated area in Saudi Arabia is small compared to the potential cultivated area in the country. The farms in the country are characterised by their small sizes. In 1968, the government commenced a free land distribution programme to enlarge the area of cultivable land in the country. These lands to be distributed are chosen after a number of surveys and studies which investigate the soil characteristics, water availability and suitability for irrigation, and type of cultivation appropriate to each area.

First estimate stated that the country has about 4.5 million hectares of land which could be reclaimed for agriculture. Land selected for distribution to the public must meet the following conditions :

It should be

- located beyond the boundaries of cities or villages;
- free from any right of ownership;
- free from any dispute, legal or otherwise;
- economical to cultivate in terms of the availability of necessary characteristics such as water and good soil.

Saudi individuals, projects, and companies, working in the agricultural sector, are eligible to benefit from the land distribution programme. Non-Saudis are eligible too, but subject to the approval of the Council of Ministers.

Individuals are required to have the necessary capital and technical know-how to apply to obtain a plot, and the priority in granting the land goes to those who, own a land in the neighbourhood of the land designated for distribution; live in the region within which land for distribution lies; have the professional experience in agriculture; and have the investment capabilities such as capital, labour, etc.

Agricultural projects and firms should be profit-seeking and legally established in the country; they specialise in agricultural or live-stock production; their minimum capital is SR 500 thousand of which at least SR 200 thousand is in the form of working capital; and have at least four permanent full time agricultural specialists residing in the country.

Land size depends on many factors such as, whether the beneficiary is an individual or a firm, available area for distribution, number of applicants, and the degree of suitability of the land for agricultural production.

In general, individuals are eligible for land with size ranging between five and ten hectares, and each family member is eligible to apply separately. The area for an individual might be raised to twenty hectares under certain conditions.

A minimum of 25 per cent of the distributed land must be used for agricultural production during the first two to five years, depending on the quality of soil, availability of water, land development and preparation costs, kind of cultivable crops feasible, and geographical location. Failure, to do so, results in taking back the land and being reallocated to another beneficiary. On the other hand, the success in utilising the land properly at the right time authorize the farmer to achieve a full ownership of the land.

Agricultural projects or companies have the right to achieve land with a maximum of 400 hectares, or larger than that upon the approval of the Council of Ministers. Appropriation right and its duration is a like that of

individuals.

During the Fifth Development Plan 1990-95, land distribution programme will be concentrated on those areas which have a high potential renewable water resource. Table 5.6 shows the total area of land distributed under the programme from the starting date in 1968 until the end of 1988 which reached 1.241 million hectares, compared to 35 thousand hectares till 1974, thus adding 1.206 million hectares or 3,446 per cent.

In 1978, the total distributed area, which was 38.5 thousand hectares, were more than what was distributed in the first seven years of the programme. The expansion in government support programmes, particularly wheat, in 1978 and thereafter, has attracted a large number of farmers, agricultural projects and firms.

The number of beneficiaries increased from 189 farmers in 1976 achieving 1.1 thousand hectares, to 4,140 farmers in 1978 obtaining 34.2 thousand hectares. The number of projects increased from 3 projects in 1976, achieving 1.2 thousand hectares, to 21 projects in 1978 achieving 4.3 thousand hectares. The average area of distributed land for each single farmer was 8.3 hectares in 1978, in contrast to 205 hectares for each project. In the following years the average was less than that for both beneficiaries.

About 37.2 per cent of the total distributed land, or 462 thousand hectares, was distributed during the period of 1982-84; of which 160 thousand hectares, or 35 per cent, went to ten large agricultural joint-stock companies; 193 thousand hectares, or 42 per cent to 1,534 agricultural projects; and 109 thousand hectares, or 24 per cent, to 19,045 farmers.

About 1.048 million hectares, or 84 per cent of the total distributed land, were distributed in the period 1983-88, compared with 193 thousand hectares in the period 1968-1982.

Land distribution by localities indicates that the

Central Region achieved the major share of the distributed land. According to the Fourth Development Plan<sup>13</sup>, the Central Region achieved 54 per cent of the total distributed land by the end of 1984.

#### 5.2.2.2 THE SUBSIDY PROGRAMMES

In addition to subsidies provided by SAAB, the Ministry of Agriculture and Water runs its own subsidy programme which covers subsidy for; fertiliser, potato seed, rice output, corn output, millet output, barley output, dates output, date palms planted, and livestock raising.

Chemical fertiliser subsidy started in 1973 to spread the use of this new input, and to help farmers improving their agricultural production at low costs. The value of the subsidy is 50 per cent of the CIF cost of the fertiliser at the port of arrival. The subsidy is paid directly to the importer, provided he complies with the selling price established by MOAW. It could be given to the farmer in case he imports the fertiliser. The amount of fertiliser is determined by the, land size, type of production, etc. MOAW terminated this programme in 1983 for two reasons: the increase in local production of chemical fertilisers which reduced its cost, and the awareness of farmers about the importance of chemical fertilisers as one of their agricultural inputs.

Another subsidy programme which was offered by MOAW and was ended in 1980, is the livestock raising subsidy programme which started in 1973. The programme failed in achieving its objectives, and therefore was stanchd for more evaluation studies.

MOAW sponsored the potato development programme which

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<sup>13</sup> MOP, "Fourth Development Plan", p. 185.



provides farmers with potato seeds of high varieties at very attractive prices. The first five tons is free of charge, and up to fifteen tons at a nominal price of SR 1.00 per kilogram.

The output subsidy programme which includes rice, corn millet, barley, and dates output, initiated to accelerate the production volumes of these products which the farmer lack the desire to produce.

Rice output subsidy was initiated in 1973, and the farmers were granted a subsidy of SR 0.30 for each kilogram of produced rice. This programme does not exist any more. Corn and dates producers are paid an amount of SR 0.25 per kilogram of their production since 1975 and 1976, respectively. Moreover, dates producers receive SR 50 for each new planted tree, and a minimum of 30 planted trees is required.

In 1975, millet and barley producers were also offered SR 0.15 for each kilogram of production. However, in 1987 the subsidy for barley increased to reach SR 1.00 per kilogram, and Grain Silos and Flour Mills Organisation (GSFMO) became responsible for purchasing the farmers' output at this new support price.

Wheat output is supported by SR 0.25 per kilogram, and that amount is paid through GSFMO since 1978, as part of the wheat supported price programme of GSFMO.

The total amount of subsidies paid by MOAW until 1983 was SR 2,265 million. It is believed that MOAW subsidies started to decline since that date for many reasons such as: the provision of subsidies through other official agencies such as SAAB and GSFMO which are under the responsibility of the Agriculture Minister (he is the Chairman of both agencies); the development of the agricultural sector, particularly with the increased number of agricultural firms, which put more responsibility on private sector shoulders; and the decline in oil revenue which affect the ability of the Ministry to continue providing the same amount of subsidy.

### 5.2.3 GRAIN SILOS AND FLOUR MILLS ORGANISATION (GSFMO)

The previous chapter discussed in detail the GSFMO and mentioned that one of its objectives is to purchase grain to maintain a strategic stockpile of grain to meet the Kingdom's requirements for six months.

In 1978, the Ministers Council ordered GSFMO to purchase the wheat production of local producers at a support price of SR 2.25 (including SR 0.25 paid by MOAW), starting from the production of 1977/1978. The market price of wheat during that year was between SR 1.5 and SR 2.0.

The objective of such a programme was to promote the production of wheat locally to achieve self-sufficiency, to improve farmers' income, and to reduce the prices of wheat and other related products, such as bread, to consumers.

In 1978/79, the supported price increased to SR 3.50, and continued like that until 1984/85 when new regulations were introduced. The new regulations, which were a result of the decline in wheat production costs and the concentration on wheat by the farmers, stated that the price of purchased wheat through GSFMO would be :

- SR 3.5 per kilogram for farmers producing no more than 500 tons;
- SR 3.0 per kilogram for farmers producing more than 500 tons; and
- SR 2.0 per kilograms for the purchase of wheat during the next four years of 1985.

GSFMO continues to purchase wheat from the local producers at SR 2.0 per kilogram for all farmers, and at SR 1.5 per kilograms for big firms whose their production is of large quantity.

Each farmer should have an agricultural certificate issued by MOAW which shows the name of the farmer, the location of the farm, its region, the area of land planted by

wheat, and expected wheat output. In addition, GSFMO recently announced that any wheat producer should have an ownership certificate for the land where he grows wheat. This new regulation will be applied eventually, though it is expected to raise some problems since some farmers have difficulties in proving the ownership of their farms.

Table 5.7 shows the quantities of wheat purchased by GSFMO and the amount paid. In the first year of the programme, 1978, the amount of wheat purchased was 3,297 tons with totalling to SR 7 million.

The following year, production increased by more than 5 times to reach 17,505 tons. That increment is nothing compared to the jump in wheat production in 1983 which reached 1.347 million tons, or more than 408 times the first year's production, within 7 years of the programme.

The reduction in wheat prices, from SR 3.50 to SR 2.0 starting from the agricultural season of 1985, has not brought about any reduction in wheat production. In contrast, it made the production of wheat to increase from 1.347 million tons in 1984 to 1.548 million tons in 1985. The new price continued to be attractive for the producers and therefore production increased from 1.548 million tons in 1985 to 2.213 million tons in the next year, and continued to increase until it reached 3.6 million tons in 1989.

In terms of the payment, GSFMO paid SR 33 billion to purchase wheat from local producers during the period 1978-1989. Of course this amount does not represent the total amount of subsidy which can be obtained by applying the following equation :

$$\begin{aligned} \text{Subsidy amount} = & \text{supported wheat price/ton} - \text{imported} \\ & \text{wheat price/ton} \times \text{wheat quantities} \\ & \text{purchased by GSFMO} \end{aligned}$$

The development in livestock, poultry, and dairy farms has led to an increase in the demand for imported animal feed such as corn and barley. Moreover, it was also stimulated by the subsidies paid by the Ministry of Finance and National Economy for imported foods including corn and barley. These two factors caused the imported barley to reach quantities greater than the actual need. For example, in 1984/85 the total imported barley reached 6.3 million tons, while an estimate determines the actual need of the country to be 2 million ton.<sup>14</sup>

Therefore, in 1987 a Royal Decree was issued instructing GSFMO to start purchasing barley from local producers at a support price of SR 1.0 per kilogram. To enforce big wheat producers to produce barley, GSFMO required that the area devoted for barley production ought to be 1/3 of the total area under wheat production.

Unfortunately, there is no available data regarding the barley production received by GSFMO, and therefore it is impossible to know the response of the farmers to this subsidy programme.

### 5.3 Industrial Incentives<sup>15</sup>

The other sector which has the potential for achieving economic diversification is the industrial sector. The government has offered many incentives to attract investors to invest in this sector. Moreover, the government has undertaken , directly, industries such as, oil and petrochemical.

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<sup>14</sup> Riyadh Newspaper, 22/7/1407 H.

<sup>15</sup> MOIE, "Industry & Electricity : Progress and Achievements", undated.  
Saudi Consulting House, 1990.

The statement issued by the State in 1974 specifying the principles of the industrial policy, stated that the government will encourage the investment in the industrial sector by adopting many types of incentives such as, offering loans and capital participation on the basis of easy and encouraging terms; offering technical and financial aid required for operating factories; giving preference to domestic products in government purchases, offering tax exemption and protection policy; granting lots of land in industrial estates; providing the necessary support to train Saudi workers; in addition to some other articles which regulate industrial activities in the country.

Although the incentives are provided for both types of investment, government and private, this section will only review the incentives offered to the private sector.

#### **5.3.1 INDUSTRIAL PROTECTION AND ENCOURAGEMENT LAW**

The Government of Saudi Arabia issued in 1961, the Law for Protection and Encouragement of National Industries. This Law indicates that an industrial establishment in existence or underformation or to be built in future shall be granted the following privilege and exemptions :

- 1- The provision of customs duties exemption for the import of raw materials and equipments.
- 2- The provision of plots of land on lease, at nominal rental, for erecting thereon factories and residential quarters for workers and employees.
- 3- The protection of domestic products from foreign competition.
- 4- The provision of financial assistance for industrial projects.
- 5- The provision of tax exemption on all domestic products devoted for export.

In 1979, Foreign Capital Investment Law was issued, and according to this Law, the foreign investor has the right to benefit from the privileges and exemptions mentioned previously for industrial projects only. Moreover, foreign projects are exempted from income tax as long as 25 per cent of the project capital is owned by Saudi citizens.

Industrial establishments are required under this Law to employ Saudi citizens in their projects in order for them to benefit from these privilege and exemptions unless they obtain permission from the Ministry of Work and Social Affairs to employ non-Saudis.

The Ministry of Industry and Electricity (MOIE) is the government body responsible for implementing these regulations, except export tax exemption which is regulated by a Royal Decree according to a resolution issued by the Council of Ministers.

#### **5.3.1.1 TAX EXEMPTION**

As we said, there are three types of tax exemption, namely, import duties exemption, income tax exemption, and export duties exemption. The importance of tax exemption as an incentive policy depends on the rate of tax imposed by the government. Tax exemption, in general, reduces the investment costs of the project and hence decreases the financial requirements, enhances the competitiveness of its products, and increase the liquidity available to the project.

Customs duties exemption is applied for all the primary raw materials, semi-finished goods, bags and cylinders necessary for industrial projects, machinery, equipment, tools and spare parts; provided that similar local items are not sufficiently available in the country. Moreover, the kinds and quantities of the items shall be determined by the Ministry of Industry and Electricity, and therefore, the

investor has to apply for exemption as early as possible to avoid delays. The establishment has to use these items in the same project for the assigned purpose which the exemption is given for.

Table 5.8 shows the value of imported goods exempted from customs duties from 1968 to 1987. The total value of the exempted goods reached SR 61.6 billion. Of that amount, SR 44.9 billion, or 73 per cent, went for, machinery, equipment, and spare parts. The imported raw materials got SR 16.7 billion, or 27 per cent. This reflects the type of industrial projects in the country which are capital intensive. Most of the exempted items went to the chemical industries sector, while the metal industries come next, and in the third is the food industries.

Income tax exemption programme is applied on foreign investment only since there is no income tax on Saudi investment. The rate of income tax is between 25 to 45 per cent of the profits. Agricultural and industrial projects, which have a foreign investment of not more than 75 per cent, are eligible for exemption from income and company taxes for a period of ten years. Other projects are eligible for a period of five years of income and company taxes exemption. It is required that the Saudi capital share be and remains at 25 per cent during the period of exemption which starts from the date of production.

Export incentives include exemption from export duties and other taxes. The exporter obtains a discount of 50 per cent of port charges for all his exported products. Moreover, he is eligible for ten days of store facilities free of charge as soon as the goods enters the customs area.

Saudi Airlines provides the exporter with special air cargo rates as follows :

- SR 1.5 per kilogram for transporting domestic industrial products from Saudi Arabia to the Middle East;

- SR 2.5 per kilogram for industrial products exported to Europe;
- and SR 1.5 per kilogram for transporting domestic agricultural products to the Middle East, and Europe.

#### 5.3.1.2 PROTECTION POLICY

The other privilege which industrial establishments are offered under the Law is the protection of domestic producers from the competition of foreign products. In 1973 a Royal Decree was issued stating that it is possible, upon the approval of the Council of Ministers, to change the custom duty rates of some imported products in a way that insures the protection and encouragement of similar domestic agricultural and industrial products.

In general, the Law mentioned three methods of protecting national industries, namely; raising of custom duties on imports, prohibiting or restricting the volume of imports similar to local products, and/or providing financial assistance to local industrial entities.

The Ministry of Industry and Electricity requires that the industrial establishments, eligible for obtaining the customs protection, should meet the following conditions :

- their industrial production is sufficient to cover a major portion of local market demand so that an increase in custom fees, when the local production is insufficient, does not become an unjustifiable burden for the consumers;
- their products shall be of an adequate degree of quality so that the consumer is not harmed;
- their product price is relatively higher than the sale price of the foreign competing products in local markets, as a result of the high production costs of national industries; and
- their products must be of importance for the national



economy; and the importance can be measured by, their value added to both the national income and production, employment opportunities created by the industry, the capital investment size, and investment opportunities introduced by this industry.

The period of custom protection is five years, and thereafter the old custom duty shall apply. MOIE believes that this period is enough to allow the local industry to develop its own self-protection by the optimum utilisation of production factors, by raising its productive efficiency, and by using its full productive capacity to increase it to the economic volume to enjoy the benefits of mass production.

The government requests that the local producers, in return for the protection provided, price their products on the basis of actual production costs plus a reasonable profit margin so that the local consumers would not be harmed by the protection.

#### **5.3.1.3 INDUSTRIAL ESTATES**

In its efforts to accelerate the wheel of industrialisation, the government started in 1970 the establishment of a number of industrial estates equipped with various means required for the establishment of factories therein. These means include public utilities and basic services such as, water, sewage, rainfall drainage, electric power, telephone communications network, paved and lighted roads, banks, post office, medical clinic, etc.

Areas of industrial estates are divided into lots of sizes to meet the requirements of different industrial establishments, and each lot is provided with all basic services. The rental charge in the industrial estates is SR 0.08 (eight halala) yearly per one square metre. Beside lands specified for project, industrial establishments are

eligible to obtain land for housing workmen at the same rental charge. The housing area is beside the industrial site.

The priority of leasing land in the existing industrial estates shall be given to industries that comply with the priorities laid down within the framework of the Five year Development Plan, establish branches for the existing industrial institutions for manufacturing new commodities within these institutions, and have a high degree of modern automation with respect to machinery and the method of fabrication.

The size of the land depends on the information set forth in the Ministerial license such as, productive capacity of the factory, financed capital, volume of machinery and equipment used, etc. The leasing period is 25 years and the investor shall begin construction in a maximum period of six month after signing the lease.

Services such as water and electricity have been provided for industrial establishments at subsidised prices. The charge for drinking water was SR 0.25 per cubic metre, and now it is between SR 0.30 and SR 4.0, depending on the consumption level. Electricity is provided at a price of SR 0.05 per kilowatt/hour for both industrial and agricultural establishments for certain consumption level, and increase with higher consumption.

In addition to the industrial estates of Jubail and Yanbu which provide industrial sites for private sector industries, there are eight industrial estates in Riyadh, Jeddah, Dammam, Makkah, Qasseem, Hassa, in addition to five industrial estate under study. The total area of industrial estates in the country is more than 33 million square metres, of which 12.451 million square metres are in Riyadh, 9.404 million square metres in Dammam, and 9.172 million square metres in Jeddah.

#### **5.3.1.4 TELEVISIONAL ADVERTISEMENT DISCOUNT**

The televisual advertisement facility was introduced in the Kingdom in 1985 for the first time. Most of the advertised products are foreign. However, some big domestic producers are using that facility. Many local producers claim that the TV advertisement is used effectively by their foreign competitors in improving their market shares while they are not able to use it because of its very high prices. So, a Royal Decree was issued in 1987 stating that any local producer is eligible to a 30 per cent discount on the total cost of his advertisements on the TV. This privilege is granted to the local producers of the industrial sector as well as other sectors.

#### **5.3.2 SAUDI INDUSTRIAL DEVELOPMENT FUND (SIDF)**

This Fund was created in 1974 as a financial machinery affiliated to the Ministry of Finance and National Economy to support and develop the domestic industrial sector in the Kingdom. The capital of the Fund was SR 500 million, which has increased year after year, due to the increase in industrial activities, until it reached SR 8 billion in 1980. Since that date, it depends on its own financial resources obtained from loans repayment to meet the demand on its credit facility.

The Fund provides interest-free credit, in form of medium- and long-term loans, to establish new factory, or to expand an existing one through replacing or modernising its equipment and machinery. However, the Fund does not finance the purchase of used machinery and equipment. Moreover, SIDF provides advice to borrowers in the field of economics, finance, management, and engineering, during the duration of the loan. The Fund charges at least 2.5 per cent for each

loan as a service charge which it may be higher depending on the size of the loan.

Saudi and non-Saudi investors who obtain industrial licenses are entitled to apply for loans. The non-Saudi investor is required by the Fund to have at least 25 per cent of its project capital being owned by Saudis to be able to benefit from the credit facility.

The Fund requires that the project should be economically feasible, and therefore the investor should submit, with the application, a feasibility study which includes in detail information about the product such as, market, pricing, competitors, product standards, production process and quantities, measurement, machines and equipment, buildings, labour, raw materials, licensing agreement, preparation expenses, and loss prevention. In addition, the Fund requires that the project is, capital intensive, capable of providing Saudi nationals with the opportunities of work and training, and not under commercial production yet. Projects which have started commercial production are eligible only for expansion loans.

Agricultural projects with big industrial undertakings as integrated poultry and dairy projects, as well as food processing, are eligible for loans from SIDF. In 1979 the Fund was entrusted to support the establishment of cool-stores, and hence, was given a capital of SR 200 million for that programme. Similarly, dates packaging project came under SIDF supervision.

In mid 1975, the government made available to the Fund SR 750 million to finance electrification projects in the country. The allocation for this programme increased several times to the final level of SR 38.9 billion. By the end of 1984, the Fund had committed the full allocation in the form of 422 loans approved to electric companies for the expansion and development of their plants in the country. General

Electricity Corporation, which is an autonomous government agency, became responsible for the development of that sector thereafter.

The fund's rate of financing is 50 per cent of the total cost for Saudi projects, as well as joint-venture projects that have at least 50 per cent Saudi equity capital. Loan rate will go down *pari passu* Saudi participation in the equity. Total costs include expenses of fixed assets, foundation expenses, and the operating capital which is equal to the operation cost for three months.

Investor's equity capital must be spent before they can draw the Fund's contribution. In some exceptional cases, the loan amounts may be disbursed in the same proportion as the equity spent on the project. The Fund shall revise the actual costs of the project and pay 50 per cent of the revised costs; other payment shall be on the same basis.

The grace period and the period of settlement are determined according to the expected cash flow of the project, noting that the maximum period for settlement is fifteen years. Dividends cannot be distributed during the loans' grace period. During the repayment period, dividend can exceed 25 per cent if an equal amount is paid toward loan repayment, in addition to the scheduled repayment.

The warranties required by the Fund, against the loan, include mortgage of the fixed assets financed for the project; personal or group guaranties to be presented by the shareholders in limited liability companies; and there is a possibility of demanding an external guarantee for projects that constitute great risk.

In order to make sure that the project is doing well, projects shall provide the Fund with accounting statement approved by auditors at least once a year, and an insurance document, in addition to visits by the fund's official at least twice a year. The Fund, also, requires that the project

utilises locally manufactured materials in the construction of the factory and its utilities. The Fund shall specify these materials at the time of evaluation. The project shall use a Saudi engineering office in completing the required technical studies, and in supervising over the erection of the factory wholly or partially, except in the cases deemed by the Fund. Lastly, the project should enter into contract with a Saudi auditor to audit the project accounts from the beginning of its erection and after operation until the Fund loan is settled.

Table 5.9 shows the value of approved loans by SIDF during the period from 1974 to 1989. The lowest level of the approved loans value was in the first year of operation totalling to SR 150 million for 21 loans with SR 7.14 million as an average amount of each loan. Nonetheless, in the next year a total of 65 loans were approved with an average loan's amount of SR 15.8 million , making the total amount of approved loans in that year reached SR 1,028. The peak was reached in 1977 with a total of SR 2,091 for 136 loans, with an average of SR 15.4 million. The highest average loan's value was reached in 1988 where the total approved loans' value was SR 1,348 million for only 32 loans which make the average SR 42.1 million.

By 1989, the total number of industrial loans committed by the Fund rose to 1,312, which contributed to the installation and expansion of 1,068 industrial projects. The total value of commitments to these projects was about SR 17.1 billion of which SR 12.3 billion has been disbursed. Already SR 8.3 billion of the disbursement has been repaid.

Engineering products has led other sectors by the size of its loan commitment. By the end of 1989, the total funds allocated to approved projects in the sector amounted to SR 3.9 billion, or 23 per cent of the Fund's total commitment in all industrial projects. Chemical products is the second most

important sector in terms of loan size, where the loans approved to projects in this sector totalled SR 3.8 billion, or 22 per cent of the Fund's loan commitment in all industrial projects. Third comes the cement sector with total amount of SR 3.5 billion, or 20 per cent of the total Fund's commitments. In fact, the cement sector had led other sectors in terms of loan size in the past. But as no loans were allocated to this sector in recent years, it now occupies third position.

The first years of operation were characterised by small loans of value around SR 11 million, allocated mainly to construction projects. That was natural because the development process during that time required such projects. But from 1980, the loans' average was around SR 20 million reflecting the change in private sector investment toward capital intensive investment such as, engineering and chemical projects. That was also natural because most of the infrastructure facilities were completed which set the stage for new industries to be established. Therefore, starting from 1980 the Fund stopped the lending facility for new established projects in the field of building materials, printing and publishing, some consumer products, etc.

Regarding the two programmes run by the Fund, namely, cold storages and dates packaging lending programmes, the total commitments to those programme by the end of 1989 were approximately SR 375 million and SR 82 million respectively.

### **5.3.3 SUBSIDY TO THE TRAINING OF SAUDI LABOUR**

As said earlier, the industrial policy issued by the government in 1974 stated the willingness of the government to support training saudi workers. The government aim, by doing so, was to develop the national labour force and increase its skills, and to encourage the reliance on it instead of on

imported labour.

In 1976, a Royal Decree was issued to regulate the payment procedure for industrial training of the Saudis, either in the country or overseas. Types of training covered by the training subsidy programme, include; in-service training, training by sending a number of workers on scholarship abroad, and group sessions organised by government departments' training centres, or by specialised industrial companies.

For training inside the country, the government bears the initial costs of training, plus the travel tickets during training period; provided that the establishment bears other costs such as, social insurance, used material, machinery depreciation, and transportation. Moreover, the government pays the instructors' salaries and their travel tickets, and award the trainee 50 per cent of his initial salary as an incentive during the training period; provided that the establishment awards the trainee 10 per cent of his initial salary on the basis of completing the training successfully.

For training abroad, the government bears all the costs of training, provided that the establishment bears 50 per cent of the trainee's initial salary. The payments are made directly to both the trainees and the instructors.

#### **5.3.4 GOVERNMENT PURCHASES OF NATIONAL PRODUCTS**

Although the private sector was not qualified in the mid 1970s to obtain large governmental contracts, an opportunity was extended to it to benefit from these contracts indirectly. The government gives the domestic products the priority in its purchase.

In 1976, the Ministers Council issued a resolution obligating technical department in Ministries, Public corporation, and consulting firms working with the government,



when preparing the specifications of government projects, to give priority to national industrial products as long as these products serve the purpose intended by the procurement. After five months, in 1977, a Royal Decree was issued to confirm that the government gives priority to national products over their foreign counterparts when concluding contracts to procure its purchases. They are preferred even if their specification is less than similar foreign products as long as they serve the purpose intended by the procurement.

The Decree allowed the direct purchasing of national products if they are of one factory. In the case of multiple factories, they should all be allowed to compete provided that the MOIE shall determine in both cases the fair price thereof.

In the same year, the government banned firms, which are in contract with any governmental department, from establishing local factories to supply their needs of raw and/or medium materials without obtaining a permission from MOIE, and instructed them to buy their needs from local factories if possible. These firms were banned again in 1978 from importing foreign products similar to national products, and were instructed to buy their needs from the list of national products prepared by MOIE.

It is noticed that all these Resolutions and Decrees were issued in the period of 1976-78 which was characterised by the large number of governmental development programmes such as infrastructure projects.

#### 5.3.5 REAL ESTATE DEVELOPMENT FUND (REDF)<sup>16</sup>

This Fund was created in 1974, the same year that SIDF was created, with an initial capital SR 250 million which

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<sup>16</sup> Real Estate Development Fund, "annual Report", different issues.

increased to SR 71 billion in 1987. The purpose of this fund was to overcome the housing shortages, which were endemic in the mid 1970's, through providing saudi individuals and companies with interest-free loans to build houses. Although the priority in lending operation is for citizens who want to build their own houses , saudi investors are eligible to obtain investment loans to build residential and commercial complexes. The requirements for investment loans are :

- Investment loans may not exceed 50 per cent of the building cost;
- investment loans may not exceed SR 10 million;
- investment loans must be repaid annually in 10 equal instalments with the first payment due one year after the implementation of the building;
- any investment loan must be repaid before another loan is requested or accepted; and
- all investment loans must be secured by mortgages.

The total amount of loans extended by the Fund until 1987 was SR 90.5 billion, of which SR 5 billion or 4 per cent of the total went for investment loans. The total number of loans for the same period was 344,973, contributing to building 413,958 housing units. For investment loans the number was 2,358 for constructing 26,488 housing units, 1,612 office buildings, and 3,703 commercial exhibitions. The Fund's total disbursements was the largest among all the government development funds.

#### **5.3.6 THE ECONOMIC OFFSET PROGRAMME**

Government expenditure on defence purposes constitutes a major part of the total expenditures. In 1989 the defence expenditure totalled to around SR 61 billion, or around 35 per cent of the total expenditure. The huge expenditure for defence purposes led the policy makers in the country to

insist that foreign contractors use a portion of this expenditure towards developing the economy. The Peace Shield Project for Command, Control and Communication System with American contractors, where the contract value is around SR 45 billion; and Al-Yamamah Project with British Contractors which costs SR 96 billion, were the two main candidate projects that can serve development objectives. Therefore, the Economic Offset Programme was initiated with the aim, basically, of recycling an amount equal to 35 per cent of the contracts technical value to be invested in advanced industries and ventures jointly with the Saudi private sector. These industries can be in the military sector as well as other sector.

This programme will encourage and assist the private sector to benefit from the experience of British and American corporation participating in the programme. The first phase of the programme witnessed the birth of six companies, namely, Alsalam Aircraft Company, Middle East Propulsion Company, Advanced Electronic Company, International System Engineering Company, Aircraft Accessories and Components Company, and Digital Telecommunications Company. Investment in these companies reaches SR 1.7 billion. These projects are part of the offset programme with the American government. The British part of the offset programme is expected to start in 1992 with the following projects, specialist training centres, polyethylene yarn & netting, drug production, and animal feed production; in addition to another eight suggested projects. Investment of this programme is estimated to be SR 6,700 million (£ 1000 million) in the form of joint-venture projects.<sup>17</sup>

It is believed that this programme will be of great help in advancing the private sector with the western technology

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<sup>17</sup> Asharq Al-Awsat, 27-11-1991, p.14.

and experience.

#### 5.4 Ministry of Finance and National Economy (MOFNE)<sup>18</sup>

With the start of the First Development Plan 1970-1975, the Government, through the Ministry of Finance and National Economy, launched an intensive interest-free loans and subsidies programme which aims to assist the accomplishment of the Development Plan objectives via supporting private sector activities such as agricultural projects, hospitals, hotels, printing and publishing , construction, bakeries, etc.; in addition to subsidising imported food stuffs.

This programme is different than similar programme offered through other governmental channels such as SAAB, SIDF, etc. It is special and, usually, temporary lending programmes designed to meet special needs.

The loans programme was developing in response to the problems which erect in the economy as the development process is carried through. In 1971/72, the programme was directed to improve and develop the standard of printing and publishing enterprises, and some other private projects. The programme has extended 34 loans with a total of SR 147 million by the end of 1985.

From 1974, the priority became the improvement and expansion of health services in the country. Many citizens, during that time, used to travel abroad to look for a better treatment and health services. Consequently, the programme's aim was to encourage the private sector to invest in health sector as a means of alleviating the pressure on the public health services. By 1985, there had been 58 loans extended to establish 31 hospitals and 7 dispensaries, with 4,158 beds and to enlarge and repair a number of existing hospitals. These

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<sup>18</sup> MONFNE, 1985.

loans have totalled to SR 746 million.

Another programme was initiated, in that year, to promote the participation of the national contractors in building the infrastructure of the country through offering them the chance to improve and modernise their companies. The programme includes the purchase of machinery, equipment, building materials, and other related apparatus. This fund was provided from 1975 until 1979, when it was felt that there was no longer a need for such a fund. During this period the fund made 64 loans, totaling SR 167.3 million.

The increased number of foreigners coming to the country, due to the expansion in development programmes, enhanced the need for developing the hotels' services sector in the Kingdom. The programme started in 1975 with four loans totaling to SR 66 million, and by 1985, 80 loans were extended for the establishment of 72 hotels in 15 cities in the country, adding 13,697 rooms to the existing ones. The total value of these loans was SR 1.7 billion.

In 1976, the country was facing a bread crisis, which was a natural result of the high demand caused by the increasing number of the foreigners in the country, and the low supply from the limited and backward bakeries. The government started an immediate new lending facility for those investors who were willing to erect new modern bakeries. The total number of extended loans through this programme, until 1985, reached 68 loan amounting to SR 264.2 million to establish 68 bakeries.

The Ministry, likewise, started in 1976 a lending programme for setting up large agricultural projects such as poultry projects, dairy farms, and animal feed and raising farms. The purpose of the programme was to reduce the dependence of the country on import for its needs of eggs, dairy products, and white and red meat, by promoting the domestic production of these products. 19 loans were extended

to establish different agricultural projects, and the total value reached SR 364 million by 1985. Table 5.10 shows the total amount of loans extended through the different programmes conducted by the MOFNE, until the end of 1988, which totalled to SR 3,724 million.

The subsidy programme conducted by the Ministry covers imported fodder, imported food items, private schools, printing and publishing enterprises, and many other activities such as sport and public transportation. This programme is different from other similar programmes offered by other governmental departments.

The objective of the food subsidy was to reduce the impact of price fluctuations in the international market on local consumers. Some of the domestic industries such as, dairy products industry, were benefiting from such programme because their needs of raw materials, milk powder for dairy industry, were under the items supported by the scheme. Therefore, their competitiveness against similar domestic industries, which produce the raw materials domestically, enhanced which increased the complaints against the programme.

The programme started in 1973 to subsidise imported food items such as vegetable fat, milk, rice, sugar, and flour. Imported meat was added to the list in 1975. Vegetable and animal fat produced by the Saudi Vegetable Oils and Ghee Company, were included in the programme in 1977. And in 1979 they started subsidising the corn and barley, which were used as a fodder for livestock and poultry.

The subsidy for rice, sugar, flour, barley, and corn, is determined on the basis of the cost to the importer plus a 10 per cent profit. The government pays the difference between this figure and the official market price. The chilled and frozen meat subsidy is calculated by a lump sum subsidy of SR 2.75 per kilo. The vegetable oils and powder milk subsidy is set at the rate of SR 2.5 per kilo. The margarine, milk and

infant milk powder is subsidised by 20 per cent of their values.

Starting from 1983, many food items have been excluded from the programme such as, meat, rice, sugar, milk, oils, and flour. Table 5.11 shows the subsidies paid through the Ministry since the starting of the programme until 1988. The subsidies for food items and fodder until 1988 was around SR 29 billion.

The Ministers Council issued a resolution in 1976 to support profit and non-profit private schools by means of subsidy, in cash or kind, and technical assistance. The programme was designed to increase the number of school in the country to make education available to all residents. The subsidy is equal to the annual budget deficit of the school. By 1984, the total amount of subsidies reached SR 1,288 million, extended to 2,053 private schools with an average of SR 627.4 thousand for each school.

In 1969, the Ministers Council approved the provision of subsidies for publishing enterprises which have financial problems. From 1974, the subsidy became in annual terms for all the publishing enterprises that issue newspapers or magazines. As it shown by Table 5.11, the total subsidies for that purpose amounted to SR 109 million.

The total subsidies extended by the programme, for all purposes, from 1973 to 1984 was around SR 23 billion. After 1984 it was difficult to obtain precise data regarding the subsidies extended by the programme.

Having reviewed the incentives policies provided by the government in Saudi Arabia to the benefit of the private sector, it is the time now to evaluate the impact of these policies on the development of the private sector in Saudi Arabia, particularly, the agricultural and industrial sector which are meant to benefit from the incentives.

The next chapter is devoted to review the methodological

approach to be used by the study to analyse and evaluate the impact of the incentive policies. Following that, Chapter seven and eight, will include a detailed evaluation of the incentives policy and their impact on the private sector of Saudi Arabia.



**TABLE 5.1**  
**GENERAL CREDIT MOVEMENT OF THE AGRICULTURAL**  
**BANK FROM 1964 TO 1989 (SR THOUSANDS)**

YEAR	SHORT-TERM LOANS		MEDIUM-TERM LOANS		TOTAL LOANS	
	Number	Amounts	Number	Amounts	Number	Amounts
1964	55	53	590	4,492	645	4,545
1965	141	295	1,781	9,633	1,922	9,928
1966	885	1,083	2,621	12,210	3,149	13,292
1967	1,232	1,542	2,500	10,458	3,732	12,000
1968	1,227	1,676	2,447	12,201	3,674	13,877
1969	1,793	3,009	2,563	13,127	4,356	16,136
1970	1,741	2,575	2,640	14,052	4,381	16,628
1971	1,234	2,266	2,631	14,292	3,865	16,558
1972	1,537	2,916	2,940	16,677	4,477	19,593
1973	1,741	3,545	3,673	32,759	5,414	36,304
1974	3,835	7,182	12,416	138,324	16,251	145,505
1975	3,037	8,244	16,629	261,189	19,702	269,433
1976	3,633	17,288	17,744	472,550	61,377	489,838
1977	3,572	43,713	16,726	541,955	20,298	585,668
1978	4,609	15,286	19,149	693,786	23,758	709,072
1979	3,557	22,734	16,225	1,105,952	19,782	1,128,686
1980	9,310	39,226	35,818	2,491,640	45,128	2,530,867
1981	5,556	29,456	31,890	2,903,446	37,446	2,932,902
1982	3,454	25,271	35,432	4,140,757	38,886	4,166,028
1983	1,759	18,511	22,085	3,477,253	23,844	3,495,763
1984	1,024	17,316	13,722	2,304,484	14,746	2,321,801
1985	305	3,902	8,904	1,547,324	9,209	1,551,226
1986	475	4,178	6,588	1,015,011	7,063	1,019,189
1987	253	2,548	4,539	838,728	4,792	841,276
1988	143	1,472	3,607	753,055	3,750	754,527
1989	178	1,782	3,964	852,521	4,142	854,303
Tot.	56,322	277,069	289,467	23,677,876	345,789	23954,945

Source:

SAAB, " Twenty Sixth Annual Report 1409/1410 H ",  
1990, p31.

TABLE 5.2

**CREDIT DISTRIBUTED BY CATEGORIES OF  
DEALERS DURING 1989/1990 (VALUES IN SR MILLIONS)**

<b>Categories</b>	<b>Central Region</b>	<b>Western Region</b>	<b>Northern Region</b>	<b>Eastern Region</b>	<b>Southern Region</b>	<b>Total</b>
<b>Traditional Farmers</b>						
numbers	1043	580	1349	257	115	3344
values	197.7	35.9	359.5	32.6	15.6	641
<b>Agricultural Projects</b>						
numbers	70	9	38	1	12	130
values	106.0	20.0	52.4	0.7	16.9	196
<b>Fishermen</b>						
numbers	-	46	13	47	106	212
values	-	1.92	0.62	0.85	12.72	16
<b>Honey-Bee Keepers</b>						
numbers	-	1	-	430	25	456
values	-	0.003	-	1.1	0.07	1

Source:

SAAB, " Twenty Sixth Annual Report 1409/1410 H ",  
1990, p 41.

TABLE 5.3

## AGRICULTURAL PROJECTS FINANCED BY SAAB UNTIL 22-7-1990

Type of Projects	Location	Operating Projects	Underconstruction Proj.
Poultry Projects	Central Region	242	11
	Northern Region	53	-
	Western Region	84	5
	Eastern Region	186	7
	Southern Region	34	4
Dairy Production Projects	Central Region	20	-
	Northern Region	4	1
	Western Region	1	-
	Eastern Region	6	1
	Southern Region	1	-
Poultry Slaughterhouse Projects	Central Region	23	1
	Northern Region	2	-
	Western Region	4	2
	Eastern Region	2	3
	Southern Region	3	-
Livestock Raising Projects	Central Region	56	-
	Northern Region	36	-
	Western Region	24	-
	Eastern Region	17	-
	Southern Region	6	-
Vegetables Greenhouses Projects	Central Region	107	6
	Northern Region	9	6
	Western Region	6	4
	Eastern Region	9	10
	Southern Region	-	1
Wheat & Forage & Fruits Projects	Central Region	412	121
	Northern Region	235	104
	Western Region	1	4
	Eastern Region	18	15
Bee-Honey Production Projects	Central Region	8	-
	Northern Region	-	-
	Western Region	1	-
	Eastern Region	-	-
	Southern Region	2	1
Other Project	Central Region	3	-
	Northern Region	1	-
	Western Region	5	-
	Eastern Region	1	-
	Southern Region	1	-
Total		1623	307

Source: SAAB, "The Statistical Guide for Specialised Agricultural Proj. ...", 1990.

**TABLE 5.4**  
**AGRICULTURAL SUBSIDIES DISBURSED THROUGH**  
**SAAB FROM 1973/74 TO 1989/90**  
**( SR MILLIONS )**

YEARS	ENGINES	AGRIC. MACHI- NERY	ANIMAL FEED	POULTRY RAISING EQUIP	DAIRY FARM EQUIP	COWS TRAN- SPORT	OTHERS*	TOTAL
1973	1.1	2.1	6.5	-	-	-	-	9.7
1974	20.4	9.0	15.0	1.2	0.7	-	-	46.4
1975	56.9	42.7	35.0	-	-	-	-	134.6
1976	67.7	42.6	65.5	4.6	-	1.3	-	182.7
1977	101.6	45.3	81.7	3.4	1.3	3.4	4.9	241.6
1978	141.5	103.3	95.7	6.1	0.7	5.7	31.1	384.1
1979	163.8	115.2	125.7	8.3	0.4	11.1	11.0	435.6
1980	297.1	179.1	26.7	3.5	0.4	8.5	0.07	615.5
1981	349.0	261.9	327.8	12.5	5.8	22.3	-	979.3
1982	472.3	370.6	432.4	15.3	1.9	29.2	-	1,322
1983	361.0	298.2	334.0	12.3	0.5	16.4	-	1,023
1984	355.9	285.6	710.0	14.8	0.7	10.8	-	13789
1985	241.8	199.7	534.4	3.3	0.1	14.5	-	993.8
1986	217.3	167.2	-	8.9	-	11.2	-	404.5
1987	148.5	108.0	-	3.3	0.1	4.5	-	264.5
1988	167.4	81.6	13.8	2.7	-	2.7	-	268.2
1989	153.4	98.7	0.2	1.5	1.5	4.3	-	259.6
<b>TOTAL</b>	<b>3,316.6</b>	<b>2410.9</b>	<b>2905.2</b>	<b>101.7</b>	<b>14.1</b>	<b>146.0</b>	<b>47.1</b>	<b>8941</b>

\* Others include Fishing subsidy in 1978, and Offshoots of Date Palm for the next three years.

Source:

SAAB, "Twenty Sixth Annual Report 1409/1410 H",  
1990, p45.

**TABLE 5.6**  
**AGRICULTURAL LAND DISTRIBUTION**  
**IN SAUDI ARABIA UP TO 1988**

YEARS	DISTRIBUTED AREA (,000 HECTARE)						TOTAL
	Individuals		Projects		companies		
	Number	Area	Number	Area	Number	Area	
1968-							
1974	5711	35.0	-	-	-	-	35.0
1975	767	5.2	3	0.5	-	-	5.7
1976	189	1.1	3	1.2	-	-	2.3
1977	971	6.0	20	1.0	-	-	7.0
1978	4140	34.2	21	4.3	-	-	38.5
1979	1559	8.0	17	0.5	-	-	8.5
1980	6075	29.0	29	3.0	-	-	32.0
1981	1225	6.3	76	9.0	-	-	15.3
1982	2709	14.0	122	15.0	3	20.0	49.0
1983	8480	48.0	638	77.5	5	128.0	253.5
1984	7857	47.0	774	100.5	2	12.0	159.5
1985	na	na	na	na	-	-	142.0
1986	na	na	na	na	na	na	157.0
1987	na	na	na	na	na	na	149.0
1988	na	na	na	na	na	na	187.0
Total	na	na	na	na	na	na	1241.0

na = not available

Source :

MOAW, " The Fourth Plan For The Agricultural Sector  
1985-1990, Riyadh, 1985, p 7.

MOAW, " Annual Bulletin of Current Agricultural  
Statistics : Sample Survey 1984-85", 1986.

MOAW, " Agricultural Sector Development : Graphical  
Indicators ", No. 4, 1409 (1989), p 48.

**TABLE 5.7**  
**LOCAL PURCHASE OF WHEAT BY GSFMO**

Years	Metric Tons	SR Millions
1978	3.297	7
1979	17,505	61
1980	32,882	115
1981	85,435	298
1982	239,690	808
1983	674,631	2,361
1984	1,346,943	4,247
1985	1,547,723	3,095
1986	2,213,152	4,426
1987	2,525,459	5,051
1988	3,128,347	5,979
1989	3,600,000	6,578
Total	15,415,064	33,026

Source :

Ministry of Planning, "Achievements of the  
Development Plans : 1970-1989", 1990, p. 275

**TABLE 5.8**  
**VALUE OF IMPORTS OF RAW MATERIALS,**  
**MACHINERY & SPARE PARTS EXEMPTED**  
**FROM CUSTOMS' DUTIES ('000 SR)**

Years	Machinery & Spare Parts	% of total	Raw Materials	% of total	Total
1969	94,865	64	52,776	36	147,641
1970	104,829	57	78,207	43	183,036
1971	33,980	49	35,121	51	69,101
1972	86,276	54	71,957	46	158,233
1973	265,39	70	111,162	30	376,557
1974	169,690*	70	72,702*	30	242,392
1975	172,848	77	52,409	23	225,257
1976	502,773	88	70,496	12	573,269
1977	1,115,449	82	247,857	18	1,363,306
1978	2,910,719	96	130,815	04	3,041,534
1979	2,272,173	66	1,164,922	34	3,437,095
1980	3,890,711	80	956,891	20	4,847,602
1981	3,891,167	69	1,730,472	31	5,621,609
1982	8,539,507	76	2,734,142	24	11,273,649
1983	4,568,861	88	638,220	12	5,207,081
1984	6,111,513	89	769,801	11	6,881,314
1985	5,411,732	75	1,789,318	25	7,201,050
1986	2,834,477	56	2,211,743	44	5,046,220
1987	2,787,479	49	2,938,756	51	5,726,235
<b>Total</b>	<b>44,919,103</b>	<b>73</b>	<b>16,703,078</b>	<b>27</b>	<b>61,622,181</b>

\* Estimated

Source :

Ministry of Finance and National Economy, Central  
Department of Statistics, " Statistical  
Yearbook ", several issues.

**TABLE 5.9**  
**VALUE OF APPROVED SIDF INDUSTRIAL**  
**LOANS BY MAJOR SECTORS (SR MILLION)**

Year	Consumer Products		Chemical Products		Cement Product		Building Products		Engineered Products		Others		Total
	SR	%	SR	%	SR	%	SR	%	SR	%	SR	%	
1974	26	17	13	9	-	-	87	58	24	16	-	-	150
1975	166	16	66	6	360	35	174	17	262	26	-	-	1,028
1976	112	10	321	26	-	-	580	46	165	13	73	6	1,251
1977	298	14	75	4	863	41	517	25	337	16	1		2,091
1978	227	23	194	20	-	-	415	42	149	15	2		978
1979	351	26	139	10	400	30	195	15	252	19	2		1,339
1980	264	21	96	8	400	32	274	22	221	17	4		1,259
1981	248	17	251	18	400	28	61	4	441	31	15	1	1,415
1982	196	12	567	34	490	29	81	5	320	19	9	.5	1,663
1983	206	17	349	28	280	23	51	4	335	27	1		1,223
1984	190	20	211	22	227	24	106	11	193	20	12	1	939
1985	185	25	249	33	39	5	29	4	250	33	-	-	752
1986	126	62	17	8	-	-	4	2	55	27	-	-	202
1987	133	17	432	54	-	-	94	12	134	17	6	.7	799
1988	272	20	675	50	-	-	2		396	29	3	.2	1,348
1989	131	20	134	21	-	-	26	4	344	53	7	1	642
Tot.	3131	18	3789	22	3459	20	2696	16	3878	23	136	.8	17089

Source :

Saudi Industrial Development Bank, "Annual Report",  
Different Issues.



**TABLE 5.10**  
**THE MOVEMENT OF MOFNE' LOANS**  
**( SR Million)**

Years	Hotels	Hospit- als	Agricul. Projects	Printing & Publ.	Bakeries	Contr- actors	Total
1972	-	-	-	2	-	-	2
1973	-	-	-	7	-	-	7
1974	-	35	-	8	-	5	48
1975	66	56	-	9	-	65	196
1976	206	27	38	19	86	57	433
1977	277	19	43	-	46	17	402
1978	295	39	138	13	84	23	592
1979	403	85	74	29	44	-	635
1980	149	24	35	25	3	-	236
1981	101	8	10	3	0.4	-	122.4
1982	163	18	-	2	0.6	-	183.6
1983	-	197	25	-	-	-	222
1984	33	238	-	30	-	-	301
1985	-	-	-	-	-	-	139
1986	-	-	-	-	-	-	82
1987	-	-	-	-	-	-	85
1988	-	-	-	-	-	-	38
<b>Total</b>	-	-	-	-	-	-	<b>3,724</b>

**Sources :**

Ministry of Finance & National Economy, " Government Subsidies and Loans During Fifteen Years 1972-1985",p 7.  
Ministry of Planning, " Achievements of the Development Plans 1970-1989 : Facts and Figures", 1990, p 228.

**TABLE 5.11**  
**THE VALUE OF SUBSIDIES PROVIDED**  
**BY MOFNE (SR MILLION)**

Years	Food Items & Fodder	Private Schools	Printing & Publishing	Total
1973	300	-	-	300
1974	750	-	5	755
1975	700	-	9	709
1976	600	10	10	620
1977	700	17	9	726
1978	800	36	10	846
1979	1,450	33	10	1,493
1980	3,000	105	10	3,115
1981	5,000	561	10	5,571
1982	4,150	347	10	4,507
1983	1,614	70	13	1,697
1984	2,633	109	13	2,755
1985	1,950	-	-	-
1986	1,863.9	-	-	-
1987	2,687	-	-	-
1988	693	-	-	-

Source :

MOFNE, "Government Subsidies and Loans During Fifteen Years 1972-1985", p 30.

MOP " Achievements of the Development Plans", 1990, p 229.

## CHAPTER SIX

### METHODOLOGICAL APPROACH FOR EVALUATING THE INCENTIVES POLICY IN SAUDI ARABIA

#### 6.1 Introduction

Chapter Three has provided us with a theoretical basis for analysing the influence which the incentive policies should have on private sector investment. The methods used by many studies to estimate the impact of fiscal policies on private investment provided us with a variety of choices to evaluate the incentive policies' effects in the case of Saudi Arabia. In a country like Saudi Arabia, the environment in which the analysis is to be carried out, however, is somewhat different from what we have seen in other studies. Examples of these differences include:

- the nature of the incentive programmes are different. While most of the studies concern mainly the tax incentives, incentive programmes in Saudi Arabia include, interest-free loans, different type of subsidies, and land grants;
- other than the income tax imposed on foreign companies' earnings, no tax system exists in Saudi Arabia;
- the main source of income in the country is oil, and it is exclusively owned by the government;
- the government expenditure backed by the oil revenues has a great impact on the economy;
- the government sector plays a significant and unique role in the Saudi economy;

Such specific characteristics of the Saudi case, in addition to others which are common between the developing countries such as the lack of accurate and reliable data, will determine the analysis framework of the study. Previously, we reviewed four methods utilised by many economists in analysing the impact of the incentive policies, and of these methods, three are going to be used in this study to analyse the impact of the incentive policies in Saudi Arabia on private sector activities. The methods to be used are, the accounting approach, field research method, and regression analysis method. While the main method is the field research approach, others are used to benefit from the advantages associated with them and to overcome any limitations of the main approach. However, the extent of utilising them, and the validity of their findings, are limited by the availability and accuracy of the data obtained.

The main analytical method of the study, as we said, is the field research approach. The questionnaire and interview techniques are the main tools of such research. The following section examines in detail the process of conducting that research.

## 6.2 The Questionnaire/Interview Approach

The Interview/Questionnaire technique, as we saw, has been used by many studies in evaluating the impact of incentive policies. It has some advantages over other methods. Of the most important is its ability to trace the impact of the incentive programmes directly from those businessmen who have benefited from the incentives. Where the number of beneficiaries is too large, as it is in our case, it would be difficult to question all of them and, therefore, a representative sample of those businessmen is usually chosen for that purpose.

Another reason for using such method is the lack of sufficient and accurate data about the Saudi private sector which would enable us to evaluate the programmes effectively. The available official data regarding the private sector is confusing, since some firms owned by the government are included as private sector units. Therefore, any analysis depending on such data will not yield an accurate results.

The questionnaire method is used by many researchers as a mean of obtaining primary data. Sellitz states that the questionnaire method might benefit a person who seeks information about what he knows or believes; or about explanations for any of these.<sup>1</sup> Mason and Bramble argue that the questionnaire has the advantage of increasing the volume of data collected, alongside the freedom provided to the respondents to express their own opinions.<sup>2</sup> The main justification and motivation for questionnaire studies, according to Lund, is their close observation of the real world which enables a person to feel the actual practice of businessmen, and avoid the mechanistic view of the world sometimes ascribed to the model-building approach, in addition to obtaining more statistical information.<sup>3</sup>

The questionnaire method, however, has its own limitations such as unrepresentative sample selection, inadequate sample size, low response rates, or failure to correctly weight the replies of individual respondents. A careful research practice in addition to a combination of authoritative sponsorship, persuasion and personal contact might help in avoiding these limitations.

The field research of this study was conducted in 1991 by

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<sup>1</sup> Sellitz, c. et al., 1959.

<sup>2</sup> Mason, e., & W. Bramble, 1978.

<sup>3</sup> Lund, P.J., 1976, p. 246.

the author, and contains two parts; a designed questionnaire directed to private units, and interviews with some businessmen and government officials working in the departments which offer the incentives. The following sections will discuss the procedures which have been followed for managing the field research.

#### **6.2.1 THE INTERVIEW**

The interview is used to know the opinion of businessmen, regardless of the eligibility of their investment for the incentives, concerning the incentives policy, government investment, and problems of the private sector. In addition, the attitudes of some officials regarding the applied incentives, and their views regarding the role the private sector should play in the economy, were the objectives of the interview.

A random sample of businessmen was selected, from the list of Riyadh Chamber of Commerce and Industry, to fill out a written interview designed by the researcher. A total of twenty three answers were received by the mail. The written interview (see Appendix A2) was designed as a questionnaire, and therefore it was analysed by using the Statistical Package for the Social Science (SPSS) computer programme.

Another thirteen businessmen were reached and interviewed personally by the researcher, in addition to five government officials. So, a total of forty one interviews were conducted during the field research work.

The valuable information which was obtained from these interviews is included in throughout the text.

#### **6.2.2 THE QUESTIONNAIRE SURVEY**

The objective of the questionnaire is to investigate in

more detail the view points of owners or managers of private establishments on the use of incentives as a means of support to the private sector. Their views and attitudes are used to help achieve the study's objective, which is to evaluate the role of the incentives policy in the development of the private sector.

#### **6.2.2.1 THE SAMPLING PROCEDURE**

The questionnaire survey was the main part of the field research study. The survey procedures included the following :

##### **A - The Definition of Population**

The questionnaire was directed to a specific population of the private sector which includes all operating private establishments eligible for the incentives offered by the government, but it is not necessary that they have benefited from any type of incentive. Private establishments which have more than 50 per cent of its shares owned by the government, or whose boarding members are assigned by the state, were excluded from the study.

##### **B - The location of Population**

Central Region was chosen as the study area for many reasons. First, the limited time and the high costs associated with doing the field research all over the country. Second, the private establishments are concentrated in three regions, namely: Central Region, Western Region, and Eastern Region. Their economic activities are similar, and it is normal to find the owners of some of them are the same. Third, most of the establishment have a branch or an office in Riyadh, the Capital, in the Central Region and therefore they have been chosen regardless of their investment location.

Fourth, the Central Region has the advantage that all different economic activities exist in it, with different degrees of concentration. The total productive licensed factories in the Central Region up to the end of 1988, was 777 or 38 per cent of the total factories in the country.<sup>4</sup>

#### C - Sampling Frame Used

The sample was selected from various recent lists published by the Ministry of Industry and Electricity, the Ministry of Agriculture and Water, the Ministry of Finance and National Economy, and Riyadh Chamber of Commerce and Industry. These lists include the main information such as the names, addresses, and telephone numbers, but have some limitations. The Ministry of Agriculture and Water's list, for instance, does not have all the agricultural establishments, particularly small farmers, in an organised manner. From these lists, the author has made a new list contain establishments located in the Central Region which their addresses were provided. They were rearranged alphabetically, and the new list had 3000 establishments working in different economic sectors.

#### D - Choosing the Sample

All the private establishments in the Central Region, which were eligible to obtain government incentives, were included in the list from which the sample was drawn from. The probability sampling method was used to select, by use of a stable, independent data generating process, the units. This involves picking a random starting point and then taking every Jth unit in the frame. Generally, J is obtained by the following,

$$J = N/n$$

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<sup>4</sup> MFNE, "The Statistical Indicator", 1988. p.80.



where  $N$  is the total number of the sample, and  $n$  is the desired sample size. Since the total number of our sample was 3000, and the desired sample size was 500,  $J$  was 6. We pointed a blind finger to the above mentioned list to choose the starting point, and the selection went down the list to take every  $J$ th name on the list. A sample of 500 private establishments was drawn, and based on the response rate of many similar studies, which was around 50 per cent, it was believed that a sample of 250 completed questionnaire would be sufficient to provide the required data.

#### 6.2.2.2 THE FIELD WORK

The questionnaire was administered by the author in Saudi Arabia, specifically the Central Region, in the period of April-July 1991. A total of five hundred questionnaires were sent out by mail with a stamped envelope addressed to the researcher. However, some of them were returned due to changes in the establishments' addresses which were not corrected in the official records. Therefore, they were handed by the researcher to the managers of these establishments.

Each questionnaire was enclosed with, a covering letter explaining the reason for the study and encouraging the recipients to fill out the questionnaire as promptly as possible; a letter from the Secretary of the University requesting them kindly to cooperate with the researcher and enhancing the importance of the study; and a letter from the Ministry of Industry and Electricity addressed to the industrial establishments allowing them to fill out the questionnaire since they have been instructed officially not to fill out any questionnaire without permission.

Because of difficulties in getting a response from the private sector units, particularly when there is no direct

benefit to be gained, it was necessary to make numerous visits and telephone calls before succeeding in encouraging a manager or owner to answer the questionnaire. Yet many establishments refused to answer the questionnaire, while others promised to answer, but the field trip was over before obtaining these answers. Some establishments promised to send out the answer to the researcher's address in Britain, but unfortunately only two answers were received.

The total completed answers received by the researcher reached a total of two hundred and twenty five questionnaires excluding the incomplete ones. So, the rate of response was 45 per cent of the total questionnaires sent out which is an accepted rate in such a survey. Although 55 per cent of the population did not respond, the collected data will be used as being a representative sample of the whole population of private units in the Central Regions as it is the common case between the researchers.

#### 6.2.2.3 THE PILOT STUDY

A pilot study should be done to test how long it takes the recipient to complete the questionnaire, to check that all questions and instructions are clear, and to enable the Author to remove any items which do not yield usable data.

After the initial questionnaire was formulated, and before starting the field work, a pilot survey was carried out on a limited number of private establishments to test their response to the questionnaire. This enabled us to identify the deficiencies of the questionnaire and hence make the necessary amendments to maximise the survey returns and minimise the error rate on answers.

A total of twenty private establishments' managers were contacted and were requested to fill out the designed questionnaire. Likewise, the researcher contacted three

university academics in the Economics Department of King Saud University in Riyadh, three others in the Education Department of the same University knowledgeable in questionnaire design, an economics professor in the Saudi Chambers of Commerce and Industry Board, and some businessmen.

As a result, modifications were made in terms of questionnaire contents and length, in an effort to enhance its function.

#### 6.2.2.4 THE QUESTIONNAIRE

The questionnaire which was in Arabic, the native language of the people of Saudi Arabia, contains thirty six questions with easy instructions to help the respondent to fill it out (see appendix A1). Most of the questions were closed-ended questions which are very popular since they provide a greater uniformity of response, more easily answered, and more easily coded and processed. Open-ended questions were included for two purposes: to give the respondent an opportunity to express himself, and to allow for elaborating some information provided.

The questionnaire was designed to provide three sorts of information. First, information about the establishment such as the location, type of activities, capital, investment volume, ownership, and labour. Nine questions were designed to obtain such information, which include question one to five and thirty two to thirty five. Second, information regarding some issues related to the activities of the establishment. The questions of this information are seven, twenty six to thirty one, and question number thirty six. Third, information related to the purpose of this study which aims to understand the establishments' views regarding the various incentive policies initiated by the government in order to develop the private sector. This type of information is the

main input used in this study to evaluate these incentives. The integration of these three types of information will enable us to investigate the concerned problem effectively.

Many returned questionnaires contained letters or notes which add more information, regarding the subject, than the one expected by the questionnaire. This information increases the extent of the analysis.

#### 6.2.2.5 THE ANALYSIS METHOD

The collected raw data has been transformed through using a coding process into a standardised quantitative form for the purpose of computer processing and analysis. The questions of the questionnaire were coded by assigning a numerical number to represent each variable. Then, the Statistical Package for Social Science (SPSS) was used to analyse the coded data.

The SPSS system is "a comprehensive tool for managing, analysing, and displaying information. It can take data from almost any type of file (or combine several files) and turn them into meaningful information: tabulated reports, plots of distributions, and results of a wide variety of statistical procedures. It brings together data management, report writing, and statistical analysis in one comprehensive system with a single language".<sup>5</sup>

Due to the nature and construction of the questionnaire, only descriptive statistical techniques such as frequencies, ratio and cross-tabulations, have been used in our study.

Chapter Eight is concerned with analysing the findings of the field survey in order to evaluate the incentive policies provided by the government to private sector units.

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<sup>5</sup> SPSS-X User's Guide, 1988, p.1.

### 6.3 The Regression Analysis

Regression analysis has the advantage of measuring, precisely, any statistical relationship between two variables. The validity of that statistical relationship in explaining economic phenomena depends on the accuracy in specifying the economic relationship between these two variables. In most of the cases of developing countries the availability and accuracy of the data utilised have been the main constraint in achieving very accurate results. Another constraint, but less binding, is the difficulty in identifying the theoretically correct specification.

Our case is no exception, and therefore, we do not attempt to build an econometric model for private sector investment in Saudi Arabia and estimate the impact of the incentive programmes on it. Rather it is more of an exploratory data analysis. Nevertheless, the results of this analysis may be useful in identifying the relationship between private sector investment and output, and government incentives to support the findings of the field research. Before we discuss the equations selected for the regression analysis, it is worth highlighting some points regarding the data.

The estimates are based on 18 annual observations covering the period 1971-1988. Another observation is used (1970) whenever a lagged variable is introduced into the equation. All figures are in nominal values, then deflated using the general price index. It is worth noting that there is no data at the disaggregated level for private sector activities, such as net private investment, but an annual macro data only. Moreover, the data about the incentives does not cover the whole mentioned period since most of them were introduced at different times.

Another problem which could affect the statistical

results of the estimates is the inaccuracy of data. In Saudi Arabia, different official bodies provide different figures (due to the statistical techniques applied) which makes it difficult to distinguish correlations representing a true economic relationship, from correlations arising through common statistical errors. Since little is known about the nature of errors in these series of data, and since there is a scarcity of data for some variables, some variables are not included which might create some problems.

The equations selected, that might be appropriate for analysing the impact of incentives policies on private sector activities in Saudi Arabia, taking into consideration the lack of data constraint, include private sector investment (PI), and private sector gross domestic product (PGDP). The latter will be disaggregated into its main components such as, agricultural sector gross domestic product (AGDP), industrial sector gross domestic product (IGDP), construction sector gross domestic product (CGDP), and trade sector gross domestic product (TGDP); as far as possible so as to trace the impact of the incentives on them.

First we test the relationship between government domestic expenditure (GE) and gross private sector investment (PI). In Saudi Arabia, where the government role in the economy is very significant, we expect the government expenditure to have a positive impact in stimulating private investment. Therefore, private investment will be regressed against private sector GDP, and government expenditure,

$$\text{LOG PI}_t = a_0 + a_1 \text{ LOG PGDP} + a_2 \text{ LOG GE}$$

Private sector investment is then formulated in accordance with the investment models of developing countries, mentioned previously, which emphasize the importance of the availability of investible funds and government investment.

However, the inclusion of explanatory variables is limited by the availability of data. So, the previous equation will be rewritten to trace the impact of elements such as government investment, government interest-free loans, and subsidies. The private investment then becomes,

$$\text{LOG PI}_t = a_0 + b_1 \text{ LOG LPI} - b_2 \text{ LOG OI} + b_3 \text{ LOG IG} + b_4 \text{ LOG PGS}_{t-1} + b_5 \text{ LOG PGL}$$

where LPI is the private investment lagged one year, OI represents government oil investment, IG is other government investment,  $\text{PGS}_{t-1}$  is government subsidies to the private sector lagged one year, and PGL is government's interest-free loans to the private sector. We use the PGS in a lagged term to reflect adjustment time needed for purchasing, installation, etc., of the subsidised input.

The signs of the coefficient for OI, could be negative for the oil sector reflecting the crowding out effects caused by the expansion in government investment in that sector. The crowding out effect of government investment in the oil sector is attributed to many reasons. First, the expansion of such investment reduces the opportunities for the private sector to invest in industries, which are characterised by their comparative advantages, and which have high potential profits compared to other industries. Second, the chance of government projects to achieve loans from commercial banks is very high, compared with the private sector projects. This limits the financial resources available to the private sector. Third, government expenditure on this investment decreases its expenditure on other activities and hence reduces the demand for the private sector goods and services. This is most true when we know that most of government investment is in joint-ventures with foreign partners.

On the other hand, the sign of the IG coefficient is

expected to be positive reflecting the complementally role of this type of government investment for the private sector investment. This type of investment is directed mainly toward building the infrastructure of the country, and utilises, mainly, the private sector services and goods.

The inclusion of subsidies is very important since they are provided to enhance the use of modern technology in the production process by reducing the price of capital goods. The results of the previous equation will show us the extent of the impact of government incentive policies on private sector investment.

A further regression will be carried out to test, specifically, the relationship between the gross private investment and both, the total subsidies, and the total interest-free loans, provided to the private sector.

The other equations will examine the impact of incentives on private gross domestic product, in general, and on gross domestic product of agricultural, industrial, and construction sectors, in particular. Because no data for other relevant variables affecting these GDPs such as, capital formation of each sub-sector, each sector's GDP will be regressed against its lagged one year GDP and the extended loans and subsidies.

Private sector GDP is regressed against its GDP lagged one year ( $PGDP_{t-1}$ ), and the extended loans and subsidies (PGLS) to test the relationship.

$$\text{LOG } PGDP_t = a_0 + b_1 \text{ LOG } PGDP_{t-1} + b_2 \text{ LOG } PGLS$$

Agricultural GDP is regressed against the agricultural sector GDP lagged one year and the total loans and subsidies (AGS) extended to the sector. More regressions will be done to test the association between agricultural GDP and the different forms of incentives, namely, agricultural subsidies lagged one year (LAS), agricultural loans (AL), wheat



subsidies (WP), and the land distributed free lagged one year (DL). The reason for having the lagged one year is the fact that a distributed land takes some time until it can be cultivated. So, the function is,

$$\text{LOG AGDP}_t = a_0 + b_1 \text{ LOG AGDP}_{t-1} + b_2 \text{ LOG AGS}$$

Industrial GDP is regressed against its GDP lagged one year, and the total loans and subsidies provided by the government (GILS). Then, each of the incentive will be regressed, separately, against the industrial GDP to investigate their relationship with it.

$$\text{LOG IGDP}_t = a_0 + b_1 \text{ LOG IGDP}_{t-1} + b_2 \text{ LOG GILS}$$

Construction GDP (CGDP) is tested by its lagged one year GDP, and total extended loans to the private sector.

$$\text{LOG CGDP}_t = a_0 + b_1 \text{ LOG CGDP}_{t-1} + b_2 \text{ LOG TEL}$$

## CHAPTER SEVEN

### THE SAUDI ARABIAN PRIVATE SECTOR : DEVELOPMENT AND ACTIVITIES

#### 7.1 Introduction

Before the discovery of oil in commercial quantities in 1938, the private sector was the main sector of the economy of Saudi Arabia. Its activities were concentrated mainly in the trade and agricultural sectors. Industrial activity was limited to handicraft industries such as weaving, dying and embroidery of cloth, mat and basket weaving, wood carving and leather working, etc. The addition of oil into the economic life of Saudi Arabia has changed the picture completely and created new structures in the economic sectors.

The setting-up of oil industries, in the Eastern Province of Saudi Arabia, carried the potential of introducing new technology, new forms of organisations, and various opportunities for local production of goods and services. However, for many reasons these developments have not brought about the optimum changes in the private sector position. First, the oil industries were concentrated in one part of a very large country which limited its positive impacts on other sectors of the economy. Second, the lack of adequate infrastructures has made the private sector development a difficult process. Third, the new promising oil sector has attracted many Saudis and this has affected negatively other economic sectors, particularly, agriculture. Therefore, the

government of Saudi Arabia has taken the responsibility of developing the economy, including the private sector.

Infrastructure investment in the early 1960s, in addition to the increase in government expenditures, and the betterment of the citizens' well-being, have induced some improvements in the performance of the private sector. Moreover, the transitions in the economy during the years in the wake of the huge flow of oil revenues have shaped, to a large extent, the activities of the private sector in Saudi Arabia. However, these transitions have largely diminished with the completion of many infrastructure facilities and the decrease in oil revenues. A new economic stage is taking place in Saudi Arabia which is characterised by the increased role of the private sector in the Saudi economy.

Previous chapters, Four and Five, discussed the government role in the economy and its efforts to encourage the private sector to participate in the economic development. In this chapter, continuous to these two previous chapters, we provide a general background about the private sector in Saudi Arabia in terms of its structure, growth, and its interaction with the government sector. This chapter is intended to be a descriptive and empirical analysis where, in addition to the background about the private sector, some regression analysis discussed before are carried out to test the relationship between government policies and the private sector activities. Moreover, some relevant results of the field research study will be incorporated in this chapter.

Our aim of carrying out the regression analysis is to support the findings of the field research survey. However, given the small sample of observation, the lack of detail information of some factors, and the low values of the coefficients of some of the explanatory variables, the results of the regression are to be taken cautiously.

## 7.2 The Growth of the Private Sector

Any study regarding the development of the private sector in Saudi Arabia cannot be complete if it does not take into account the interaction relationship between the government and the private sector. The heavy involvement of the government in the economy, both in terms of investment or other types of expenditure, has its impact on the activities of the private sector. The Saudi economy has experienced three distinctive economic cycles which have affected the private sector in different ways.

During the first period (1963-1972) which was characterised by stable oil prices and production, the domestic government expenditures on development programmes were constrained by many factors such as, the low generated income from oil resources, and the burdens of the Middle East crisis which forced the government to devote more financial resources for defence and for assisting front line Arab countries. During that period, the private sector activities were not that significant due to a host of factors, including the lack of a basic physical infrastructure, the absence of adequate financial sources, lack of industrial knowledge and of guidelines to direct entrepreneurs toward potential projects.

As Table 7.1 shows, the private sector GDP in 1963 was SR 3.108 billion, accounting for only 36 per cent of the total GDP. In 1964, it increased to SR 3.875 billion, and in 1972 it reached its maximum of SR 9.459 during that period. However, the share of the private GDP in total GDP reached its maximum in 1964, accounting for 38 per cent, while the share in 1972 was 23 per cent which was the minimum level during that period. The reason for this was the rapid increase in the government sector's GDP compared with the increase in the private sector's GDP. The average growth rate of the private

sector GDP during that period was 7.9 per cent compared with 19.7 per cent for the oil sector GDP.

The private sector share in gross capital formation of the country, during that period, reached its maximum of 41.9 per cent with a total value of SR 904 million in 1966 as can be seen from Table 7.1. However, the maximum in value term, during that period, was reached in 1972 where the private sector gross capital formation was SR 1.669 billion, accounting for 29.3 per cent of the total gross capital formation. The decrease in its share despite the increase in its value is attributed to the increase in the government gross capital formation both in oil and non-oil sectors.

The second period (1973-1981) have witnessed many changes in the Saudi Arabian economy. These changes stemmed mainly from the sharp rise in oil prices in late 1973, and the beginning of the development planning era in the country in 1970. The growth rate of the oil GDP in money terms rose by 188 per cent in 1974 (from SR 29.1 billion in 1973, to SR 83.9 billion in 1974). Similar conditions occurred in 1980 (second oil boom) when the growth rate of oil GDP increased by 75.5 per cent (from SR 142.9 billion in 1979, to SR 250.8 billion in 1980). The private sector GDP growth rate, on the other hand, rose by only 37 per cent in 1974 (from SR 10.9 billion in 1973, to SR 15 billion in 1974), and by 26.5 per cent in 1980 (from SR 107 billion in 1979, to SR 135 billion in 1980).

During the period 1975-79, government investment was largely concentrated in the construction of the various infrastructure projects. The Saudi private sector was neither prepared nor capable to meet the internal demand for either supplies or labour. The problem has been compounded by strong private demand for construction services (supplies and labour). In general, the sudden increase in oil revenues did not immediately affect the growth of the other sectors by the same magnitude as occurred in the oil sector, though it did

contribute to the accelerated growth of these sectors. It was during this second period, 1973-1981, that the economy took full advantage of the growth in the oil sector. The huge oil revenues accumulated by the government during this period enabled a greater emphasis on development. The improved management of the economy through economic planning and government expenditures on development programmes led to a dramatic growth in the private sector. Most of these development programmes were directed to build an adequate infrastructure in the country.

The private sector responded positively to these changes, took advantage of the opportunities provided by the government and participated in the construction of the infrastructure projects and in meeting the new increased demand caused by the government expenditures. The private sector GDP rose from SR 10.9 billion accounting for 27.3 per cent of the total GDP at the beginning of this period (1973), to its maximum by the end of the period in 1981 with a total of SR 157.2 billion which constitutes 29.7 per cent of the total GDP (see Table 7.1). Its contribution to the gross domestic capital formation (GDCF) rose from SR 2.1 billion, or 29.2 per cent in 1973, to SR 34.4 billion or 28.6 per cent of the total in 1981. The average annual rate of growth for private sector GDP during this period, in real terms, was 13.7 per cent.

The third period (1982-1991) was characterised by sharp fluctuations in oil prices and in government expenditures. Three main events happened in that period which affected the economy of Saudi Arabia. The first was the Gulf War between Iraq and Iran. Although the war started at the end of the previous period, the Saudi involvement in supporting Iraq against Iran started in heavy term within this period. That assistance resulted in diverting some financial resources from boosting domestic growth. It has been estimated that the Gulf States paid up to \$25 billion in financing Iraq in the war

against Iran during the period 1979-1986.<sup>1</sup> Another side of the Gulf War is the negative impact it had on the trade activity going through the Gulf which witnessed a decline in its volume and an increase in its costs.

The second event was the decline in oil prices and, in turn, in the main source of income of the country, oil revenues. Although the decline in oil prices started in 1982, the sharpest reduction was in 1986 when prices declined from as high as \$28 a barrel in January 1986 to a low of \$8 in the middle of the year.<sup>2</sup> The prices improved in the following years to reach \$20 in 1989.<sup>3</sup> The country's oil production dropped from 9.9 million barrels a day in 1980, to 3.17 million barrels a day in 1985, and the oil revenues dropped by 87 per cent, from as high as \$102 billion in 1981 to as low as \$13 billion in 1986.<sup>4</sup> As a result, government expenditures dropped from SR 283 billion in 1981 to SR 137 billion in 1986. The government argues that the reduction occurred not only due to the decline in oil revenues, but more importantly because of the completion of major infrastructure projects.

The third event is the Iraqi invasion of Kuwait in August 1990 and its consequences. The government commitments during that crisis and thenceforth, in addition to the other effects resulting from it such as the instability in the region, the increase in defence expenditures (the defence expenditures in the 1992 budget amounts to over SR 54 billion or 30% of the total) have continued to affect the economy.

While the second period witnessed an explosive expansion

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<sup>1</sup> Reed, S., 1986.

<sup>2</sup> MEED, June 1987.

<sup>3</sup> SAMA, "Statistical Summary", 1989, p. 43.

<sup>4</sup> Ibid., pp.102-3

in the economy, the third period was characterised by a shrinking economy after the oil glut materialised in 1981. The government has decreased its overall spending only slightly, but has trimmed development projects sharply. Since most of the private sector activities during the second period were related strongly to development projects, the new circumstances in the third period affected them badly. However, the private sector backed by its huge reserves abroad recovered quickly and therefore its GDP has not shown a dramatic change. It is estimated that the private sector returned during the period 1982-1988 SR 63 billion which accounts for 26 per cent of its reserve abroad.<sup>5</sup>

As Table 7.1 shows, the private GDP at the beginning of this period in 1982 reached SR 116 billion compared with SR 100 billion the previous year. It continued to increase until it reached SR 131 billion in 1986, then decreased to SR 122 billion in 1987. The share of the private GDP in total GDP indicates that it increased from 25 per cent in 1982 to 42 per cent in 1985 and to 46 per cent in 1986. In real terms, the private sector's share in the total GDP reached 55.1 per cent in 1986 compared with 32.5 per cent in 1978.<sup>6</sup> However, this high share of the private GDP in total GDP reflects, in addition to the growth of the private sector, the decline in the oil sector contribution to total GDP. The real gross domestic product in 1978 was SR 42 billion, with the oil sector GDP share accounting for 51.5 per cent. In 1986, the real GDP was SR 41 billion, and the oil sector GDP share was 22.5 per cent. On the other hand, the average annual rate of growth for private sector GDP during the years 1982-87 of the third period, in real terms, was only 3.05 per cent.

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<sup>5</sup> SAMA, "Annual Report 1407/08", pp.81-8.

<sup>6</sup> MOFNE, No. 173, June 1987, p.9.



The contribution of the private sector to the gross capital formation registered some increase at the beginning of the third period where it amounted to SR 36 billion in 1982, or 37 per cent of the total GDCF. That increased to SR 41 billion in 1984, constituting 42 per cent of the total GDCF in that year. In 1987 it decreased to SR 30 billion while the share in the total GDCF increased to 46 per cent reflecting to some extent the decrease in the oil sector share in the total GDCF that year.

#### 7.2.1 THE ROLE OF GOVERNMENT EXPENDITURES

As we said earlier, government expenditures play an important role in the development of the Saudi economy, in general, and in the private sector in particular. Clearly post 1973 the increase in government revenues and expenditures have been a major stimulating factor in the development of the private sector. The transfer of public revenues to the private sector occurred through a direct and indirect mechanism. "Development is a public sector responsibility ... in the sense that the ownership and operation of most of the newly created assets continued to be controlled by the central or local government. In most sectors, government agencies manage the spending of public funds, while implementation of the government's expenditure programme is actually undertaken by the private sector. The activities of the private sector are, therefore, closely linked to the scale and scope of government expenditures."<sup>7</sup>

As we know from Chapter Four, government investment in the domestic economy has been of two types: investment in social overhead capital, and investment in directly productive activities. While the former covers infrastructure and human

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<sup>7</sup> MOP, "Third Development Plan", p.32.

resources development, the latter covers direct investment through state-enterprises in the petroleum industry, such as in refining and hydrocarbon projects, or through public corporations in agro-industry and other industrial projects outside of or in conjunction with the private sector.

To find out how these expenditures have affected the private sector activities, we carried out a time series regression analysis to evaluate the impact of government expenditures on private sector GDP. The real value of private sector GDP (PGDP) in time t, therefore, was regressed against the real private GDP lagged one year (LPGDP), and the real government expenditures in time t using a log function. An annual time-series data for 1970-1988 at constant prices were used. Using the Ordinary Least Square (OLS), the following result was obtained :

$$\log \text{PGDP} = 0.48 + 0.86 \log \text{LPGDP} + 0.095 \log \text{GE}$$

(5.19)            (68.45)            (8.97)

$$\bar{R}^2 = .99 \quad \text{D.H} \quad 0.1004 \quad F = 6914.9 \quad \text{S.E} = .017$$

The result shows that 99 per cent (as indicated by adjusted  $\bar{R}^2$ ) of the variations in the private sector GDP are explained by the private sector GDP lagged one year and government expenditure. The t-statistics (the figures between parenthesis) for the two variables are highly significant. Because we have lagged the dependent variable, the traditional D-W test is known to be biased, thus, we used the unbiased D-H test which shows the absence of auto-correlation. Moreover, the F statistics, which measure the significance of overall regression, and the standard error of estimation (S.E) validate this functional relationship. According to this result, there is a positive and strong relationship between government expenditures and the private sector GDP. The coefficient shows that a one per cent increase in government

expenditures leads to an increase of 9.5 per cent in the value of private sector GDP.

To obtain a close look at the impact of government expenditures on the private GDP, we carried out the analysis at a sub-sector level where we tested the relationship between government expenditures and the GDPs of agricultural, industrial, trade, and construction sub-sectors of the private sector. In all equations, the sub-sector real GDP is regressed against its value lagged one year and the government expenditures in real terms. The estimated results of these regressions are as follows:

$$1- \log \text{AGDP} = -1.6 + 1.09 \log \text{LAGDP} + 0.07 \log \text{GE}$$

$$\begin{array}{ccc} (-1.5) & (12.5) & (1.2) \end{array}$$

$$\bar{R}^2 = 0.90 \quad D-H \ 1.99 \quad F= 97.1 \quad S.E = 0.15$$

$$2- \log \text{AGDP} = -3.6 + 1.11 \log \text{LAGDP} + 0.23 \log \text{GE}$$

$$\begin{array}{ccc} (-2.9) & (13.7) & (2.3) \end{array}$$

$$\bar{R}^2 = 0.94 \quad D-H \ -0.88 \quad F= 49.5 \quad S.E = 0.13$$

$$3- \log \text{IGDP} = -0.028 + 0.92 \log \text{LIGDP} + 0.07 \log \text{GE}$$

$$\begin{array}{ccc} (-0.13) & (37.0) & (2.7) \end{array}$$

$$\bar{R}^2 = 0.99 \quad D-H \ 0.63 \quad F= 1494.5 \quad S.E = 0.04$$

$$4- \log \text{TGDP} = 0.22 + 0.84 \log \text{LTGDP} + 0.11 \log \text{GE}$$

$$\begin{array}{ccc} (1.23) & (32.6) & (4.6) \end{array}$$

$$\bar{R}^2 = 0.99 \quad D-H \ 1.2 \quad F= 1838.5 \quad S.E = 0.04$$

$$5- \log \text{CGDP} = -3.6 + 0.47 \log \text{LCGDP} + 0.76 \log \text{GE}$$

$$\begin{array}{ccc} (-6.9) & (9.7) & (9.9) \end{array}$$

$$\bar{R}^2 = 0.98 \quad D-H \ 0.04 \quad F= 1119.0 \quad S.E = 0.08$$

In equation (1) which tests the association between the agricultural sector GDP with government expenditures, the

value of D-H suggest an auto-correlation among the residuals of the equation and that makes the value of  $R^2$  to be overstated. Hence, the Cochrane-Orcutt Method was used to overcome the auto-correlation, and the new results are shown in equation (2). The new value of D-H indicates the absence of auto-correlation, and the F statistics is highly significant. More than 94 per cent of the variations in the agricultural GDP is explained by the independent variables (agricultural GDP lagged one year and government expenditures). The relationship between government expenditures and the agricultural GDP was positive and statistically significant at 5 per cent level of confidence as indicated by the t-statistics of the coefficient. An increase of one per cent in government expenditures results in an increase of 23 per cent in the agricultural GDP.

Equation (3) shows that 99 per cent of the changes in industrial GDP are explained by the industrial GDP lagged one year and government expenditures. The coefficient of government expenditures was positive and significant at both 5 per cent and one per cent levels of confidence. The D-H test indicates the absence of serial correlation. The response of the industrial GDP to one percent change in government expenditures was estimated to be 7 per cent.

The trade sector, which represents the hotels, restaurants, and retail and wholesale trades, has responded positively to the government expenditures. The significant relationship between the two is indicated by the high t-statistics of the coefficient. A change of one per cent in government expenditures results in a change of 11 per cent in the trade sector GDP. The validity of that result is indicated by D-H test, F statistics, and t tests, which are all significant. The adjusted  $R^2$  shows that 99 per cent of the variations in trade sector GDP is explained by the lagged one year values and the government expenditures.

The results of equation (5) show that there is a significant relationship between government expenditures and the construction sector GDP. Because most of the huge government expenditures in the 1970s were directed towards building the infrastructure of the country, the construction sector has benefited, as expected, more than any other sector from these circumstances.

According to the results of equation (5), a one per cent change in government expenditures leads to an increase in the construction sector GDP of 76 per cent. This result is highly valid since the coefficient t statistics of the variables are statistically significant, the D-H test shows the absence of auto-correlation, and the F statistics are very high. The lagged variable plus government expenditures explain 98 per cent of the total variations in the construction GDP as indicated by the adjusted  $R^2$ .

The results discussed support the hypothesis that government involvement in the economy has affected, generally, the private sector activities positively. All main sub-sectors of the private sector in Saudi Arabia have benefited from government expenditures in one way or another. That is a normal result since these government expenditures were directed toward building the country's infrastructure facilities in its broad definition. The important questions to be investigated is the form of relationship between the two sectors in the future where the government expenditures are going to be either small or directed toward investments other than the infrastructure.

If there is enough information regarding the investment values of each sub-sector of the private sector, the regression analysis will be more significant in analysing the relationship between private investment and government expenditures. Unfortunately, obtaining this information is a difficult task. Instead, therefore, we will analyse the

impact of government expenditures on the private sector gross domestic capital formation only.

From our previous analysis it was clear that the private sector gross domestic capital formation has also witnessed an improvement in its values, and in its shares in the total capital formation of the country. Government expenditures in Saudi Arabia have induced improvements in infrastructure, an increase in general demand in the economy, and the existence of new investment opportunities in the economy. These effects certainly stimulate private sector investment. To test, empirically, the relationship between private investment and the government expenditures, we regressed the real value of the private investment (PI) against the real private sector GDP and the real government expenditures for the period 1970 to 1988. The inclusion of the GDP in the equation is consistent with the accelerator theory of investment discussed in Chapter Three. Applying the OLS technique method, the following statistical result was estimated:

$$\begin{array}{l} \log \text{PI} = - 3.42 + 0.69 \log \text{PGDP} + 0.48 \log \text{GE} \\ \quad \quad \quad (- 7.6) \quad \quad (9.24) \quad \quad (8.40) \\ \bar{R}^2 = 0.98 \quad \quad \text{D-W } 1.30 \quad \quad \text{F} = 498.7 \quad \quad \text{S.E} = 0.088 \end{array}$$

The low value of D-W suggests an auto-correlation among the residuals of the equation causing the value of  $\bar{R}^2$  to be overstated. Therefore, an auto-correlation test using the Cochrane-Orcutt Method was used which gave the following result:

$$\begin{array}{l} \log \text{PI} = - 3.66 + 0.70 \log \text{PGDP} + 0.48 \log \text{GE} \\ \quad \quad \quad (- 5.03) \quad \quad (7.04) \quad \quad (5.95) \\ \bar{R}^2 = 0.98 \quad \quad \text{D-W } 1.84 \quad \quad \text{F} = 280.3 \quad \quad \text{S.E} = 0.088 \end{array}$$

The test improved the D-W while F statistics declined but

is still significant. The t-statistics for both variables are significant at all levels. The D-W indicates the absence of auto-correlation among the residuals. The relationship shows that 98 per cent of the variations in the private investment are explained by the private sector GDP and government expenditures. In support of previous results, the estimation here shows a positive and significant association between government expenditures and private investment. An increase in government expenditure by one per cent will lead to an increase of 0.48 per cent in private investment.

### 7.2.2 THE ROLE OF GOVERNMENT INCENTIVES

It can be said that the growth and development of the private sector during the previous period was related significantly to government activities in the economy. Previous results showed clearly how important was, for example, government expenditures in affecting the private sector gross domestic product and investment. Since part of these expenditures is in the form of loans and subsidies, and have been directed, specifically, toward enhancing the growth and development of the private sector, it is very important to find out their particular effects on the performance of the privates sector in previous periods.

The association between the loans and subsidies, and the development of the private sector will be measured through regressing the private sector GDP (PGDP), and the private sector gross investment (PI), against these two types of incentives. All values are in real terms, and the functions are in log form. The private gross domestic product (PGDP) is regressed against, its value lagged one year (LPGDP), and the total government loans and subsidies (PGLS) provided by the government. Using the Ordinary Least Square Method (OLSQ), the regression analysis results are:

$$\log \text{PGDP} = 1.2 + 0.87 \log \text{LPGDP} + 0.02 \log \text{PGLS}$$

(7.3)            (46.6)            (5.5)

$$\bar{R}^2 = 0.99 \quad \text{D-H } 0.61 \quad F = 3313.2 \quad \text{S.E.} = .025$$

The result, as we expected, shows the significant relationship between the incentives provided by the government (loans and subsidies), and the private sector GDP. The independent variables explain 99 per cent of the variations in the private sector GDP, as indicated by  $R^2$  statistics. Other statistical tests such as F, and t statistics are highly significant and validate that result. The Durbin-H test indicates the absence of auto-correlation among the residuals. So, we can conclude that government incentives have been one of the main factors in stimulating the growth of private sector GDP in the period 1970-1988. We will test, specifically, the relationship between the incentives and the sub-sectors of the private sector when we review their activities later in this chapter.

Now we will be more specific, and evaluate the impact of these incentives on private sector gross investment. The private investment equation is a function of its value lagged one year (LPI), the investable fund provided by the government through interest-free loans (PGL), government investment in the oil sector (OI), government investment other than oil (GI), and the total subsidies provided by the government to the sector (PGS). The regression analysis was made using (OLSQ) and the result is as follows:

$$\log \text{PI} = 3.7 + 0.50 \log \text{LPI} + 0.01 \log \text{GI} - 0.1 \log \text{OI}$$

(3.9)            (6.85)            (0.15)            (0.99)

$$+ 0.11 \log \text{PGL} + 0.12 \log \text{LPGS}$$

(3.3)            (3.8)

$$\bar{R}^2 = 0.99 \quad \text{D-H } 0.11 \quad F = 337.3 \quad \text{S.E.} = 0.062$$



The  $R^2$  statistics show that 99 per cent of the variations in the private sector gross investment is explained by the independent variables. The Durbin-H test indicates the absence of any auto-correlation in the equation, while other tests are significant.

The loans provided by the government have a significant impact on private investment, as indicated by the t statistics, and a one per cent change in the loans' values induces a change in private investment of 11 per cent. Also, the subsidies supplied by the government have a significant impact on private investment. So, the government incentives have stimulated the investment of the private sector. In contrast, the impact of government investment on private investment was insignificant, as indicated by the low values of t statistics, although the signs have taken the expected forms.

In previous test it was found that the government expenditure has a significant impact on private investment. Moreover, we said before that a large part of the expenditure was spent on development projects, which means that the private investment in turn should have been affected significantly by these expenditure. However, the finding here suggest the opposite which lead us to suspect that the official data regarding the government investment either does not reflect the precise figures, or does not include all government expenditure on investment.

In respect of government investment, it is worth noting the businessmen's answers regarding this subject. Of the 23 businessmen who answered our written interview, 18 or more than 78 per cent, agreed (10 agreed strongly) that the national economy could accommodate both private and government investment. Only 4 businessmen, or around 17 per cent, stated that the economy does not have the ability to accommodate both.

Moreover, 13 businessmen, 56.5 per cent, agreed that government investment is concentrated on activities beyond the capability of the private sector. These mostly include oil-related industries such as petrochemicals. However, 8 businessmen, 35 per cent, disagreed with this view. But the majority, 83 per cent, agreed that government investment has created many investment opportunities for the private sector. Additionally, 21 businessmen, more than 90 per cent, agreed that current private investment does not match, and reflect, the real capabilities of the private sector.

### **7.3 The Structure of the Private Sector**

Having reviewed the private sector growth during the past three decades, and its relationship with government expenditures, we turn now to the three main sub-sectors of the private sector in Saudi Arabia. These are the agricultural, industrial, and construction sectors. We will review the performance of each sector, its activities, and the impact of government policies on it. We chose these sectors, specifically, because they have the potential for achieving diversification of the economic base of the country, particularly the agricultural and industrial sectors. Moreover, these sectors have been of most concern to the government during the previous periods. Although the trade and service sectors are very important and play a significant role in the economy, we limit our interest to the producing private sectors since they are related to the aim of our study.

### 7.3.1 AGRICULTURAL SECTOR<sup>8</sup>

The sector most affected by the discovery of oil in Saudi Arabia has been agriculture. Before oil, this was the major sector of the economy both in terms of employment and income. Yet, that importance can be attributed, mainly, to the status of the economy at that time which was poor and backward. The development of oil resources, which increased the country's wealth and improved the per capita income, resulted in a decline in the importance of the agricultural sector. In addition, the arid nature of the country which is characterised by harsh climatic conditions, scarcity of water, difficult terrain, and sand encroachment, imposed severe constraints on the practice and development of agriculture.

These considerations, therefore, caused a decline in the role of the agricultural sector in the Saudi economy. The sector's total employment dropped from 46.2 per cent of the total labour force in 1967, to 20 per cent in 1984, and to 9.9 per cent in 1990, as stated by the Fifth Development Plan. Although the reduction could be attributed, to some extent, to the adoption of new technologies in production practices, which reduced the number of workers required, it does indicate the decline in the sector's contribution to the economy. This fact is reflected in the extent of the sector's contribution to the gross domestic product of the country. As Table 7.2 shows, the total agricultural GDP (AGDP) in 1963 amounted to SR 782 million, or 9 per cent of the total GDP and 22 per cent of total non-oil GDP. In 1987, the volume of AGDP increased to SR 18,312 million, but its share to the total GDP decreased to 6.7 per cent, and to the total non-oil GDP to 9 per cent.

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Sources:

- MOP, "Development Plans" -SAMA "Annual Reports".
- SAAB "Annual Reports". - MOA's issues
- MOP, "Achievements of Development Plans".

In fact, the 6.7 per cent share of the AGDP in the total GDP reflects an improvement in the performance of the sector. In 1977, the share of the AGDP was only 0.9 per cent of the total GDP, and continued at less than two per cent until 1983. In 1984 the share increased to 3.3, increasing to 8 per cent in 1990, or SR 22.8 billion. The sector has experienced rapid growth over recent years, by almost 14 per cent per year during the period 1985 to 1990. The total capital investment of the sector, according to the Fifth Plan, was SR 2.5 billion, or 4.3 per cent of the total in 1990.

There are two main reasons behind the improvement in the performance of the agricultural sector in the late 1970s and during the 1980s. The first is the advancement in agricultural infrastructure. The second is the various incentives provided by the government such as interest-free loans, subsidies, and free distributed lands, which we reviewed in detail in Chapter Five. These two factors represent a direct and indirect government incentives which reflect the strong belief the policy makers in Saudi Arabia have in the ability of the sector for: making a substantial contribution towards the diversification of the economy, providing employment to the rural population and, above all, lowering dependence on foreign supplies for such a vital commodity as food. The next section will discuss in detail the main activities of the sector and the role of the government incentives in their development quantitatively and qualitatively. Before that we review briefly the general characteristics of agriculture in Saudi Arabia.

#### **7.3.1.1 THE GENERAL CHARACTERISTICS OF AGRICULTURE**

Saudi Arabia is one of the largest and most arid countries in the Middle East covering an area of 2.240 million sq. km. (888 thousand sq. miles). This vast land has no

rivers or large bodies of water. Rainfall averages 2 to 4 inches annually, except in the southern part of the country where it averages 12 to 30 inches. The population was estimated to be 14.9 million in 1990 including working foreigners.

Of the total area of the country (224 million hectares), only 2 per cent, or 4.5 million hectares, is considered arable and of that per cent there are 1.78 million hectares under cultivation. The majority of these cultivated areas, around 64 per cent, are in the Central Region of the country (Riyadh and Qassim). In 1987, around 53 per cent of the cultivated area was used to produce wheat.

The land distributed under the "Land Distribution Ordinance" had reached 1,241 thousand hectares by 1988, almost 70 per cent of this owned by agricultural projects and companies. The Saudi Arabian Agricultural Bank (SAAB) plays an important role in reclaiming this land and improving its productivity. By 1988, more than 416 thousand hectares were serviced by loans and subsidies provided through the Bank.

The major agricultural areas in the country are: the Taif area in the Western Region, the Asir and Jizan area in the Southern Region, the Qassim and Riyadh area in the central Region, the Tabouk and Aljouf area in the Northern Region, and the Alahssa and Alqateef area in the Eastern Region. While the Asir area receives a reasonable amount of rain, other areas, particularly Qassim, Riyadh, Alahssa and Alqateef, depend on non-renewable underground water resources. The 64 per cent cultivated area in the Central Region depends completely on underground water resources. In addition, the more than 50 per cent cultivated area under wheat production is mostly in the Central Region. 90 per cent of water consumption is by the agricultural sector, providing more than 80 per cent of its water requirements. Water scarcity represents the most limiting constraint on agricultural

expansion in Saudi Arabia. Thus, extensive use of these scarce water resources, particularly of non-renewable underground water, will create a serious problem in the future calls for a re-thinking of the country's agricultural policies and strategies.

In response to the increasing water problem, the government has developed some other sources to increase the water supply. Desalinated water has become an important means of satisfying the increasing demand for drinking water in cities. Another source is sewage water, which is used for irrigation after chemical and biological treatment. However, the most important issue is to limit the consumption of water by the sector through imposing a very strict policy regarding rational use of water resources by farmers.

Agriculture in Saudi Arabia is carried out by traditional farms, agricultural companies, and specialized projects. Traditional farms are characterised by their small size, ranging from 0.3 to 5.0 hectares. The size of the farms is a major obstacle in the use of mechanisation. Moreover, most of these farms are planted with palm-trees that prevent an efficient utilisation of the land and modern techniques. Therefore, most of them have been extended through cultivating the attached lands which have been obtained freely from the government.

The specialised projects include: livestock raising projects, dairy projects, poultry projects, greenhouses, and others. They have become major elements in the agricultural sector brought about by the expansion in incentives provided by the government. These projects financed by the government number 1792, with extended loans reaching SR 5.6 billion. Some of these projects are run by agricultural companies.

The government has also supported the extensive use of mechanisation and improved methods of production in agriculture. The total number of agricultural machines

financed by SAAB until 1984 was 173,442. For 1988 and 1989, it was 9,671 and 10,217 respectively. These machines include ploughs and ploughing machines, shovels, prong openers, trailers, levelling coulters, etc. The number of engines and pumps by 1984 was 145,681 and 116,984 respectively. In 1989 the number was 2,741 and 2,791 respectively. The loans and subsidies provided by SAAB alone reached SR 24 billion and SR 9 billion respectively by 1990 (Chapter Five has more details.)

The extensive use of machinery in agricultural activities has reduced significantly the labour shortage problem in the agricultural sector. The majority of the labour force are foreigners. According to our field research findings, 53 per cent of the 98 respondents, who represent the agricultural sample, stated that the majority of their workers are non-Saudis. On the other hand, 43 per cent of them employ an almost equal number of Saudis and non-Saudis.

The question to be asked is what is the role of these loans and subsidies in developing the agricultural sector in Saudi Arabia? The rapid increase in many agricultural products after the introduction of incentives might provide the answer to that question.

#### **7.3.1.2 AGRICULTURAL PRODUCTION AND THE INCENTIVES**

Government support of the agricultural sector started in 1962, but the late 1970s witnessed the most extensive use of a wide range of incentives. The response of the agricultural sector to such incentives appeared clearly in the increased production of many agricultural products in the 1980s, as shown by Table 7.3. In fact, certain agricultural commodities, such as wheat, eggs, dairy products, poultry, vegetables and some fruits, showed a remarkable increases.

## WHEAT :

In 1970 the wheat production of Saudi Arabia was 26 thousand tons. In 1975, this increased to 123 thousand tons. As part of its drive toward food self-sufficiency and security, the government encouraged the production of wheat to such an extent that farmers had little incentive to grow other cereals. As discussed in Chapter Five, the wheat produced by local farmers is bought by the government at very generous prices, in addition to the farmers sharing other agricultural incentives provided by the government.

The impact of these incentives can be seen clearly from the jump in wheat production in the years following the introduction of the incentives. In 1979, the annual growth rate of wheat production by specialised projects was 500 per cent. In 1984, wheat production reached 1,360 thousand tons, and by 1988 had increased to 3,160 thousand tons. Wheat production rose at an annual average rate of 30.1 per cent during the period 1970-88, the country exceeding a fully-sufficient position in wheat. As Table 7.4 shows, there was a large wheat surplus in 1987 which caused problems in storing and disposing of it. The surplus in 1988/89 was estimated to be 2.5 million tons. This large wheat surplus is expected to remain in the coming years. The expected local demand for wheat production for 1995 is 1,291 thousand tons.

Storing and disposing of the surplus wheat output are not the only problems brought about by the expansion in wheat production. Shortages in local production of other cereals, such as barley and corn, stemmed mainly from the concentration on wheat production. As Table 7.4 shows, imported barley for animal feed reached 4.9 million tons in 1987/88, while local production was 162 thousand tons, meeting only 3.2 per cent of the local consumption. Importing barley as an animal feed is supported by the government. Also, barley is bought by the government at supported prices in order to increase the number



of participants involved in its production.

#### **VEGETABLES and FRUITS**

The government was keen to increase the country's fruit and vegetable production to appropriate levels. Hence, through incentives programmes, it has subsidised the production of many types of vegetables and fruits. Table 7.3 shows that over a ten-year period, the production of vegetables almost doubled. In 1972, production was 653 thousand tons, and by 1982 it reached 1,292 thousand tons. It continued to increase, reaching 1,987 thousand tons in 1988. More than 50 per cent of the country's vegetable needs is met by domestic production. Table 7.4 shows that the production of tomatoes, okra, Cucumber and Courgette, and Aubergine, meet 76.3%, 89.2%, 88%, and 89% of the country's needs respectively.

In case of fruits, production increased from 307 thousand tons in 1970 to 792 thousand tons in 1988, as shown in Table 7.3. While there was a surplus in production of dates, and around 87 per cent rate of self sufficiency in grape production, citrus production was still far behind the self sufficiency level. Although there are 9 million palm trees in the country, date production is still below the potential for that product. Improving the quality of palm-tree farms, and enhancing the agro-industry of this commodity will make Saudi Arabia an important exporter of dates and their by-products. The country exported 26 thousand tons of dates by the end of the Fourth Plan.

Other important products in which the country has achieved self-sufficiency and has the potential to export in commercial quantities, are melon and watermelon. While the production of these two commodities was 1,276 tons in 1971, it dropped to 554 thousand tons in 1988. However, that figure meet, approximately, the country's demand for this product.

## LIVESTOCK

The livestock population of Saudi Arabia comprises 7.4 million sheep, 3.3 million goats, 0.216 million cows, and 0.405 million camels. The principal livestock products are hides, wool, and dairy produce, and it is the dairy sector which is the most dynamic in the livestock industry. In 1970, domestic production of milk was 156 thousand tons, and this increased to 498 thousand tons in 1988 which resulted in self-sufficiency in fresh milk. However, the increased demand for dairy products such as cheese, butter, milk powder etc., which is met by imports, emphasizes the importance of diversifying the current patterns of dairy production. In 1987, 593 thousand tons of dairy products were imported while domestic production was 403 thousand tons, meeting 68 per cent of the local demand for such products.

Specialised farms produced 208 thousand tons of milk in 1988, compared with 2 thousand tons in 1975. There were 500 cows on these farms in 1975, and 40,259 in 1988. It is believed that the country has the largest number of dairy farms in the Middle East. The efficiency of these farms is impressive, the average annual milk yield is almost 7 thousand litres per cow.

## POULTRY

This sector is one of the major successes in Saudi Arabia's agricultural development. In 1970, 5 thousand tons of eggs and 7 thousand tons of poultry meats were produced in the country. By 1975, eggs and poultry meat production had increased to three times that figure at 16 thousand tons and 21 thousand tons respectively.

By 1980 Saudi Arabia was a self-sufficient in egg production, while ten years before eggs were entirely an imported commodity. In 1986, egg production reached 137 thousand tons, registering a high surplus, which led to a

substantial decrease in production to 103 thousand tons in 1988.

Poultry production has the potential of meeting completely the demand of domestic production. However, fierce competition of foreign products, particularly from France and Brazil, have driven many local producers out of the market. The 1988 production, which met more than 53 per cent of the domestic demand, amounted to 266 thousand tons.

The different incentives provided by the government such as free land, subsidies, and loans, have no doubt played an important role in development of the agricultural sector. The previous regression analysis indicate the significant relationship between private GDP, private investment, and incentives. To evaluate the role of these incentives on the development of this sector, we carried out some time series regression analysis, using annual data in real terms, to test the association between agricultural GDP and some of these incentives. The time series periods of the equations are different due to differences in the introduction times of these incentives. Therefore the observation number will be indicated in each equation with the letter (n).

First equation was carried out because it was important to test the impact of the total extended loans and subsidies provided by the government, in general, on the agricultural GDP. Then, agricultural GDP was regressed against its GDP lagged one year and the different forms of incentives provided by different government departments in different times to test the impact of each type of incentives. The estimated results of these regressions are as follows :

$$1- \log AGDP = -0.51 + 1.03 \log LAGDP + 0.02 \log LAGS$$

$$(-2.7) \quad (40.7) \quad (3.36)$$

$$\bar{R}^2 = 0.99 \quad D-H -0.43 \quad F= 651.1 \quad S.E = 0.03 \quad n =10$$

$$2- \log \text{AGDP} = 0.65 + 0.87 \log \text{LAGDP} + 0.08 \log \text{WP}$$

$$(0.81) \quad (8.0) \quad (1.9)$$

$$\bar{R}^2 = 0.98 \quad \text{D-H } -1.67 \quad F = 237.1 \quad \text{S.E} = 0.05 \quad n = 11$$

$$3- \log \text{AGDP} = 1.5 + 0.87 \log \text{LAGDP} + 0.09 \log \text{LD}$$

$$(1.6) \quad (8.6) \quad (3.3)$$

$$\bar{R}^2 = 0.95 \quad \text{D-H } -0.70 \quad F = 59.6 \quad \text{S.E} = 0.12 \quad n = 18$$

$$4- \log \text{AGDP} = -2.5 + 1.15 \log \text{LAGDP} + 0.19 \log \text{LAS}$$

$$(-3.9) \quad (23.3) \quad (3.1)$$

$$\bar{R}^2 = 0.96 \quad \text{D-H } -0.49 \quad F = 63.2 \quad \text{S.E} = 0.11 \quad n = 16$$

$$5- \log \text{AGDP} = -1.1 + 1.1 \log \text{LAGDP} + 0.09 \log \text{AL}$$

$$(-1.8) \quad (13.6) \quad (2.8)$$

$$\bar{R}^2 = 0.94 \quad \text{D-H } -0.63 \quad F = 48.4 \quad \text{S.E} = 0.13 \quad n = 18$$

An auto-correlation test using the Cochrane-Orcutt method was applied for all the equations to overcome the auto-correlation that has been suggested by the values of D-H test when we did the first regression using Ordinary Least Square technique (OLS). The new results of the equations show an absence of auto-correlation as indicated by the D-H statistics, and the F statistics are very high indicating that the independent variables as a group are significantly different from zero at both 1 and 5 per cent levels.

In equation (1) we regressed the agricultural GDP against its lagged one year GDP and the sum of loans and subsidies extended to the sector by the government lagged one year (LAGS). The results shows that these two variables explain 99 per cent of the total variation in real agricultural GDP. As expected, the relationship between the incentives provided by the government lagged one year (LAGS), and the agricultural GDP is positive and significant at 1 and 5 per cent levels of confidence. The reason for the incentives lagged one year

being significant, rather than the incentives in  $t$  period, is explained by the logical argument which says that in the agricultural sector at least one year of adjustment mechanism might be required before the effects of the agricultural investment become evident. This result supports our previous argument that the increase in agricultural production was caused, mainly, by incentives introduced by the government.

Equation (2) tests the association between the agricultural GDP and one component of the incentives, namely, the wheat price subsidy (WP). The independent variables explained 98 per cent of the variation in agricultural GDP. The coefficient of the wheat subsidy indicates a positive and significant relationship between the agricultural GDP and this type of subsidy at the 5 per cent level of confidence. Although this subsidy programme is directed toward a single commodity, wheat, its significant impact reflects the fact that a large amount of agricultural output is dominated by wheat.

The land distribution programme also has a significant impact on stimulating the agricultural GDP. As shown by equation (3), its coefficient is positive and highly significant. This programme with the agricultural GDP lagged one year, explained 95 per cent of the variations in agricultural GDP as indicated by  $R^2$  test.

Regarding the agricultural subsidies provided through SAAB, we found that its value lagged one year has a positive and highly significant impact on agricultural GDP. Using the lagged variable is consistent with the logical argument that some time elapses before the returns of subsidised materials such as engines, pumps, etc., become apparent. The relationship, as shown by equation (4), shows that more than 96 per cent of variations in the value of agricultural GDP are explained by the level of subsidies lagged one year and the agricultural GDP lagged one year.

The last equation (5) measured the relationship between the agricultural GDP and the loans provided by SAAB. More than 94 per cent of the variations in agricultural GDP are explained by the independent variables, namely, agricultural GDP lagged one year and SAAB's loans. The loans have a positive and significant impact on agricultural GDP at one and five per cent levels of confidence.

The conclusion reached from the previous analysis confirmed the positive role that government incentives have played in stimulating the agricultural GDP. The great improvements in the agricultural sector during the last decade were the result of government involvement in building the necessary infrastructure and providing generous incentives. However, the important question which remains unanswered is whether these achievements would have been possible with less incentives?

### 7.3.2 THE MANUFACTURING SECTOR <sup>9</sup>

The industrial sector in Saudi Arabia comprises three components: the petrochemical industries carried out by Saudi Arabian Basic Industries Corporation (SABIC), the large group of factories licensed by the Ministry of Industry and best described as the 'formal' manufacturing sector, and the 'informal' manufacturing sector which comprises a large number of small workshops in repair and small-scale production activities. We have already discussed SABIC in Chapter Four, since it is considered one of the public companies owned by

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<sup>9</sup> Information in this section is based mainly on the following Sources:

- MOEI publications.
- MOP, "Achievements of Development Plans", & "Development Plans"
- MOFNE, "The Statistical Indicators, 1989".
- Riyadh Chamber of Commerce & Industry, "National Industry: One Step Forward", 1990.
- SIDF, "Annual Reports".

the government. The formal manufacturing sector is the one which we are interested in reviewing in this section since it is the real reflection of private sector participation in industrial activity.

The key issue for developing the manufacturing sector, as well as other private sectors, is to foster diversification of the economic base in order to reduce the excessive dependence on the oil sector. Diversification of the non-oil economy of the country implies aspects of structural change in private sector activities in order to lessen the extent of the traditional service sectors and accelerate the development of the producing sectors. Private sector industrial activity, nascent in its present form, has the potential of progressing into what is called the first, or "easy" stage of import substitution industry. Generally, this process involves replacement of the imports of nondurable consumer goods by domestic production. And "... to the extent that the domestic production of these commodities generates external economies in the form of labour training, the development of entrepreneurship, and the spread of technology, there is an argument for moderate infant industry protection or promotion."<sup>10</sup> Therefore, different forms of government support have been extended to this sector (as discussed in Chapter Five) to ease industrial investment for the investors and hence increase the role of the sector in the economic life of Saudi Arabia.

Encouragement and financial incentives are provided to industrial investors to enable well managed companies to realize reasonable returns from operations. On the other hand, investors are faced with many constraints such as a lack of skilled Saudi workers, the small size of domestic markets, strong competition of foreign products, lack of local

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<sup>10</sup> Balassa, B., October 1980, pp. 8-9.

industrial experience, and other difficulties.

#### 7.3.2.1 THE SECTOR'S GROWTH AND STRUCTURE

The industrial experience of the private sector in Saudi Arabia is of recent years. The number of factories in operation until 1970 was 199, with capital reaching SR 2.8 billion, and more than 13 thousands workers. In 1975, the number increased to 460 factories, of which 136 were joint-ventures with foreign investors. The capital was SR 11,528 million, and there were 39,423 workers. The number of productive licensed factories continued to increase in the following years with a different number of new factories each year.

While in 1977 and 1980, there were 215 and 216 new factories respectively, in 1984 and 1986 there were, respectively, 84 and 34 new factories. This reflects the economic conditions of these years which affected not only the number of new factories, but also the type of products of these factories. For example, the period 1974-85, which was the era of infrastructure building, witnessed the establishment of many factories which specialised in producing building and metal materials. More than 50 per cent of the established factories during that period were building and metal products industries.

By 1987 the number of productive licensed factories was 2,016, covering all economic activities. The capital of 31 per cent of them was under SR 5 million, and they had between 10 and 30 employees.

By 1990, the number of factories in operation had reached 2,255. Distribution between the economic activities shows that the factories are concentrated in three main industries, namely: engineering industry which has 634 factories (28.1 per cent of the total); building materials industry which has 560



factories (24.8 per cent); and foodstuff industry which has 361 factories (16 per cent). However, this number and the previous ones include all factories run by the private and public sectors, except oil factories. For example, of the total number of factories, which was 2,061 in 1987, 23 of them were owned by the public sector. The total capital of the factories in 1989 reached SR 96 billion, and they employed around 145 thousands workers. It is estimated that around 82 per cent of these factories are owned completely by Saudis, and the rest are joint-venture partnerships. The factories are concentrated in three main cities, namely, Riyadh, Jeddah, and Dammam where 33 per cent, 27 per cent, and 23 per cent respectively are their share of the total factories in 1990.

In terms of its contribution to Gross Domestic Product, the manufacturing sector's real growth rate fluctuated between 6.8 per cent in 1975 and -2.4 per cent in 1973. The sector's real growth rate started to increase and reached its highest of 21 per cent in 1980. For the period 1981-85 the sector grew, in constant price terms, at an average annual rate of 14 per cent. Much of this growth was directly attributable to the growth in construction, as manufacturing continued to be heavily oriented toward supplying the construction sector with building supplies during that period. During the Fourth Development Plan 1985-90, the real growth rate of the sector was 3.9 per cent reflecting the recession conditions prevailing in the economy as a result of the sharp decline in oil prices in 1986 and thereafter.

Table 7.2 shows the contribution of the manufacturing sector in total GDP in current prices for the period 1963 to 1987, and 1990. During the entire period, the contribution of the sector in total GDP averaged around 2.3 per cent. This low percentage reflects the fact that the manufacturing sector remains small, particularly by international standards. Looking at the average share of manufacturing in total GDP for

some countries shows that, in oil producing countries it is 10 per cent, for newly industrialising nations the average is 18 per cent, and for industrial countries it reaches 28 per cent.

The contribution of the sector to total GDP in 1963 was SR 171 million, 1.9 per cent of the total. Although the value of its contribution increased gradually in the following years, its percentage share did not exceed 2.5 per cent. In fact, in 1974 the percentage share decreased to 0.7 per cent, although its value totalled SR 730 million. Despite the increase in the sector's GDP the next year, 1975, by more than double from SR 730 to SR 1600 million, the percentage share decreased to 1.1 per cent. This reflects the growth of other economic sectors, particularly the oil sector.

The improvement in the sector during the period 1985 to 1990, in addition to the decrease in oil sector GDP which caused the total GDP to decrease, increased the percentage share of the sector to 5 per cent in 1987, and to 3.4 per cent in 1990. In terms of values, the sector's GDP was SR 13.6 billion in 1987, while in 1990 it decreased to SR 9.4 billion. The Fifth Development Plan (1990-95) expects the manufacturing sector's GDP to reach SR 15 billion by the end of the plan, which accounts for 4 per cent of the total GDP. Also, the Plan expects capital investment of the sector to increase from SR 3.5 billion, 6 per cent of the total in 1990, to SR 7.2 billion in 1995, 8 per cent of the total.

The number of those employed in the sector by 1990 had reached 354 thousands, or 6.4 per cent of the total civilian labour force. By 1995, that number is expected to reach 439 thousands, or 7.6 per cent of total civilian employment at that time. Again, like the agricultural sector, the sector depends heavily on foreign markets to obtain its required labour force. It is estimated that only 14.3 per cent of the workers in the sector are Saudis. Our field research findings indicate that 90 respondents, or 76.9 per cent of the total

industrial sample (116 respondents), employ a very small number of Saudis, while the majority of the employees of the 24 other respondents, or 20.5 per cent, are non-Saudis.

#### **A - COMPOSITION OF THE SECTOR**

The composition of the manufacturing sector in Saudi Arabia are: food stuffs, textiles and clothing, leather, wood products, paper products, chemical products, ceramics products, building materials, engineered products, and other products.

#### **ENGINEERING INDUSTRY**

This sector includes a wide variety of industries, from small factories that produce desert coolers, to major plants producing electric transmission cable, steel pipes and heavy structured steel components. This sector has first place in respect of the number of productive licensed factories. By 1990, the total number of factories in this sector reached 634, or 28 per cent of the total number of factories. However, it is third in terms of the total invested capital which was SR 11.7 billion or 11.4 per cent of the total industrial capital during that year.

It is second in terms of loans extended to it by SIDF. The loans from 1974 to 1988, reached SR 3,534 million which represents 21.5 per cent of the total extended loans by the Fund during the entire period. During 1988, the Fund approved 20 loans for this sector with a total value of SR 396 million, or 29 per cent of the total loan commitment during the year. Of this amount, SR 203 million were extended for two factories to be set up in Riyadh, one for rebuilding and repairing of aircraft accessories, and the other for aircraft modification. These two projects are among those of the economic offset programmes.

The value of the country's imports of engineered products

during 1987 was approximately SR 31.5 billion, accounting for around 42 per cent of total imports. In the same year the products of this sector met around 57 per cent of the domestic demand for electric transmission cables, 50 per cent of the demand for air-conditioning equipment, 17 per cent of the demand for refrigerators, 43 per cent of the demand for water heating equipment, 70 per cent of the demand for desert coolers, and 50 per cent of the demand for water, gas, and electrical meters.

#### **CHEMICAL INDUSTRY**

Although this sector is in fourth place in terms of number of factories, it is the leading sector in terms of invested capital. By 1990, the total invested capital of this sector was SR 52.9 billion or 54.5 per cent of the total invested capital. The reason behind the high invested capital is the sector's dependence on high intensive capital technology. The number of factories in this industry had reached 320 by 1988.

Saudi Arabia has achieved a remarkable improvement in the production of many chemical products. In 1987 it became self-sufficient in compound fertilizers and started to export. More than 98 per cent of the domestic needs for cleaning materials are produced locally. Paint products satisfy 75 per cent of the local demand. Lubrication oils production meets more than 85 per cent of domestic consumption.

In terms of loans obtained from SIDF, the sector is in first position, achieving SR 3,644 million or 22.2 per cent of the total loans extended by the Fund since its inception and up to the end of 1988. The total commitments to the sector in 1988 aggregated SR 675 million, accounting for 50 per cent of the loan commitments during that year. Of that amount, SR 400 million was extended for the expansion of a fertiliser plant in Dammam, and SR 210 for establishing a new project for

pharmaceutical products in Qassim.

#### **CONSUMER PRODUCTS INDUSTRY**

This sector includes many industries that produce food stuffs, leather products, textiles, and wooden products. The total number of factories in the sector reached 336, 11, 43, 16, and 75 respectively in 1988. Their total invested capital was SR 6.7 billion for the food industry, SR 119 million for leather products, SR 765 million for the textiles industry, and SR 810 million for the wooden products industry.

Total cumulative loan approvals for this sector by 1988 aggregated SR 3 billion, or 18.2 per cent of the Fund's total commitments, thus placing the sector in fourth place after the Chemical, Engineering, and Building material sectors. The sector achieved 20 per cent of the Fund's total loans commitments in 1988, or SR 272 million. These loans were given for establishing thirteen new projects and the expansion of another ten projects.

In 1988, the country's total import of consumer products reached more than SR 28 billion, accounting for more than 34 per cent of the total import. This figure reflects the need for developing such industry to meet the domestic consumption needs since the raw materials for most of these industries are available in the country. By 1987, the country's production of some food stuffs met most of the domestic needs for these products. For example, beverages production covered more than 90 per cent of the domestic consumption. However, leather and textiles industry meets a very low percentage of domestic consumption.

#### **BUILDING MATERIALS INDUSTRY**

This industry had its golden days during the period that witnessed the building of the country's infrastructure. During 1974-1982, the average number of new factories

established in this industry was 50 annually, and after that, the average dropped to 12. The total number of factories in this industry by 1990 reached 560 with total invested capital of SR 20 billion.

The major industry in this sector is the cement industry. There are eight cement companies with an installed annual production capacity of 13.3 million tons. Although these companies alone can meet the local demand, the total value of the country's imports of cement in 1987 was SR 472 million, reflecting the high foreign competition.

The cement industry led all other industrial sectors in terms of total extended loans till the end of 1987. Although the industry did not obtain any new loans in 1988, it is in third place in terms of total loans, with SR 3,459 million or 21 per cent of the total loans extended by the Fund since 1974. Other building material industries have not obtained any new loans since 1980, but the total loans extended to them had reached SR 2,670 million, or 16.2 per cent of the total Fund's loans by the end of 1988.

Since this industry is closely related to the construction industry, its performance can be better established when we review the construction sector later.

## **B - THE ROLE OF INCENTIVES**

Having reviewed the activities of the industrial sector, we turn now to investigate the role of the incentives provided by the government in the development of that sector. To do so, we carried out a regression analysis where we tested the relationship between the industrial sector GDP and the loans and subsidies provided by the government as incentives for that sector.

We tested the association between the industrial GDP and other variables such as, the total amount of loans extended to the sector by the government, the value of import exemption,

and the value of loans extended to the sector by SIDF. In all equations the data was in real terms, and the industrial sector's GDP lagged one year was used as an independent variable. In general, the time series covers the period 1970-1988. But because the starting date of the incentives is different, some regression analysis was made on a smaller period than the others, and the letter "n" indicates the length of the period. The estimated results of the equations using OLS method are:

$$1- \log \text{IGDP} = 0.13 + 0.94 \log \text{LIGDP} + 0.01 \log \text{GILS}$$

$$(0.45) \quad (43.3) \quad (2.9)$$

$$\bar{R}^2 = 0.99 \quad \text{D-H } 0.58 \quad \text{F} = 967.3 \quad \text{S.E} = 0.03 \quad n=13$$

$$2- \log \text{IGDP} = -0.026 + 0.96 \log \text{LIGDP} + 0.01 \log \text{GIL}$$

$$(-0.07) \quad (36.0) \quad (2.6)$$

$$\bar{R}^2 = 0.99 \quad \text{D-H } 0.63 \quad \text{F} = 875.9 \quad \text{S.E} = 0.03 \quad n=13$$

$$3- \log \text{IGDP} = 0.86 + 0.85 \log \text{LIGDP} + 0.06 \log \text{LME}$$

$$(2.24) \quad (16.1) \quad (2.7)$$

$$\bar{R}^2 = 0.99 \quad \text{D-H } -.033 \quad \text{F} = 922.9 \quad \text{S.E} = 0.04 \quad n=18$$

$$4- \log \text{IGDP} = -0.29 + 1.01 \log \text{LIGDP} + 0.03 \log \text{IL}$$

$$(-1.76) \quad (69.6) \quad (5.6)$$

$$\bar{R}^2 = 0.99 \quad \text{D-H } 1.14 \quad \text{F} = 945.0 \quad \text{S.E} = 0.02 \quad n=15$$

In equation (1) the real industrial GDP is regressed against its real GDP lagged one year (LIGDP), and the real total value of loans and subsidies (GILS) provided to the sector by the government. The time series covers the period from 1976 to 1988 in addition to one lagged year.

The independent variables explain 99 per cent of the variations in industrial GDP. The results also show the

absence of auto correlation as indicated by the value of the D-H test. The coefficient for all the independent variables are positive and different from zero at the 1% level. This finding is consistent with our previous hypothesis that government incentives play a major role in the economic development of the industrial sector.

Equation (2) tests the impact of government loans alone on the industrial GDP. Again the results show the significant and positive impact of these loans on the sector's GDP. The D-H test indicates the absence of auto-correlation in the equation.  $R^2$  statistics show that 99 per cent of the variations in the industrial GDP is explained by government loans and the industrial GDP lagged one year. Other statistical tests are significant and validate the findings of the regression.

In equation (3) we tested the relationship between the real industrial GDP and the real values of import exemption lagged one year (LME), plus the industrial GDP lagged one year. The first regression results indicated an auto-correlation in the equation and therefore the Cochrane-Orcut procedure was used. The independent variables explain 99 per cent of the changes in the industrial GDP as indicated by  $R^2$  statistics. Durbin-H statistics indicates the absence of auto correlation in the equation. The coefficient of the import exemption values lagged one year (LME) is positive and significant at both 1% and 5% level of confidence which supports our earlier findings. The values of import exemption at time  $t$  was not significant, and therefore, we eliminated it from the equation. The explanation for that might be that it takes time until the exempted imports of this year enter the production process and their yields start to appear. This argument is supported by the fact that 73 per cent of the exempted imports value is allocated to machinery and spare parts.



The last equation (4) shows the results of the regression analysis that test the relationship between the industrial loans extended by SIDF to the sector, and the real GDP of the sector. The  $R^2$  shows that 99 per cent of the variations in industrial GDP are explained by the independent variables (IGDP lagged one year and SIDF's loans). The Durbin-H test indicates the absence of auto correlation in the equation, and it is significant at the 5% level of confidence. The coefficient of the independent variables are positive and highly significant. So, the industrial loans of SIDF have a positive impact on the industrial GDP and that is consistent with the previous results.

### 7.3.3 THE CONSTRUCTION SECTOR

The construction boom in the country during the seventies and early eighties resulted from the heavy involvement of the government in building infrastructure, in addition to massive migrations of citizens from the countryside to the cities. That boom in many respects created a class of investors, who on the one hand sought a share of building contracts, and on the other moved into areas of import substitutions for materials in large demand in the building industry. Many groups of people benefited from the boom in construction during that period.

The foreign contracting firms, which came into the Saudi Arabian construction market with all the necessary inputs and which were able to execute large-scale projects with maximum efficiency, were the greatest beneficiaries of the boom. Other beneficiaries were the many Saudi entrepreneurs who had an established background in commerce and who were able to set up joint ventures with the foreign contracting firms. The Saudi contracting firms which were restricted by their small size and lack of experience could not compete with the large

firms and therefore benefited the least. The construction industry presented Saudi entrepreneurs with the opportunity to set up enterprises to provide, domestically, the products associated with the construction sector. In an effort to encourage Saudi private sector participation in the construction industry, the government initiated, between 1975 and 1979, a lending programme which was directed toward helping the Saudi contractors to develop their establishments to be able to participate in the construction process. The total loans extended by the programme reached SR 167 million. Moreover, the government adopted, in 1983, the "thirty per cent rule", whereby at least 30 per cent of the construction value of government contracts must be awarded to Saudi construction firms. Another government initiative was to divide large construction projects into a series of small projects so they could be handled by the small Saudi construction firms.

According to the Third Development Plan,<sup>11</sup> in 1976 there were 215 large-scale contractors in the country, 70 per cent of them foreigners. In addition, an estimated 4,200 small Saudi contractors were also engaged in various aspects of construction. According to the Plan, the construction sector's labour force totalled 330,100, comprising 13 per cent of the total labour force. The number of contractors increased to 5,668 in 1981 with 543 of them employing 100 and over, while the total employees reached 297,709.<sup>12</sup> The Fourth Plan estimated that there were 1,152 thousand workers, or 26 per cent of the total labour force, in 1984, whose jobs were dependent upon construction activity.<sup>13</sup> The number employed in this sector, including the building material industry,

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<sup>11</sup> MOP, "Third Development Plan", p.255.

<sup>12</sup> MOFNE, "Statistical Indicators, 1989", p.34.

reached 944 thousand workers by 1990, a large amount of labour in a single sector, of which only 5 per cent were Saudis.<sup>14</sup>

The declining performance of the Saudi economy, as a result of the reduction in oil revenues and hence government activities, affected the construction sector more than any other sector. The relationship between the construction GDP and government expenditure, as indicated by the regression analysis, was highly significant and sensitive, a one per cent change in the government expenditures caused a 76 per cent change in the sector GDP. Therefore, it was natural for the contractors to suffer most from the tightening up of government spending. Many contractors, particularly small ones, went bankrupt, others diverted their activities to related areas such as maintenance and operation, and only the organised and wealthy contractors survived and continued in business. According to a field research study of the construction sector carried by the Council of Saudi Chambers of Commerce and Industry,<sup>15</sup> it was found that many construction companies' means of production had been idle by at least 70 per cent (some of them 100%) for almost three years after the recession. The three main causes for this were revealed as: the decline in economic activities, lack of good planning, and increased debts.

The performance of the construction sector can be seen through its contribution to the gross domestic product (GDP). In current prices, as shown by Table 7.2, the sector's GDP registered an increase in its values during the entire period

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<sup>13</sup> MOP, "Fourth Development Plan", p.223.

<sup>14</sup> MOP, "Fifth Development Plan", pp.224-5.

<sup>15</sup> Council of Saudi Chambers, "The Un-utilised Resources in Some of the Private Sector Activities", 1989, p.78.

of 1963-75, particularly the last year when its values increased from SR 2,720 to SR 7,719 or by 184 per cent. However, its share in GDP remained below 6 per cent during the whole period. The next year, 1976, its value doubled and its percentage share increased to 9.6 per cent, and continued to register remarkable increases in terms of its share and values until 1983 when its total GDP decreased to SR 55 billion compared with SR 58.2 billion in 1982.

Although the sectors's GDP reached its minimum value in 1986, SR 34 billion, its share in total GDP remained higher than 12 per cent in the following years due to the decrease in the values of total GDP. In 1990, the construction GDP reached SR 34.2 billion, or 12.2 per cent of the total GDP. The Fifth Plan expects the sector's capital investment to increase from SR 2.2 billion in 1990, or 3.8 per cent of the total, to be SR 3.5 billion in 1995, or 4 per cent of the total.

Regarding the growth rate of the sector's GDP, the sector registered a decreased annual growth rate with an average of -8.2 per cent (-6.7 in real terms), while its employment decreased at an annual average rate of -8.5, during the period of the Fourth Plan (1985-1990).<sup>16</sup> Looking back to the First Plan period (1970-75), we found that the sector's value added had grown at an annual average rate of 18.5, and that average decreased to 17.7 per cent during the Second Plan (1975-80), but during the Third Plan period the average annual rate of decline in value added was around -1.4 per cent.<sup>17</sup>

This sector has been subsidised by the government directly and indirectly. The direct subsidy was through the contractors loans' programme run by the Ministry of Finance

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<sup>16</sup> Ibid., p.69, p.274.

<sup>17</sup> MOP, "Fourth Plan", p.222.

and National Economy. The indirect subsidy is represented by the different loans provided by the government to the different private sector units, and to the public, which stimulate the demand on the construction sector's services. Since the previous results showed the significant impact of government expenditures on the sector's GDP, it is worth testing, in particular, the impact of the loans extended to the private sector, by different government departments, on the construction GDP. We used a time series data covering the period 1970-1988 in their real values, and the equation which is in log form, has the sector's GDP (CGDP) as a function of the total extended loans (TEL) and the sector's GDP lagged one year. The estimated results using OLS method show the following:

$$\begin{aligned} \log \text{CGDP} &= 2.43 + 0.60 \log \text{LCGDP} + 0.17 \log \text{TEL} \\ &\quad (8.77) \quad (14.3) \quad (8.3) \\ \bar{R}^2 &= 0.98 \quad \text{D-H } 0.48 \quad \text{F} = 828.3 \quad \text{S.E} = 0.092 \quad n=18 \end{aligned}$$

The Durbin-h test shows the absence of auto-correlation in the equation. Also,  $R^2$  statistics indicate that the independent variables explain 98 per cent of the changes in the sector's GDP. The positive and high significance of the coefficient indicates the significant impact that the independent variables have on the construction GDP. A change of one per cent in the values of extended loans to the private sector results in a 17 per cent change in the sector's GDP.

#### 7.4 The Government and Private Sector Perspectives

Cooperation between the government and businessmen in Saudi Arabia is a crucial element in the "emergence" of a private sector of an appropriate size and which is tangible economically. Therefore, the private sector members are

regularly consulted by the government the economic policy. The Chambers of Commerce and Industry, which represent the private sector members, offer a bridge between the government and the private sector. They have been behind the government/businessmen's annual conference that has been held four times up to now. The debate between the government and the private sector through these conferences is very important in increasing the required cooperation between the two sectors to achieve the desired objectives. Before we review the outlines of these conferences, it is important to discuss briefly the government's attitudes toward the private sector. These attitudes are reflected in the Development Plans adopted by the government as a means of setting guidelines for the development of the economy.

#### **7.4.1 THE FIRST DEVELOPMENT PLAN (1970-75)**

The First Plan was considered to be the start point of transition for the Saudi economy, through adopting a planning process and guidelines for economic activities. Although the plan was very modest in size and yet very comprehensive in its objective, certain areas accrued more emphasis such as defence, and human and physical infrastructures. The general objectives of the plan were to increase the growth rate of the gross domestic product, to develop human resources to increase their productivity and participation in the development process, and to diversify the economic base to lessen dependence on oil through increasing the contribution of other sectors of the economy in the gross domestic product.

The private sector's role in the development process was recognised by the government and the plan emphasised the need to encourage this sector to increase its productivity in the productive sector. The plan, in this respect, highlighted two main points: to review those programmes and projects which

might be established and developed to encourage the participation of the private sector in the economy; and to initiate studies to devise means by which the private sector might be induced to offer some services currently being provided by the government such as education, health, public utilities, and repair and maintenance of governmental buildings and institutions.

#### 7.4.2 THE SECOND DEVELOPMENT PLAN (1975-80)

The Second Plan was formulated at a time of obvious improvement and development in the position of the government in both economic and financial respects. The objectives of the Plan were a continuance of those determined by the previous Plan. However, this Plan was more successful in tackling and alleviating the constraints, such as the lack of necessary infrastructure, which prevent development from taking place in the country. This investment in infrastructure enhanced the success of private investment in the following years.

With the increased government involvement in the economy, the Plan emphasised the government's belief in a free market system and in the important role the private sector should play in the economy. Moreover, it emphasized that there should be no constraints on private sector activities unless they affect negatively other economic or social priorities. Also, the government would not invest in any project unless it was impossible for the private sector to undertake it, and when doing so, the government was willing to leave these investments to the private sector as soon as it was ready and able to manage them.

In this Plan, a special section was included to review the procedures the government intending to follow to encourage the participation of the private sector in the economy. These

procedures included: the provision of different forms of agricultural subsidies, modifying mining regulations to encourage the search for mines, issuing a new industrial policy which aimed to promote private investment, establishing the industrial Funds to extend industrial loans for private investment, and forming firms to operate hotels, tourism centres, transportation and services jointly with the private sector.

#### 7.4.3 THIRD DEVELOPMENT PLAN (1980-1985)

The Third Plan, for the first time, recognised the importance of the involvement of the private sector in the planning process. It was stated in the Plan that, "Although the importance of the private sector was recognized in the Second Plan, no comprehensive approach to private sector planning had been attempted."<sup>18</sup> Integrating the private sector into the planning process was suggested by the Plan for four reasons, in addition to the increased potential of the private sector. First, introducing and promoting the development programmes are the responsibility of the government, but implementing the plans falls very largely on private enterprise. Second, competition between the public and private sectors for scarce resources such as manpower, entrepreneurship, water, and efficient infrastructure. Third, the need to coordinate the aspirations, objectives and goals of the private sector with those of the National Plan. Forth, the involvement of the sector in planning to ensure a two-way flow of information between the two sectors, to fully appraise the private sector of future government plans, and to integrate its plans with the National plans.

Since the government Plans are indicative in their nature

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<sup>18</sup> MOP, "Third Development plan", pp.481-2.



in respect of the private sector, many policies were suggested to ensure the achievement of the plans' objectives for the private sector, such as: the provision of incentive policies, the provision of information and studies regarding available investment opportunities in the economy, and the completion of infrastructure facilities. These policies were revealed in detail when the Plan reviewed its policies and programmes for each sector of the economy.

#### 7.4.4 FOURTH DEVELOPMENT PLAN (1985-90)

The importance of private sector planning, discussed in the previous Plan, was reflected in this Plan through devoting a whole chapter about: the scope and nature of the private sector and its contribution to the development process, the impact of the main changes in the economy over recent years on the future development of the private sector, identifying the problems the sector is likely to face in the future, and reviewing the government's main policy proposals and the desired responses from the private sector.

The Plan's concentration on the role of the private sector and its importance in the future Saudi economy was very clear. This development in government attitudes toward the private sector was normal since the government's leading role in the economy diminished with the completion of most of the necessary infrastructure.

The policies to be adopted by the government in respect of the private sector over the years of the Plan include: increased opportunities for the sector to acquire, manage, and operate government projects providing that this results in lower costs; encourage the sector's participation in financing development; ensure that current government policies toward the private sector are appropriate; encourage private investment in new areas, encourage the banks' involvement in

the development process; and encourage the establishment of more joint-stock companies.

#### 7.4.5 THE FIFTH DEVELOPMENT PLAN (1990-1995)

The Fourth Plan's emphasis on the importance of the private sector in the economy has been translated by the Fifth Plan through encouraging the sector to achieve economic development. The theme "the role of the government and the private sector" is the main ingredient of most of the Plan's chapters. The Plan considers the private sector as the cornerstone for achieving the economic-base diversification objective, and therefore emphasises the importance of increasing the policies and regulations that enable it to fulfil its obligations.

According to the Plan, there are four principal contributions to the long-term economic objectives of the country which are expected to be fulfilled by the private sector. These contributions are identified as: diversifying the economy through a wide range of vigorous and growing industries to be established by the sector, providing productive employment for the Saudi labour force, deploying private capital in the economy, and strengthening the adaptive capacity of the economy.

The private sector development objectives could be achieved through four major elements, namely: encouraging private sector participation in a broader range of activities, encouraging competitiveness among Saudi producers, developing domestic financial markets, and strengthening private sector business capabilities. Institutional measures to be taken to support the development of the private sector include: establishing a private sector department within the Ministry of Planning, studying the possibility of transferring the ownership of some projects and services run currently by the

government to the private sector, developing business services, promoting and developing private sector exports, promoting foreign investment, strengthening business education, and developing small businesses.

From the previous review we conclude that there were general principals that determine government attitude toward the private sector:

- commitment of the government to the free economy principal during the planning period as reflected by the goals of these Plans;

- government confidence in the capability of the private sector to participate effectively in developing the economy, and therefore;

- the adaption of many incentives to encourage and increase such participation;

- and the willingness of the government to cooperate with the private sector for the benefit of the domestic economy.

#### 7.4.6 THE BUSINESSMEN'S CONFERENCES<sup>19</sup>

In accordance with the demands of the Third and Fourth Plans for the private sector to increase its involvement in the economy, plus the awareness of the sector as to its important role, have led Chambers of Commerce and Industry in Saudi Arabia to organise regular biennial businessmen's conferences which have come to be a focal point for government/private sector discussion. Such conferences are of considerable importance since the interaction between the government and the private sector determines the extent of development progress in the country.

The first conference was held in Dammam, in Eastern

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<sup>19</sup> Saudi Chambers Council, "Documents and Achievements", proceeding papers of Businessmen's conferences.

Province, in April 1983. The theme of the conference was 'Towards Better Contribution of the Private Sector in Development'. The second conference was in Riyadh, in Central Province, in March 1985 under the same theme as the first one. The third conference was in Abha, in Southern Province, in March 1987, the theme being 'Towards Activating the Private Sector to Better Contribution to the National Economy'. The fourth conference was held in Jeddah, in Western Province, in May 1989.

#### THE FIRST CONFERENCE

The objectives of the Conference were:

- emphasising the importance of the private sector's role in undertaking development projects, and the need to solve the problems preventing it from doing so; and
- developing and improving the capabilities of the private sector.

Government views in this conference emphasised: its support for such conferences, its support of the consumers' requirements, its belief in the principle of a free economy, and the need for expanding the production base of the private sector without complete dependence on government projects and subsidies.

The conference working papers discussed many issues and the conference communique raised many points, which can be summarised as follows:

- re-evaluate the regulations related to the activities of the private sector in order to develop and improve them to be more efficient;
- increase the private sector's share in government contracts, and ensure the implementation the government incentives resolutions;
- establish a stock market as soon as possible;
- concentrate on domestic investment and direct the

investment toward long-term investment;

- direct some private sector returns toward improving the social activities in the country.

## **THE SECOND CONFERENCE**

The objectives of the conference, which was held at the beginning of the Fourth Development Plan, were:

- setting up better conditions to ensure the continuation of development and improvement of the private sector;

- evaluating and developing the private sector's capabilities to enable it to undertake more responsibilities in achieving the Development Plans' objectives;

- determine the role of the Chambers in increasing the effectiveness of the private sector.

The King's speech in the Conference reflected government attitudes toward the private sector which were a re-emphasises of the principles mentioned in the first conference. The important issues raised by the Conference are summarised below:

- the need to increase government support to the construction sector;

- supporting the national industry through: executing the government resolution which gives priority in government purchases to domestic products, protecting domestic production from foreign dumping, rescheduling the private sector debts to SIDF, and promoting private sector exports;

- re-evaluating the agricultural incentives policy to be more effective in promoting and developing the agricultural sector;

- and, improving the commercial regulations and implementing the issued ones.

## **THE THIRD CONFERENCE**

The conference's objective was to show practical ways in

which a better contribution of the private sector to the national economy could be achieved in agriculture, industry, services, tourism and utilisation of the infrastructure and base plants at Jubail and Yanbu. Its communique specifically raised the following issues :

- the responsibility of the private sector to the national economy in terms of: increasing the employment of Saudis, eliminating illegal business practices, improving production efficiency, etc.;

- the need for reviewing many policies, such as customs tariff policy, lending and banking policy, to be more consistence with the private sector needs which will result in more effective role for the sector in the economy;

- stimulating local and foreign demand on private sector products;

- improving the climate for the construction sector;

- changes are needed in the agricultural sector which include: expanding subsidies, improving research centres, setting up quarantine centres for livestock imports, ensuring the economic use of water, and improving services and facilities for the sector;

- activating the tourism investment;

- and invest in Jubai and Yanbu industrial cities.

#### THE FOURTH CONFERENCE

This conference was different than the previous ones in terms of its concentration on the potential future role of the private sector. The main objective of the conference was 'improving the climate to achieve the optimum utilisation of the private sector resources to build the diversified economy'. Conference discussions focused on four major issues:

- developing the structure of the private sector to face the development challenges of the next period;

- finding the best ways of increasing national employment in the private sector;

- commencing means for attracting foreign investment, and increasing the volume of local investment;

- privatisation and the participation of the private sector in operating public projects.

The communique of the Conference raised the following main issues:

- the private sector should develop and improve its own resources, structures, and institutions in terms of management, financing, marketing, and research and development;

- the sector should increase its efforts to employ Saudis, and at the same time the Conference emphasised the importance of developing the human resources of the country to meet the needs of private sector activities;

- expand private domestic investment in order to widen the economic diversification of the economy, and many things should be done including improvement and development of the financial markets, in addition to considering the forms of investment suggested by the Conference's papers;

- the private sector should be given the opportunity to own and operate some public projects, and the two sectors should work together to facilitate the transferring procedures.

Because of the Gulf crisis in 1990, the fifth Conference was postponed. However, the Chambers organised many specialised meetings, attended by ministers, which were directed toward discussing possible ways for enhancing private investment in the economy. Among these meetings were: the seminar about 'the investment opportunities in food industry', held in Riyadh in June 1991, and a seminar held in Yanbu in April 1992 regarding the investment climate in the country and the appropriate strategies to be followed to attract local and

foreign investors.

## **7.5 The Current Private Sector Problems**

We conclude this chapter by briefly reviewing the main problems facing the Saudi Arabian private sector. Efforts toward developing the private sector will obviously be more successful if the problems can be alleviated. The problems are not the only ones but the main problems facing the private sector. The choice of the following problems and the support of their arguments are based on the findings of our field research investigation, in addition to many studies conducted by Saudi Chambers.

### **7.5.1 FINANCING PROBLEMS**

The financing problems of the private sector can be understood more fully when we highlight some issues regarding the financial service sector in Saudi Arabia. First of all, Saudi Arabia is an Islamic country and most of its people are strongly related to their religion. This fact needs to be mentioned here since Islam forbids usury and interest is considered by Moslem scholars to be one form of usury. Therefore, one of the problems which exists in the Saudi economy, and needs to be solved, is the dualism between what the people believe in and what is been practised in reality.

This problem, of interest, caused many people to invest their personal savings in physical assets, such as gold and land, to avoid taking interest on them when they are put in commercial banks. Hence, a large amount of savings are not available for investors because of the absence of financial intermediaries who offer the people a tool to invest their surplus money in a way that works in accordance with the Sharia (the Islamic law) which the people obey. The existence



of some Islamic banks in the country, which are accepted by the Moslem scholars, might relieve that problem. Unfortunately, they are not allowed to operate in Saudi Arabia, although they existed in some non-Islamic countries. These banks, beside the existing commercial banks, will absorb the surplus money of those who are reluctant to deal with the commercial banks and direct it to the benefit of the economy. Moreover, the existence of Islamic banks in the country will increase the competitiveness between banks which will result in increasing their efforts to develop themselves and their participation in the economy.

The Fifth Development Plan 1990-1995, raised the issue of the need to develop the financial system in the country to meet the financial requirements of local investors, and suggested some solutions; yet it ignored interest, which is, in our opinion, an important issue to be considered and to be solved in order to reduce the constraints that prevent the financial system in the country from working efficiently.

The aversion of most Saudis, and other Muslims living in Saudi Arabia, to receiving interest has benefited the commercial banks greatly since a great amount of the banks' funds comes from interest-free demand deposit. These type of banks' deposits totalled SR 55,735 million or 41.3 per cent of the total banks' deposits. In addition, there are more than SR 38,652 million, as deposits of non-Saudis living in the country, in the form of foreign currencies.<sup>20</sup>

The second point is that the commercial banks are not playing the role they are supposed to play in the economy. Although they enjoy a sound financial position, with total assets reaching almost SR 220 billion, their local lending and investment activities have not matched with this position. By the middle of 1989,<sup>21</sup> the total commercial banks investment

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<sup>20</sup> SAMA, " statistical Report ", 1989.

within the private sector was SR 3,217 million, while the total extended loans to the private sector reached SR 69,539 million. The banks' loans and advances to the private sector have been characterised by their emphasis on import financing, in addition to short-term loans to the benefit of the construction sector. The banks' total extended credit to the agricultural sector, for example, was SR 961 million by the middle of 1989.

The commercial banks' lending policy pay great attention to available collateral for securing the loan, rather than the feasibility of the project at hand. A study by Riyadh Chamber of Commerce and Industry, regarding the role of commercial banks in supporting the private sector, reached a conclusion that supports our arguments.<sup>22</sup>

On the other hand, commercial banks found it much easier to hold foreign assets, in the form of loans to, and/or deposit at, foreign financial institutions, than to develop the domestic lending market. The total assets of the commercial banks abroad stood at SR 116,2 billion in the middle of 1989.

Thirdly, many Saudi Arabian businessmen have kept their wealth in the form of assets in foreign countries, rather than in domestic investment. The information regarding these assets estimated them to be SR 303 billion in 1980.<sup>23</sup> This is triple the total amount of capital for all private sector units in the country. The Fifth Plan's emphasize on the repatriation of Saudi private sector financial assets held abroad, (it is a key element of the Plan's policy to induce

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21 SAMA, "Statistical Report", 1989.

22 Riyadh Chamber of Commerce and Industry, "The Role of Commercial Banks ...", 1988.

23 SAMA, "Annual Report", 1987 (Arabic).

higher levels of private investment), reflects the importance of such an amount in relieving the finance problems in the country.

The finance problem, therefore, is not brought about mainly because of the lack of financial resources in the country, but rather because of the lack of an efficient financial system that can channel the accumulated wealth toward a productive investment.

#### **7.5.2 LACK OF EXPERIENCE AND RESOURCE DEFICIENCIES**

The expansion in the private sector economic activities during the seventies and early eighties was mainly a result of the increase in government expenditures, rather than a result of good planned investment. Hence, the decline in economic activities in the late 1980s showed many deficiencies in private sector structures which were not obvious during the boom time.

Among these deficiencies is the lack of well organised institutions. The desirability of many investors to benefit as much as possible from the profitable chances that existed with the expansion in government expenditures led them to establish many projects without preparing a complete systematized framework. Many projects are without an important departments such as marketing or accounts. In some cases, the project has only the manager, usually the owner, and the workers, and nothing else. Some projects were established without, even, reasonable feasibility studies. As a result, many establishments of this type went bankrupt during the recession period which followed the decline in oil prices in 1986. This type of deficiency still prevails in many private establishments causing an inefficient utilisation of resources.

Another problem is the reliance of the private sector on

foreign markets for its requirements of raw materials, labour, capital goods, and technology. Lack of a skilled labour force is one of the problem of the Saudi economy, and existing one is too expensive compared to imported labour force. This phenomena led the private sector to depend on foreign labour, in addition to the extensive use of capital goods. But this situation makes the private sector easily affected by external market fluctuations. During the Gulf crisis, many businessmen interviewed mentioned the difficulties they faced with foreign labour many of whom demanded to go home. Some of the top managers left their positions without any warning.

Technology is not only the buying of machinery and equipment and knowing how to operate it. It is also the ability to monopolize the concepts and skills associated with this equipment and machinery in order to utilise them efficiently and develop them in accordance with the different needs in different times. The difficulties of technology for the private sector stem from many factors, including difficulty in obtaining it in real terms, its high costs, the difficulty in choosing and finding the appropriate technology for the conditions of Saudi Arabia, the unwillingness of the dealers to cooperate effectively so that it will be needed always, and that the trained workers are foreigners. In fact, Saudi establishments are acting like training centres for many developing countries, except Saudi Arabia, who achieve after a few years very skilled workers.

Another problem is lack of information. The success of any investment or project depends to a large extent on the availability of the necessary information regarding markets, investment opportunities, raw materials, etc. Absence of useful information leads to a lack of appropriate long-term planning and the failure of many private establishments. The quantity and quality of the available information in Saudi Arabia is still weak, and in many cases its very difficult to

gain access to.

### 7.5.3 MARKET CHALLENGES

One of the main problems and obstacles that face the national industries in Saudi Arabia, is the difficulties associated with their efforts to sell their final products. The market challenges for domestic products are of different sources. These include, shortcomings within the private establishment, the high competition of foreign producers, and the nature of the domestic markets.

The shortcomings in private units are attributed to many factors, such as, the structure of these units, lack of efficient management, the lack of appropriate planning, etc. Investigation of the framework of the private sector establishments in Saudi Arabia indicates that most of them are of very small scale, employing less than 5 persons and with an average capital of SR 2 million. The bias towards small establishments reflects not only the comparatively recent development of the private sector, but also the high degree of entrepreneurial drive within Saudi Arabia. The ability of such small units to compete is very low and many problems, financial in particular, arise. Most of the small farmers in our sample complained of the difficulties associated with marketing their products. The easiest way of marketing for them is to sell their products to brokers who make most of the profit out of the transaction.

Another point, which is associated with small establishments as well as others, and which we mentioned earlier, is the absence of a specialised department for marketing in many private establishments. Marketing today involves many aspects, such as distribution, markets studies, storing, consumer preferences, advertisement, etc. The time of high demand during the expansion period does not exist any

more and, therefore, the private establishments are required to develop their structures to keep up with the changes in economic conditions.

Another market challenge the private sector faces, is the high competition of foreign producers. Although part of that competition is because of the shortcomings associated with the structures of the private establishments, there are other more important factors. The Saudi private sector is in its infancy stage and needs sufficient time to be able to compete with foreign products. The capability of the foreign producers to sell at lower prices in the Saudi market is achieved mainly because of, the high experience they have, cheap and advanced technology, and economies of scale. Moreover, some producers such as Koreans and Chinese, enjoy very cheap labour. In a country like Saudi Arabia, which is characterised by its open market with maximum tariffs of 20 per cent on certain products, the competition between local producers and foreign producers is in favour of the latter.

Another problem is the people's confidence in and therefore preference for foreign products, particularly certain international names, and the weak advertising of domestic products. Although the quality is an important and distinguishing factor in consumers choice of product, many Saudi products do not lack such an advantage. Another factor, which increases the problem, is the weakness of regulations and procedures preventing some illegal methods and practices of marketing. Import of low quality products, of falsified trademarks, and dumping practices, are among the factors affecting the competitiveness of local products.

The Saudi Council of Chambers has conducted an expanded study about the dumping practices in Saudi markets and confirmed its existence particularly in industrial products.<sup>24</sup> Most businessmen whom I interviewed mentioned the case of poultry producers who face great competition from French and

Brazilian producers. Some poultry producers showed me statistically the dumping practices of foreign producers who reduce their prices to less than their production costs. They added that many producers were almost going bankrupt but the last Gulf crisis affected them positively and saved their business. In a recent study, prepared for the Riyadh Chamber by a specialised European institute,<sup>25</sup> it was found that the dumping margin of the French producers reached 50 per cent, while in the Brazilian case it ranged between 8% and 20%. According to the study, the consumption of Saudi markets of poultry was estimated to be 268 thousand tons in 1989, of which 194 thousand tons are imported. Imports from France and Brazil alone are estimated at 88 thousand and 79 thousand tons respectively. Some of the local producers interviewed said that all they want is a fixed price for both foreign and local poultry products and they are ready to accept the domestic consumers' judgment.

Another market challenge is the nature of the domestic market which is characterised by its small scale and the existence of similar domestic products. The export choice is encompassed by many difficulties which include all previous constraints. In an attempt to enhance the exports of the private sector, the Center for Developing National Exports was established in 1986 to offer the businessmen services and programmes to help them export their products. The private sector exports of industrial products reached SR 2.9 billion in 1990 compared with SR 2.4 billion in 1989.<sup>26</sup> The main

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<sup>24</sup> Council of Saudi Chambers of Commerce and Industry, "The Dumping Phenomena in Saudi Markets", Riyadh.

<sup>25</sup> Asharq Al-Awsat, 10/3/1992, p.10.

<sup>26</sup> Alyamamah, No.1183, 1412(1992), pp.48-9.

markets for Saudi exports are the Gulf States and some Islamic countries. The Fifth Development Plan discussed the need to support export activities financially and technically and suggested some points such as establishing a specialised export bank. According to our field research findings, the main constraints facing the private sector's exports are: the low current capacity of the establishments, the low foreign demand for domestic products, and the barriers imposed by foreign countries. These constraints were mentioned by 71 respondents, or 32 per cent of the total sample; 50 respondents, or 22.2 per cent of the total; and 48 establishments, or 21.8 per cent of the total, respectively.



**TABLE 7.1**  
**PRIVATE SECTOR'S GDP AND GDCF**  
**(SR MILLION)**

YEAR	PGDP	% of TGDP	PGDCF	% of TGDCF
1962	3108	36.0	na	na
1963	3463	38.0	na	na
1964	3875	38.0	na	na
1965	4313	37.0	na	na
1966	4675	36.0	904	41.9
1967	5185	35.0	884	37.0
1968	5835	36.0	941	35.8
1969	6127	35.0	1056	40.7
1970	6720	29.0	1150	39.2
1971	7339	26.0	1290	37.9
1972	9459	23.0	1669	29.3
1973	9031	13.4	2061	29.2
1974	14192	11.7	4424	34.1
1975	23799	15.2	8823	33.9
1976	35597	18.6	14102	32.0
1977	47434	21.3	18061	29.3
1978	58535	23.8	19510	26.1
1979	71351	21.0	22336	24.4
1980	86035	17.7	27519	25.9
1981	100957	18.7	34414	28.6
1982	116211	25.1	35687	29.5
1983	127964	32.3	40493	36.8
1984	129998	37.0	40624	42.1
1985	130981	41.7	35236	46.2
1986	123686	45.6	32033	48.4
1987	121767	44.2	29619	46.4

**GDP** = Private Sector Gross Domestic Product. **GDCF** = Private Sector Gross Domestic Capital Formation. **TGDP** = Gross Dom. Product. **TGDCF** = Gross Domestic Capital Formation.

**Sources:**

MOFNE, Central Department of Statistics, "The National Accounts of S.A", various issues (for data from 1963-72).  
MOP, "Achievements of the Development Plans: 1970-1989".

**TABLE 7.2**  
**THE BASIC SECTORAL COMPOSITION**  
**OF PRIVATE SECTOR GDP (SR MILLION)**

YEAR	PGDP	Agricul.	Indust.	Construct.	Trade	Servic.	TGDP
1963	3611	782	171	365	558	484	8898
1964	4315	804	188	402	598	459	9569
1965	4361	856	207	442	714	519	10257
1966	4848	913	227	486	832	578	11776
1967	5698	846	309	727	722	1366	12931
1968	6155	881	344	869	807	1449	14429
1969	6612	957	385	977	938	1615	15407
1970	7340	984	431	934	1008	1678	17153
1971	7913	1016	484	1007	1068	1805	22581
1972	8784	1059	543	1174	1177	2145	27858
1973	10940	1139	617	1809	1554	2533	40088
1974	14954	1242	730	2720	2355	3490	98839
1975	27747	1392	1600	7719	3897	4990	139223
1976	46589	1586	2211	15854	6180	7890	163892
1977	67694	1866	3063	25546	8507	9720	203942
1978	88229	3909	4066	31959	11049	15146	223818
1979	106652	4196	5173	34764	13912	18912	247622
1980	134967	4648	6467	43108	17760	23384	383590
1981	157253	5572	7721	50348	21984	29905	517994
1982	184229	6740	9124	58181	25064	36361	522176
1983	205437	8724	10685	54903	28088	46585	411797
1984	214869	11620	13597	44964	30386	52072	351397
1985	213073	13789	14299	38745	30222	54971	313941
1986	200385	15861	13828	33989	29072	54138	271091
1987	200339	18312	13650	35600	27797	53061	275494
1990	210100	22800	9400	34200	27400	na	280200

TGDP = Total gross domestic product. PGDP= Non-oil gdp

**SOURCE:**

SAMA, "Annual Report", Several Issues.

MOP, "Fifth Development Plan" (1990 Figures).

**TABLE 7.3**  
**PRODUCTION OF SELECTED AGRICULTURAL**  
**AND ANIMAL PRODUCTS**  
**(THOUSAND TONS)**

YEAR	FRUITS	VEGETABLES	CEREALS	MEAT	FODDER CROPS AREA *
1970	307	na	213	43	41.3
1971	362	na	185	47	41.1
1972	240	653	110	52	32.3
1973	355	399	113	101	28.7
1974	434	674	299	87	63.3
1975	458	884	288	81	44.7
1976	360	597	282	87	34.4
1977	389	744	295	84	46.4
1978	529	546	301	80	41.3
1979	525	705	340	87	42.4
1980	470	756	266	94	29.0
1981	497	718	306	139	40.8
1982	509	1,292	488	188	148.9
1983	577	1,089	875	239	264.4
1984	658	1,313	1,444	287	169.5
1985	656	1,443	2,191	348	145.1
1986	714	1,284	2,463	426	139.1
1987	781	1,912	2,934	444	163.3
1988	792	1,987	3,612	473	137.1

\* Hundred Hectares.

SOURCE:

MOP, "Achievements of Development Plans", 1990, p.271.

**TABLE 7.4**  
**DOMESTIC PRODUCTION, IMPORTS, AND EXPORTS**  
**OF SOME AGRICULTURAL COMMODITIES**  
**IN 1987/1988**

(SR million, 000' tons)

Commodities	Domestic Product- ion/ton	Import		Export		Domest- ic Cons umption	Self Suffic- ient %
		SR	Tons	SR	Tons		
Wheat	2,653.0	144	120	450	1344	1,429	186
Barley	162.4	1434	4,935	2	7	5,090	3
Corn	44.2	227	514	0	0	558	8
Dates	484.2	11	6	58	30	460	105
Citrus	11.7	126	110	0	0	122	10
Grapes	99.8	40	15	0	0	115	87
Tomatoes	346.3	87	108	2	1	454	76
Potatoes	34.5	52	51	0	0	85	41
Watermelon	322.6	34	20	20	20	323	100
Melon	192.4	12	10	1	1	202	95
okra	22.2	6	3	0	0	25	89
Onion	14.4		69	0	0	84	17
Cucumber & Courgette	129.4	46 16	21	5	4	147	88
Sesame	3.2	19	8	-	-	11	28
Aubergine	35.7		4	0	0	40	89

SOURCE:

Riyadh Chamber of Industry and Commerce, "Domestic  
Production Between Consumption and Export",  
1989, p.54.

## CHAPTER EIGHT

### FIELD RESEARCH AND QUANTITATIVE INVESTIGATION ON THE INCENTIVE POLICIES

#### 8.1 Introduction

The general aim of the thesis, as we said earlier, is to evaluate the role of the incentive policies, offered by the government to the private sector units, in developing that sector and increasing its participation in economic activities. The previous chapter analysed the impact of these incentives on the development of the private sector, during the last two decades, through reviewing the available information published by the official sources and private sector organisations. Nonetheless, it is not sufficient to rely solely on the conclusion reached by the previous chapter in determining the failure or success of the incentive policies in achieving their designed objectives.

In addition to evaluating the impact of the incentives on the private sector activities, it is very important to investigate the existence of any shortcomings that might limit the effectiveness of the incentives in achieving the best results. Administrating the incentives, for example, is as important as the incentives themselves. Consequently, more information has been obtained via a field research survey conducted by the author on a sample of Saudi private units and businessmen. The data was collected by using a designed questionnaire directed to the owners or managers of different private establishments, in addition to written and personal

interviews with some businessmen and government officials.

The questionnaire method is used by many researchers as a mean of obtaining primary data. Sellitz<sup>1</sup> stated that the questionnaire method might benefit a person who seeks information about what he knows or believes; or about explanations for any of these. Mason and Bramble argued<sup>2</sup> that the questionnaire has the advantage of increasing the volume of data collected, alongside the freedom provided to the respondents to express their own opinions. The main justification and motivation for questionnaire studies, according to Lund<sup>3</sup>, is their close observation of the real world which enables the person to feel the practice of actual businessmen, and avoid the mechanistic view of the world sometimes ascribed to the model-building approach, in addition to obtaining more statistical information.

The questionnaire method, however, has its limitations such as unrepresentative sample selection, inadequate sample size, low response rates, or failure to correctly weigh the replies of individual respondents. Careful research practices in addition to a combination of authoritative sponsorship, persuasion and personal contact might help in avoiding these limitations.

The field research was conducted during 1991 by the author himself, and consists of two parts; a designed questionnaire directed to the private units, and interviews with some businessmen and government officials working in the departments which offer the incentives. The details about conducting the field research survey have been given in Chapter Six. This chapter analysis the results of the field

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<sup>1</sup> Sellitz, C. et al., 1959.

<sup>2</sup> Mason, E., & W. Bramble, 1978.

<sup>3</sup> Lund, P.J., 1976, p. 246.

research survey.

## 8.2 The Background Profile of the Respondents

The survey respondents were asked to provide some general information concerning their enterprises' activity type, main products, capital, total investment, establishment date, market orientation, type of ownership, and labour. The inclusion of these questions provides more information which helps in understanding and analysing the results of the survey.

The distribution of the sample between the different private sectors shows that:

- 52 per cent of the sample, or 117 establishments are from the industrial sector;
- 43.6 per cent of the sample, or 98 establishments are from the agricultural sector; and
- 4.4 per cent, or 10 establishments are from different sectors.

This distribution is natural since the incentive policies are directed mainly to those two sectors and aim to develop and enhance their contribution to the economy of Saudi Arabia.

The agricultural establishments of the sample can be divided into three groups, namely, agricultural projects, grain farms, and mixed agricultural products farms. The first category consists of, dairy production, poultry and eggs, greenhouses, honey and others. In the agricultural projects' group there are 20 establishments, or 20.4 per cent of the total agricultural sample. The second category includes farms which produce mainly wheat, in addition to other grains, and are represented by 39 respondents, or 39.8 per cent of the total agricultural sample. The third category speaks for itself, there being 39 respondents, or 39.8 per cent of the agricultural sample.

The industrial establishments of the sample were classified into five groups, namely: consumer products which include food and beverages, textiles and leather products, wooden products, and paper products and printing; building materials which include ceramic and glass products, and other non metallic building materials; engineered products which include metal products, machinery, electrical equipment, and transport equipment; and other products which include chemicals and petroleum, rubber and plastic products, and other manufactured products.

The industrial establishment distribution shows that there are 35 factories for consumer products, or 29.9 per cent of the total industrial sample; 34 engineered products factories, or 29.1 per cent of the total industrial sample; 25 building materials factories, which is 21.4 per cent of the total; and 23 factories, or 19.6 per cent producing other products.

In terms of capital, three categories can be defined, large capital establishments which has 18 establishments, or 8 per cent of the total sample, with a capital of SR 41 million or more; and 27 or 12 per cent of the sample with a capital of SR 16-40 million. The medium capital category has 57 or 25.3 per cent of the total sample with SR 6-15 million capital. The small capital category has 122 establishments, or 54.2 per cent of the sample, with a capital of or less than SR5 million (77 of them with capital of SR 2 million or less and 45 of them with capital of SR 2.1-5 million). Therefore, it can be said that the sample reflects to a large extent, the nature of the private sector in Saudi Arabia which is characterised by the existence of a large number of medium- and small-scale establishments with capital of around SR 15 million or less.

Another important classification is that which shows the total investment since it gives a precise picture regarding the size of the establishments. The sample units, according



to their total investment, are divided into the same classes of capital. The first class are those with large investment volumes, there being 78 establishments in this class. Of these establishments, there are 37, or 16.4 per cent of the sample, with an investment totalling SR 41 million or more; in addition to another 41 establishments, or 18.2 per cent, with investment of SR 16-40 million. The second class has 53 establishments which is 23.6 per cent of the sample, with total investment of SR 6-15 million. And lastly, the third class has SR 5 million or less as total investment, and there are 91 establishments in this class, or 40.4 per cent of the total sample.

According to the establishment date of the sample units, 46 enterprises, or 20.4 per cent of the sample, were established before 1974; 27, or 12 per cent between 1974-1979; another 75, or 33.3 per cent between 1980-1983; 40, or 17.8 per cent between 1984-1987; and lastly, 35 enterprises, or 15.6 per cent after 1988. So, it is clear that most of the sample units were established during 1974 to 1983 which witnessed generous government incentives.

Another important classification is the one concerning the market orientation of the establishments since it tells us whether the private sector's production is directed toward import substitution or export promotion. We found that a total of 162 establishments or 72 per cent of the sample directed their sales to local markets completely. Another 40 establishments or 17.8 per cent sold 10 per cent or less to foreign markets, while the other 90 per cent or more go to local markets. Only 22 establishments or 9.4 per cent sold between 10 to 30 per cent to foreign markets, and one establishment sells between 40 to 70 per cent to foreign markets. That limitation of the private sector to local markets might be attributed to the fact that it is a new emerging sector, and in general, at this stage of development

it is normal to find it directed toward an import substitution strategy.

The participation of the foreign investors in the economic activities of the private sector is of a low level. Around 196 establishments, or 87.1 per cent of the sample, are owned completely by Saudis; while another 20 or 8.9 per cent, are joint ownership with more than 51 per cent of the capital held by Saudis and the rest by non-Saudis. Only four establishments, or 1.8 per cent of the sample, are owned completely by foreigners; and another five establishments, or 2.2 per cent, had joint ownership with more than 51 per cent of the capital held by non-Saudis.

The majority of the workers of the sample units were non-Saudis. Almost 173 establishments, or 76.8 per cent of the total sample employs a small number of Saudis; and another 48 establishments, or 21.3 per cent employed almost equal numbers of Saudis and non-Saudis.

### **8.3 Private Sector Finance and the Lending Policy**

Financing is a crucial element in the investment process of any country and Saudi Arabia is no exception. As we have seen, the government incentives programme is directed sufficiently toward facilitating the finance requirements of the private sector establishments. Interest-free loans were provided by the government to businessmen in the country to keep the cost of finance for them as low as possible. The start point in evaluating the incentives provided by the government is to examine their role in providing the private sector with their financial requirements. In the previous chapter we discussed the nature of the financial services in the country and this information should be borne in mind while we analyse the respondents' answers regarding the finance.

### 8.3.1 THE FINANCE PROBLEMS

The first question about the finance issue which the respondents were asked was to indicate, by choosing 'yes', 'no', or 'uncertain' as an answer, whether finance is one of the problems they face frequently. It was found that more than one-third of the sample do face financial problems frequently, and this supports our argument in the previous chapter that finance is one of the private sector problems. As can be seen from Table 8.1, of the 223 respondents (the sample is 225) who answered this question, 122, almost 54.2 per cent, said that they do not face finance problems frequently; 79, or 35.1 per cent, stated that they do face finance problems frequently; and 22, or 9.8 per cent, answered by choosing the 'uncertain' option which could mean that they face finance problems but not frequently. Although it is difficult to identify the extent of the finance problem which the respondents face, yet, our aim is to find out how many of them do consider finance a problem. As we saw, more than one-third of the private sector units in Saudi Arabia do face finance problems, which in turn enhances the importance of the existence of an efficient financial market that can relieve and solve this problem.

We now investigate which sector suffers from the finance problem more than the others. Reviewing the previous answers by considering the type of economic activity of the respondents, shows that in the agriculture sector, 54 farmers (68 per cent of the 79 establishments facing finance problems), or 55.1 per cent of the 98 agricultural sample, face finance problems frequently; while 30 or 30.6 per cent said no; and 13 or 13.3 per cent were uncertain. So, finance is a major problem for agricultural establishments since more than half of the sample suffer from it frequently. This problem touches all agricultural activities since 24 farmers,

or 44.4 per cent of the farmers facing finance problems frequently are grain producers, 20, or 37 per cent produce mixed agricultural products, and 10, or 18.5 per cent are agricultural projects.

The industrial sector on the other hand is less effected by finance problems than the agricultural sector. Of the 116 respondents' answers from the industrial sector, only 22 respondents, or 18.8 per cent of the industrial sample, face finance problems frequently. On the other hand, 85 respondents, or 73 per cent of the sample, do not face finance problems frequently; while 9 others, or 7.7 per cent of the sample, were uncertain. Although the 18.8 per cent is relatively high, it can be considered normal in a country like Saudi Arabia which lacks a well organised financial markets. Moreover, the infancy stage of industry could be another reason, since many investors lack the efficient management which could enable them to avoid the causes of such problems.

Of the ten respondents representing other sectors, only three stated that they face finance problems frequently, while the other seven said they do not face such a problem. That means almost one-third of the ten establishments do face finance problems frequently.

Table 8.2 shows the respondents' answers to the previous question classified by capital. There are four capital groups and the answers are as follows :

- the group which contains small establishments with capital of SR 5 million or less, 56 or 46 per cent face finance problems frequently, 50 or 41.3 per cent do not face finance problems, and 15 or 12.4 were uncertain;

- among the 57 establishments with capital between SR 6-15 million, 13 or 22.8 per cent, said yes, 39 or 68.4 per cent said no, and 5 or 8.8 per cent, were uncertain;

- among the 26 establishments with capital between SR 16-40 million, 3 or 11.5 face finance problems frequently, 22

or 84.6 per cent said they do not, and one establishment said was uncertain;

- among the 18 establishments with capital of SR 41 million or over, 7 or 38.8 per cent said yes, 10 said no, and one establishment was uncertain whether they faced finance problems frequently.

So, it can be said that finance problems are associated with small-scale establishments (with capital less than SR 5 million) more than the others. As we understand from the previous chapter, one of the deficiencies of the private sector is lack of good management and of well organised establishments. Many establishments, particularly the small-scale ones, do not have more than the manager and he plans everything. Such deficiency, no doubt, increases the possibility of failure and of incurring unnecessary and avoidable costs.

The small agricultural establishments are most affected by the finance problem since more than 80 per cent of the 56 small-scale establishments which face finance problems frequently, or 45 respondents, are in the agricultural sector. Three factors can be mentioned as possibly accounting for problems in the agriculture sector in Saudi Arabia:

- the nature of agricultural investment which is characterised by high risk due to sever weather, marketing, water availability, and shortage of skilled labour;

- most of the agricultural investments are short-term, and therefore, the agricultural investor is in need of finance more frequently than other investors;

- the existence of inexperienced investors who have been attracted to invest by some factors, such as government incentives, more than other factors relying on a good feasibility study.

In the industrial sector, only 8 or 36 per cent of the 22 establishments that face finance problems are small-scale.

Next come another 7 medium-scale establishments (capital of SR 6-15 million), then 6 large-scale establishments (capital of SR 41 million or more). According to their type of production, of the 22, there are 7 producing consumption products, another 7 producing engineered products, 5 producing different products, and 3 industries producing building materials.

### 8.3.2 THE FINANCE SOURCES

The question to be asked now is: What is the role of the financial institutions in fulfilling the financial needs of the private sector and hence relieving the problem of finance. The survey respondents were asked to state, from the alternatives provided, their regular source of finance, which include commercial banks, government development banks, some ministries lending programmes, private lending establishments, personal borrowing, and self-finance. This question is very important since it determines how important are the financial institutions as a finance source for the private sector establishments.

As shown by Table 8.3, of the 225 establishments, 115 or 51.1 per cent of the respondents said that self finance is their first source of finance; 73 or 32.4 per cent stated government development banks, 28 or 12.4 per cent said commercial banks, and only 7 or 3.1 per cent said that personal borrowing is their first source of finance.

In terms of the second source of finance; 54 or 24 per cent of the respondents gave government development banks as their second source of finance, 45 or 20 per cent said self finance, 41 or 18.2 per cent said commercial banks, and 28 or 12.4 per cent put personal borrowing as a second source.

The respectable position of the development banks between the finance sources of the privates sector shows clearly the success of the government lending policy in filling the gap in

the financial markets in Saudi Arabia. Some might argue that it is normal to find development banks as a main source of finance because they are a very easy and cheap way of acquiring loans. In fact, this argument supports our conclusion since the lending policy is meant to be an easy and cheap financial source so that it can facilitate the investment process for private investors.

The preceding findings, which indicate the importance of self-financing, suggest many possible conclusions of which one or more could explain the results. The first is that the private establishments in Saudi Arabia are successful in their businesses since most of them rely on their own resources, such as retained profits, to meet their financial requirements. The second is that private investment in the country is possible for those people who have the ability not only to establish the investment, but to continue to supply it with its financial needs. The third conclusion is that the financial intermediaries, as can be seen from their position in previous answers, are not playing a vital role in enhancing the activities of the private sector since only 12.4 per cent of the private sector's units consider commercial banks as their first source of finance.

The information regarding the regular source of finance, in accordance with the type of economic activity, shows that the agricultural sector is the least dependent on commercial banks as a source of finance. This is in accordance with statistical data, mentioned before, which indicate the low percentage of commercial banks' loans extended to the sector.

Of the 98 establishments which represent the agricultural sector, 55 or 56.1 per cent indicated that government development banks are their first source of finance; 35 or 35.7 per cent put self-financing in first place; and two answers of only 4 respondents or 4.1 per cent, said that commercial banks or personal borrowing are their first source

of finance. As stated before, SAAB provides loans, of different types and terms, for agricultural units for most purposes as long as the farmer repays regularly. However, SIDF loans are paid only for establishing and expanding the project rather than to finance its continuing needs. Therefore, it is normal to find that SAAB is considered to be the first source of finance for more than 56 per cent of the agricultural respondents. However, this is not considered to be enough reason for commercial banks being the first source of finance for only 4 per cent of the respondents. The commercial banks, and other private financial intermediaries -if they are interested in investing in the domestic markets significantly- should investigate the reasons why the farmers depend on SAAB and self-financing as their main source of finance rather than on commercial banks.

Of the 117 industrial units which represent the industrial sector, 75 or 64.1 per cent stated that self-financing is their first source of finance; 22 or 18.8 per cent said commercial banks; and 16 or 13.7 per cent chose development banks as their first source of finance. Here we find that the commercial banks' position is better than it is in the agricultural sector, and the development bank is less important than in the agricultural sector. This situation might be attributed to two main reasons: first the nature of SIDF loans which are advanced only for the purpose of establishing and expanding industrial units and, second, the need of industrial units for the services of commercial banks to finance their imports.

As a second source of finance, 31 or 26.5 per cent said commercial banks; 30 or 25.6 per cent said development banks; and 12 or 10.3 per cent said self-finance. For the ten respondents representing other sectors, 5, or 50 per cent, said self-financing is their first source of finance; 2 or 20 per cent said development banks; and 2 said commercial banks.



Table 8.4, which shows the same results, regarding the finance sources question, classified according to the capital groups, indicates that the scale of the establishment does not alter the position of the private financial intermediaries in the eyes of the respondents since all of them agree upon the low role of the financial intermediaries in the economy. As the capital of the establishment becomes higher, we find more dependence on self finance and less on development banks and commercial banks. Of the 122 small-scale establishments, 57 establishments, 47 per cent, consider self-financing as their first source of finance; 51 or 42 per cent said developments banks; and only 9 establishments or 7 per cent said that commercial banks are their first source of finance. Of the 57 medium-scale establishments, 30 or 53 per cent said self-financing is their first source of finance; 14 or 25 per cent said development banks; 11 or 19 per cent stated that commercial banks are their first source of finance. Of the 27 medium- to large-scale establishments (SR 16-40 million), 18 or 67 per cent said self finance is their first source of finance; and 4 establishments or 15 per cent for development banks and commercial banks respectively.

When we investigated the regular source of finance of those 79 respondents facing finance problems frequently, we found that more than 51 per cent of them consider the development banks as their first source of finance. More precisely, 41 establishments (33 in the agricultural sector and 8 in the industrial sector) put the development banks in first place, while another 16 establishments said it is their second source of finance. Next comes self-financing which is the first source of finance for 22 establishments, or 28 per cent of the 79 respondents (16 in the agricultural sector and 5 in the industrial sector), and a second source for 19 establishments. Commercial banks, on the other hand, are the first source of finance for 10 of them (2 in the agricultural

sector and 7 in the industrial sector), and the second source of finance for another ten. The commercial banks, and other private financial intermediaries, have the chance to improve their position in the domestic economy by playing their natural role in facilitating lending operations for the private sector. In fact, it is their duty to act responsibly in providing the financial requirements of the economic units of the country.

The private sector is required to participate heavily in the development process during the next decade, and as we have seen, one of the constraints that might prevent it from doing so is the finance problem. Therefore, our findings support the issue raised by the Fifth Development Plan (1990-95) toward improving the financial service sector to act efficiently in meeting the investment requirements of the private sector. Unfortunately, it seems that investment in the country is very difficult to be obtain, except for those who are strong enough financially to carry on without the high possibility of failure.

### 8.3.3 LENDING INCENTIVE POLICY

The conclusion reached previously supports the existence of the government development banks such as, Saudi Arabian Agricultural Bank (SAAB), Saudi Industrial Development Fund (SIDF), and other government lending programmes. The government felt, at an early stage, the need for establishing such institutions to fill the gap in the financial market and meet the financial needs of the private sector establishments through providing short-, medium-, and long-term loans. Of the 23 businessmen who answered the written interview, 20 or 87 per cent said that the economy was in need of government support. In addition, the 13 businessmen whom we interviewed personally agreed upon the private sector's need for a lending

incentive policy and some of them pointed out that the commercial banks were not of much help, particularly, for medium and small establishments.

As we have seen, development banks are the first source of finance for 73 establishments or 32.4 per cent of the respondents, and a second source for another 54 or 24 per cent. This reflects the importance of the existence of these institutions and supports the idea that the private sector was in need of them. It was also shown that the small-scale establishments benefit the most since 51 or 42 per cent of the 122 small-scale establishments consider development banks as their first source of finance.

#### 8.3.3.1 POLICY'S ROLE IN FINANCING THE PRIVATE SECTOR

Can we say that the government lending programme has succeeded in solving the financial problems of the private sector establishments, particularly, the small ones? To answer that question, we investigate first how many establishments have benefited from the programme. As Table 8.5 shows, of the 225 establishment of our sample, 169 or 75 per cent of the total, stated that they have obtained loans through the government lending programmes. Around 74 establishment have obtained loans from SIDF; 87 obtained loans from SAAB; 5 from the Ministry of Finance and National Economy; and 3 from the Real Estate Development Fund.

The fact that 75 per cent of the sample, representing the private sector establishments, benefited from the government lending policy leaves no doubt that the private sector has been affected positively through fulfilling its needs of finance by that policy. In particular, the agricultural sector, where 88 per cent or 86 farmers have obtained loans from SAAB, in addition to three and four other loans obtained from MOF and SIDF respectively, bringing the total number of

agricultural beneficiaries to 93 or 95 per cent of the agricultural sample. In the industrial sector, 70 establishments or 60 per cent of the total establishments have obtained loans from SIDF, in addition to one who obtained a loan from the Ministry of Finance.

Regarding the size of the loans provided by the development banks, Table 8.5 shows that SAAB's loans are characterised by their small values. Of the 87 loans provided by SAAB, 69 of them, or 79.3 per cent, are of SR 4 million or less. More precisely, 40 loans, or 46 per cent of the total number, are under SR 1 million; 15 loans are between SR 1 to 2 million; 14 others are between SR 2 to 4 million. The other loans are; 10 loans of SR 4-10 million, and 8 loans ranging between 10 to 20 million.

In contrast, SIDF's loans are characterised by their larger amounts; some of them reached more than SR 80 million for two establishments, as can be seen in Table 8.5. Then, the loans' values range between SR 41 to 80 million for three establishments, SR 21 to 40 for ten establishments, between SR 11 to 20 for 17 establishments, SR 4 to 10 for 19 establishments, and less than SR 4 million for 12 establishments. The difference between the nature of agricultural and industrial investments could explain the different loan values, in addition to the fact that agricultural loans cover more purposes than industrial loans, and the latter are paid toward up to 50 per cent of establishment costs. In general, it was found that the capital size of the establishment has a significant impact on the loan's value. Those establishments with a high capital volume get higher loans' values. This, in fact, seems reasonable since the requirements of big establishments are greater than the small ones. However, this should not be the only, or the major, criterion in extending the loans.

The respondents were asked whether the provision of

governmental loans has helped in solving their establishments' financial problems. Of the 163 respondents who answered that question, 64 respondents, or 39.3 per cent of the total 163 beneficiaries, agreed strongly that the provision of loans has helped in solving their financial problems. In addition, 78 respondents, or 48 per cent agreed that government loans helped in solving their problems. So, 142 respondents or 78 per cent said that government loans did help in solving their financial problems. Only 15 or 9 per cent disagreed with that statement. Thus we can conclude that the government lending incentive policy has succeeded in relieving the finance problem of the private sector. This is especially true about the agricultural sector where 75 farmers or 75.5 per cent of the total agricultural respondents agreed (38 of them strongly) that government loans helped in solving their problems. For industrial sector, 66 respondents, or 56.4 per cent of the total industrial establishments agreed (24 agreed strongly) that the loans provision helped them in solving their financial problems.

In fact, the lending policy was of great help for those establishments facing finance problems frequently. We found that 56 establishments or 71 per cent of the total establishments which face finance problems frequently, stated that the policy was helpful in solving their financial problems. More specifically, of the 79 establishments which face finance problems frequently, 27 or 34 per cent agreed strongly that government lending programmes have helped in solving their financial problems; 29 or 37 per cent agreed that it helped in solving their financial problems; 3 said they were uncertain; 2 did not agree; in addition 5 others did not agree strongly.

We turn now to investigate, more closely, the role of government loans in solving the finance problems of those small establishments. The findings suggest that most small

private establishments (capital of SR 5 million or less) with financial difficulties have benefited from the lending policy in reducing the extent of such difficulties. Of the 56 small-scale establishments facing finance problems frequently, 41 or 73.2 per cent, agreed (20 of them agreed strongly) that the government loans helped them in solving their finance problems. The other answers showed that 2 respondents were uncertain, another one did not agree, and 3 others did not agree strongly. Therefore, it is accepted that the government lending programme has been one solution for the financial problems of the private sector establishments, particularly, the small ones.

On the other hand, government loans helped in solving the financial problems even of those who did not face financial difficulties frequently. 70 establishments, or 57.4 per cent of those 122 establishments which did not face finance problems frequently, stated that government loans helped in solving their financial problems (31 agreed strongly, and 39 agreed only). Three establishments were "uncertain"; 5 did not agree; 1 did not agree strongly, and 43 establishments did not answer the question. Of the 22 establishments which said they are uncertain as to whether they faced finance problems frequently, 5 or 23 per cent agreed strongly that the loans helped in solving their financial problems; 9 or 41 per cent agreed strongly; 1 did not agree; 1 did not agree strongly; and 6 or 27.3 per cent did not answer the question. These results support the conclusion we reached before, that government loans were of much help in solving the financial problems of the private sector establishments. It also supports the argument that finance is one of the main problems of the private sector since half of the establishments who said that they did not face finance problems admitted that the government loans helped in solving their problems, not to mention those who were uncertain about whether they faced the

finance problems frequently.

#### 8.3.3.2 LENDING POLICY'S IMPACT ON PRIVATE INVESTMENT

Now we turn to investigate the role of the lending incentive policy in stimulating the private sector's investment. Previous regression analysis confirmed the significant impact of loans on gross private investment. To find out the impact of loans on stimulating net private investment, the respondents were asked to state their purposes for obtaining loans through the government lending policy. They were given four options, namely, to establish the firm, to expand the firm, to purchase equipment, other purposes; and they were free to choose more than one answer. Table 8.6 shows the respondents' answers to this question, and as can be seen, the first option, establishing the firm, was the purpose of obtaining the loans for 107 respondents, or 47.6 per cent of the 225 establishments. So, almost half of the new private investments were undertaken because of the loans, not to mention those who obtained loans for the purpose of purchasing new machinery and equipment.

Investigating the main products of these 107 establishments who obtained the loans to establish the enterprise shows that, 23 establishments, or 21.5 per cent produce grain; 22, or 20.6 per cent produce mixed agricultural products; 15 or 14 per cent produce industrial consumption products; 13 or 12 per cent are agricultural projects; 12 or 11 per cent produce engineered products; 12 establishments produce different products; and 10 establishments or 9 per cent produce building materials.

In second place, in terms of the purpose of obtaining the loans, comes the option 'acquired the loans to purchase equipment', where we found 101 establishments, or 44.9 per cent of the total choosing it as an answer. Regarding the

option, expanding the firm, it was selected as a target of obtaining government loans by 48 establishments, or 21.3 per cent of the total respondents.

Answers to the question about the purpose of obtaining the loans numbered 256, while 169 establishments obtained loans, which means that some establishments gave more than one answer. However, since 107 establishments obtained loans for establishing the project, and another 48 for expanding the project, we can say that to purchase equipment was the only purpose of obtaining loans for 14 establishments, while the remaining 87 establishments which indicated that their purpose for obtaining the loans was to purchase equipment were either new establishments or expanding establishments. This conclusion is supported by the fact that of the 101 establishments which said that they had loans to purchase equipment purchasing, 39 establishments were in the industrial sector and 34 obtained loans from SIDF which grants loans to establish or expand a firm.

Therefore, it can be seen that the government lending policy has stimulated net investment in the economy through supporting the existence of 107 new establishments, or 47.6 per cent of the private sector's units, and the expanding of 48 establishments or 21.3 per cent of the total. Moreover, it helped in replacing capital for another 14 establishments. Of the 23 businessmen who answered the written interview, 19 or 83 per cent, supported our conclusion by agreeing (9 agreed strongly) that many private investment were established because of the government incentives. To support that argument we also asked the respondents whether they would have been able to undertake the activity, for which they obtained the loans, without the loan. The answers show that 116 respondents, or 69 per cent of the 169 beneficiaries, would not have been able to undertake the activity without the loans, while another 46, or 27 per cent, said they would have



been able.

The agricultural respondents who obtained the loans for the purpose of establishing projects numbered 56 respondents, or 57.1 of the total 98 agricultural respondents. Another 24 establishments, or 24.5 per cent, obtained loans for the expansion purpose; while 13 establishments, or 13.3 per cent, obtained the loans to purchase equipment.

Of the 117 respondents of the industrial sector, 48 establishments, or 41 per cent, obtained the loans for the firm's establishment; and 23, or 19.7 per cent to expand the establishment. Of the ten establishments of other sectors, 3 said the firm's establishment was the purpose of the loans, one chose "others" as an answer, while the others did not answer the question.

An investigation, which is as important as the previous one, is to find out why the remaining 56 respondents did not obtain loans. Thus, we asked the respondents who did not obtain loans, the reason for that. The answers indicate that 34 respondents, or 61 per cent, were not in need of such loans, 11 did not fulfil the conditions, 5 had their applications rejected, while the other 11 respondents mentioned other reasons, such as complicated loan request procedures.

We also asked those 46 respondents, who stated that they were able to undertake activities without the loans, about their reason for applying for loans. The majority, or 72 per cent, said that the reason was to benefit from the chance provided by the government. Next comes, in importance, those who used the loan application procedure to ascertain if their project was sound, assuming it to be so when approved by the concerned department. And lastly, that the feasibility study showed the importance of accruing the loan.

Finding that one-third of the beneficiaries from the lending policy were able to undertake the intended activity

without the loans raises the question regarding the possibility of wasted resources that result from directing some loans where they are not really required. Also, finding that 20 per cent of the non-beneficiaries complained, mostly, about the administration of the loans indicate the importance of investigating this issue, and that is the aim of the next section.

#### **8.3.3.3 LENDING POLICY ADMINISTRATION**

In Chapter Two, we discussed the shortcomings that might limit the effectiveness of the incentive policies in achieving their objectives. We said that these shortcomings stem, mainly, from two things: either from the nature of the incentives system itself, such as its regulations; or from the performance of the people who are administering these incentives. The extent of the administrative requirements and procedures for obtaining the incentives might encourage or discourage investors from applying for the incentives. For that reason it was necessary that the study explores the respondents' views regarding the incentives' administration in Saudi Arabia to find out any shortcomings that need to be corrected in order to make the incentives more effective.

The respondents were asked many questions regarding the incentives' administration such as, the administration procedures, the required conditions, loans' values, grace period, and repayment period. The administration procedures are an important factor in determining the success of the policy in achieving its objectives. Investors are discouraged from applying for the designed incentives if they are required to go through complicated or/and time consuming procedures. The same goes for the required conditions or specifications that an investment should have to be eligible for the incentives. Of great importance, also, are the loan size, its

grace period, and repayment schedule. These factors should be as appropriate as possible to ensure the achievement of the desired objectives, and to avoid any adverse effects.

Although the questions were directed toward the lending incentive regulations, many comments were received evaluating the performance of the employees who administrate the loans. The respondents were given a multiple choice between different degrees of answers, which included strongly disagree, disagree, uncertain, agree, and agree strongly, in order for them to express their degree of agreement with the statements. Table 8.7 shows the respondents' answers regarding the administration issue. We start by evaluating the administration of the SIDF lending policy.

#### **A- Administration of Industrial Lending Policy**

The first question was about the administration procedures which the applicant goes through in order to obtain the loan. These include the papers to submit, the agencies to consult, the period of studying the application, etc. Of the 74 respondents who have dealt with SIDF; 9 or 12.2 per cent of them agreed strongly that the administration procedures of SIDF are complicated, 19 or 26 per cent agreed only with that statement, 7 or 9.5 per cent were uncertain, 31 or 42 per cent disagreed that SIDF's administration procedures are complicated, and 6 or 8 per cent disagreed strongly with that statement.

Although more respondents consider that the SIDF's administration procedures are not complicated, than those who believe that they are (37 respondents, or 50 per cent, and 28 respondents, or 38 per cent, respectively), the answers indicate the existence of some shortcomings in the loans' administration procedures which need to be overcome. Although it is difficult to define these shortcomings, the comments of

some respondents bring to light some points that the SIDF should consider. These include the high fee which SIDF charges for the feasibility study, the lack of confidence between the investors and some employees of the Fund, the inexperience of some of the employees, and the bureaucracy and centralisation of the decisions. Moreover, a businessman said that the information required by SIDF is more than that necessary for making the decision about awarding the loan. He added that revealing this information might disclose trade secrets. An example of the information that SIDF requires is, the feasibility study, which should contain the following information (in as much detail as possible):

- a description of the product or products;
- the project's description and capital cost;
- the operation expenses of the factory;
- a detailed marketing plan;
- a detailed technical description of the manufacturing process;
- a description of the proposed management structure with personnel qualifications and expenses;
- financial projections for future years, including balance sheet and profit and loss accounts.

The Guide to Industrial Loans issued by SIDF states that although the information required might appear lengthy, without it, it would not be possible to analyse the project in sufficient depth to make a judgement on its likely prospects of success and, then, the possibility of financing it. Another businessman said that the Fund acts in the same manner as the commercial banks when dealing with applications and this is not consistent with its main job as a development institute. An example he gave was the guarantees the Fund requires to secure the repayment of the loan.

These might not be the main reasons which explain the answers of the 38 per cent of respondents who said that the

loans' administration procedures are complicated. But alleviating some of them, which are in fact considered to be shortcomings, would definitely improve the effectiveness of loans system. It is known that the Ministry of Industry and Electricity does not issue industrial permission to any project unless they are convinced that it is feasible and appropriate for the economy. Therefore, it is necessary that the Fund coordinates with the Ministry in this regard to avoid any problems or duplication that cause delay in, or denial of providing loans for the applicants.

In respect of the complaints raised against the Fund's employees, it is the concern of the Fund, as we understood from officials, to train its employees in order to improve their skills, and such a process of course takes some time. Additionally, the Fund should review the loans regulations and procedures, from time to time, to ensure that they are achieving the desired objectives. On the other hand, complications in the loans' procedures are caused, sometimes, by the applicants themselves when they apply for the loans without completing the required information which in turn generates delays in taking the decision regarding their application. Moreover, some applicants ask the Fund employees for some exceptions which are beyond their authority to grant. Some comments suggest that the Fund should increase the authority of its employees to enable them to process the cases in their hands more efficiently.

We turn now to evaluate the conditions or specifications set by the Fund to determine the eligible projects to obtain loans. For example, the Fund requires that the projects must be viable from a marketing, technical and financial point of view; be capital intensive; offer scope for employing and training Saudi citizens; and some other requirements. In order to evaluate these conditions, the respondents were asked to state their agreement or disagreement with the statement

which says that the SIDF conditions for obtaining the loan are reasonable. Of the 74 respondents, 13 of them, or 17.6 per cent, agreed strongly with the statement; 42 others, or 57 per cent, agreed only; 4 respondents, or 5.4 per cent, disagreed strongly; another 7, or 9.6 per cent, disagreed that the conditions are reasonable. So, the majority, or more than 74.3 per cent of the total beneficiaries, believe that the loan conditions of the Fund are reasonable.

Another important issue to be evaluated is the size of the loans extended by the Fund. Since the Fund finances 50 per cent maximum of the total costs of the project, it was not surprising that we found, generally, that the loans' values are related positively to the capital of the projects. But, does that mean that the extended loans satisfy the financial needs of the projects? The respondents were asked to express their agreement with the statement that 'the loans extended by the Fund have not satisfied their financial needs'. Of the 72 replies to that question, 6 respondents, or 8.3 per cent, stated that they disagree strongly with the statement. In addition, 35 respondents, or 48.6 per cent, did not agree with the statement, which brings the total of those who believe that the loans satisfied their projects' financial needs to 41 respondents, or 56.9 per cent of the total. Linking these answers with the answers of those facing finance problems frequently, shows that 7 respondents who said that they face finance problems frequently are satisfied with the loans' values.

In contrast to the previous answers, we found 8 respondents, or 11 per cent of the 72 answers, agreed strongly that the extended loans did not satisfy their firm's financial needs. Another 18 respondents, or 25 per cent, stated that they agree with the statement, which means that 26 respondents or 36 per cent agreed that the SIDF's loans did not satisfy their projects' financial needs. Among them were 10

respondents who face finance problems frequently.

Since the loans objective is to encourage private investors to invest domestically, through providing them with lending facilities, rather than to act as a financial institution, the respondents' answers indicate the success of the loans in achieving that objective (i.e encouraging investment) by satisfying the financial needs of most of the industrial units.

The SIDF sanctions loans repayable over a maximum term of fifteen years. The grace period, repayment instalments' amounts, and maturity dates are determined on the basis of results reached through a project's study of the potential cash flow. It is obvious that determining these concerns is very important since it could cancel the positive effects of the loans should the repayment become a heavy burden on the investor. So, to what extent does the bank succeed in determining these concerns to enhance the effectiveness of the loans?

To get an answer to that question, the respondents were asked to express their agreement with two statements. The first one says that 'the grace period of the Fund's loans is appropriate', and the second says that 'the repayment period of the Fund's loans is enough'. Of the 74 respondents to the first statement, 37 or 50 per cent agreed that the grace period of the Fund's loans is appropriate; in addition another 12 respondents or 16 per cent agreed strongly with the statement. In contrast, 19 respondents, or 26 per cent did not agree with the statement, and one respondent disagreed strongly. Consequently, we can say that the Fund's determination of the grace period was good, since more than 66 per cent of the borrowers considered the grace period to be appropriate. Nonetheless, the Fund should pay attention to the fact that more than 26 per cent of the borrowers are not satisfied with the grace period they have been given. It is

important that the Fund has the flexibility to change the grace period of the loans if the project's real cash flow is less than the expected cash flow, to enhance the prosperity of the project and avoid putting a heavy burden on the borrowers.

Concerning the second statement about the repayment period, we found that of the 74 respondents, 38, or 51.3 per cent, agreed that the repayment period of the Fund's loans is enough, and 9, or 12.2 per cent, agreed strongly. Twenty respondents, or 27 per cent, believe that it is not enough and 2 respondents disagreed strongly. In other words, around 30 per cent of the respondents believe that the grace period is not enough. Again, the results suggest the need for the Fund to reconsider those cases to find out whether the loan repayments lead to or cause any financial problems for those projects. Some comments suggest that the Fund should reschedule repayments for struggling projects, and even support them by new loans, to enable them to overcome their problems if investigation shows that they have the capability to continue successfully after such support. Others suggest that the repayment period for small factories should be extended to ensure maximum positive impact. Depending solely on the results reached by the Fund's feasibility study of the project to determine the repayment period, or the grace period, is misleading and may generate negative consequences that rule out the positive effects of the loans. The Fund's officers argue that they do not follow a strict collection procedure and any project which can prove that it faces difficulties is given special consideration.

We investigated the link between the respondents' answers regarding the SIDF administration of loans with some variables such as the establishment date, the capital, the loan's value, and the main product, to find out if any one of these variables has an effect on the answers but we have not detected any significant relation.



## B - Administration of Agricultural Lending Policy

We turn now to evaluate the SAAB's administration of the agricultural loans through the farmers' answers to the same questions we discussed in the previous section. As we have seen before, 87 establishments benefited from the loans provided by SAAB. However, there were more than 87 answers to some of the questions, which means that either some respondents did benefit from the SAAB's loans but did not mention that, or they applied for the loans but did not get them and, therefore, they were able to give their views about the administration.

89 respondents answered the question about the administration procedures of the SAAB agricultural loans. Again, the question was in the form of a statement which said that 'The administration procedures of SAAB are complicated'. The respondents had to choose between five answers, namely, disagree strongly, disagree, uncertain, agree, agree strongly, for that question and for the other questions about SAAB's administration of loans. The percentage of those who believe that the SAAB'S administration procedures for granting agricultural loans are not complicated is close to the percentage of those who agreed that they are complicated. Around 46 per cent, or 41 respondents, disagreed that the administration procedures were complicated (10 of them disagreed strongly). In contrast, 37 respondents, or 41.6 per cent, stated that the procedures are complicated (11 of them agreed strongly). Almost 12 per cent, or 11 respondents, were uncertain about this issue. The results raises some concern regarding the administration procedures for granting agricultural loans since the respondents' attitude toward them were closely between two contradictorily answers. Some of the respondents argued that some of the Bank's staff are not qualified enough to be able to decide upon the feasibility of

the project which results in extending loans for projects that have a strong likelihood of failure. The comments added that the researchers, who visit the farms to decide the needs to be covered by the loans, should be well trained and have enough experience to avoid any problems that might arise because of their poor qualifications.

The nature of agricultural investment makes it more difficult to have a standard procedure that can be applied for all cases, and therefore, the possibility of having different treatments for similar cases is not ruled out. However, we emphasize again the importance of improving the efficiency of the employees and the performance of the system through, for example, employing management technology in the Bank, and other technical applications. During my visit to the Bank, I found that the Bank has installed a good computer network at considerable cost, but unfortunately, it is not utilised by most of the employees for many reasons, among them being the lack of knowledge to use it efficiently. Much of the paper work is done manually, causing inefficiency in dealing with applications.

We investigated (as we did in the previous section) the possibility that some variables such as, capital, main product, loan's value, and establishment date, might have an effect on the respondents' answers regarding the SAAB's administration of loans. But we did not find any significant relation. These variables were chosen because it was thought that they might contribute some information in explaining the respondents' answers. For example, it was important to know whether the declining oil revenues in the 1980s which has forced the Bank to depend, more than before, on its financial resources to ease its lending operations, rather than expecting more government financial support, has an effect on the Bank's policy and administration of the loans. It is true that these changes have caused the number of extended loans to

decline, and to slow the speed of proceeding the applications. However, linking the respondents' answers with their establishments' date, their sizes, and their products has not showed any significant results. That means, generally speaking, that the changes in the Bank procedures were appreciated by the respondents, and were not a main problem for them.

In respect of the conditions that the borrower should meet, in order to be able to obtain an agricultural loan from the Bank, the answers show that the majority believe that the conditions are very reasonable. Of the 88 farmers, who answered the question which says 'the required conditions for obtaining the agricultural loans are very reasonable', 9 respondents, or 10.2 per cent, said they disagreed strongly with the statement; 10 respondents, or 11.4 per cent, did not agree; 6 respondents, or 6.8 per cent, were uncertain. On the other hand, 39 respondents, or 44.3 per cent, agreed that the required conditions are very reasonable; and 24 respondents, or 27.3 per cent, agreed strongly with that statement. So, around 72 per cent of the respondents agreed that the conditions are very reasonable, against 22 per cent who stated the opposite. However, the attitudes of those 19 respondents, or more than 19 per cent of the total agricultural sample, enhance the need for evaluating the conditions to overcome any shortcomings.

Ordering those answers, which state that the Bank's conditions are not reasonable, according to their type of production, shows that: 9 of them produce grain, 8 mixed agricultural products including grain, and 2 are agricultural projects. According to their capital size, we found that 12 of them are of SR 5 million capital or less, 3 are with capital of SR 6-15 million, and 4 with capital of SR 16-40 million. We can conclude from these figures that most of those who are not satisfied with the Bank's conditions are

small farmers. Since most of the agricultural loans are granted to finance the purchase of agricultural equipment and machinery, one explanation for their disagreement could be that those small farmers are not satisfied mainly with the conditions which require that the farm should be of a certain size to become eligible to obtain finance for buying equipment and machinery.

Because the SAAB's loans are characterized by their small values, this emphasizes the importance of questioning whether the loans have succeeded in meeting the farmers' needs or not. The respondents were asked to respond to the statement that says 'the loan's value extended to you by SAAB did not satisfy your farm's financial needs'. There were 88 answers to that question, and it was found that 47.7 per cent, or 42 respondents, stated that the loans did not satisfy their farm's financial needs. Among them were 19 respondents, 21.6 per cent of the 88 respondents, who agreed strongly. In contrast, 38 respondents, or 43.2 per cent, said that they disagreed with that statement (11 disagreed strongly), and therefore, admitted that the loans satisfied their financial needs. Eight respondents, or 9 per cent, did not choose a clear answer, and said they were uncertain.

Investigating the production and the loans' values of those 42 farmers who said that SAAB's loans did not satisfy their farm's financial needs, revealed the following:

- 15 farmers or 36 per cent produce grain, and obtained loans of less than SR 4 million;

- 20 farmers, or 47.6 per cent, produce mixed agricultural products and 16 of them obtained loans of SR 4 million, while the remaining 4 farmers obtained loans of SR 4-20 million;

- 7 are agricultural projects and their loans' values were SR 2.1-4 million for 2 of them, SR 4.1-10 for 2 projects, and SR 10.1-20 million for 2 projects.

Looking at their capital, we found that of the 42 respondents, 28 or 66.7 per cent have capital of SR 2 million or less; 4 or 9.5 per cent have capital of SR 2.1-5 million; 2 or 4.8 per cent have capital of SR 6-10 million; 4 or 9.5 per cent have capital of SR 11-15 million; 2 or 5 per cent have capital of SR 16-20 million; 1 had capital of SR 21-40 million, and one's capital was unknown. These results do not necessarily imply that the majority of the respondents dissatisfied with the loans' values are small farmers, because 26, or 68.4 percent of the 38 respondents, who were satisfied with the loans' values are also small farmers. Moreover, we found that 24, or 57 per cent of the 42 dissatisfied respondents face finance problems frequently, while the remaining 18 farmers do not.

The next question which the farmers were asked was about the grace period which SAAB allows them for the loans they have. Of the 88 respondents for that question, 49 or 55.7 per cent agreed that the grace period is enough (14 of them agreed strongly). On the other hand, 37 or 42 per cent stated that the grace period is not enough (21 of them disagreed strongly). From the previous chapter we knew that agricultural projects are the only borrowers who are eligible for a grace period. Since we had 25 respondents in our sample representing agricultural projects, it is worth investigating why 86 farmers answered that question while they do not have a grace period for their loans. According to the SAAB definition of the agricultural project, any farm that uses a greenhouse in production, produces a dairy product, or produces grains is eligible to benefit from the privileges which are granted to those projects established as agricultural projects.

Of the 88 respondents for the question regarding the appropriation of the grace period, 9 agricultural projects agreed that the grace period is appropriate, and the same

number of respondents stated the opposite. Another 21 respondents, producing mixed agricultural products, agreed that the grace period is appropriate, while 11 respondents disagreed. Lastly, 19 respondents, producing grain, agreed with the statement, and 17 respondents disagreed. So, the explanation for the answers is one of two: that the respondents not running pure agricultural projects have within their farms some investment which is considered an agricultural project, and is therefore treated as agricultural projects, or that the respondents wanted to express their opinion regarding that issue by stating their agreement or disagreement about it. Whatever the explanation, the result is important since it shows the satisfaction or dissatisfaction of the agricultural investors with the SAAB's procedures regarding the grace period which helps in evaluating the lending policy of the Bank in general to overcome any shortcomings. The finding that more than half of the agricultural sample were dissatisfied with the grace period of the Bank points to the importance of introducing such an appropriate term.

The following question, which is as important as the previous one if not more so, is about the repayment schedule of the loans. Its importance stems from the fact that the repayment schedule is the key element in determining the impact of the loans on the activity concerned. We asked the farmers to state whether they agreed with the statement that 'the repayment period of the SAAB's loans is enough'. We had 91 answers to that question. Fifty-five per cent of them, or 50 answers, stated that the repayment period is enough for them to repay the loan. Another 39 answers, or 43 per cent, said that the repayment period is not enough. Regarding the degree of agreement or disagreement with the statement that the repayment period is enough, 20 respondents agreed strongly with the statement, 30 agreed with it; 21 disagreed strongly

with the statement, and 18 disagreed. As we have already established, almost half of the agricultural establishment face finance problems frequently. Hence, it is important to find out whether the repayment schedule puts pressure on these farmers. The investigation shows that of the 49 respondents who agreed that the grace period is enough, 22 face finance problems frequently, while 22 do not, and 5 are uncertain as to whether they have a finance problem. Of the 39 respondents who said that the repayment period is not enough, 26 face finance problems frequently, 7 do not, and 6 are uncertain. So, almost half of the farmers who face finance problems stated that they are not satisfied with the repayment period set by SAAB. The Bank should pay considerable attention to these cases to make sure that the loans extended to encourage agricultural investment do not bring about a contradictory outcome.

#### **C - MOFNE and REDF Administration of Loans**

The Ministry of Finance and National Economy (MOFNE), and the Real Estate Development Fund (REDF) provide loans for private establishments, as we said in Chapter Five. In our sample, five respondents benefited from the MFNE lending programme, and three from the REDF lending programme. Although the beneficiaries from these two channels are very few (only 3.5 per cent of the total sample), their evaluation of loans' administration of the two channels provide some valuable indications.

Regarding the administration procedures of the MOFNE loans programme, three respondents stated that they are complicated, while two others said that they are not. It is normal to find the administration and conditions of the loans provided by MOFNE of that difficulty since the Ministry lending programme is designed for specific purposes and

therefore is more selective than those of other programmes which intend to encourage the investment in the whole sector instead of a specific area. The loans' conditions of MOFNE were reasonable in the opinion of three respondents, while three others said they were not reasonable, which reflects again the nature of the MOFNE loans. Because the Ministry is interested in achieving certain goals under specific circumstances, its loans' procedures are tough, but their values are enough to ensure the achievement of the goals. Therefore, we found that four respondents considered MOFNE loans' values enough to meet their firms' financial needs, while one respondent disagreed with that. The shortcomings of the MOFNE loans, that appears from the respondents' answers, are regarding the grace period and the repayment period. Three respondents considered the grace period of MOFNE loans as not appropriate while one respondent regarded it as appropriate. For the repayment period, three said it is not enough while one stated it is enough.

Asking the same questions regarding the REDF lending policy, we found that two respondents said that the administration procedures of the Fund are not complicated, while one respondent said they are. For the loans' conditions, there were only two respondents and they think the conditions are reasonable. The amount of loan did not satisfy the financial needs of one respondent, but was enough for the other. While both respondents agreed strongly that the grace period is not appropriate, one of them considered the repayment period as not enough.

#### **8.4 The Subsidy Policy**

The government's subsidy programme covers many aspects, though agricultural investments gain the lion's share. It was difficult for us to evaluate every subsidy of the programme



due to the fact that the length of the questionnaire would be doubled if we include questions about each subsidy, and that would cause the response rate to be very low. Therefore, we group the subsidies under general titles which cover related subsidies. For example, under 'production factors subsidies' we included any subsidy extended for the purchasing of equipment, machinery, or other capital goods. The same was done with other subsidies. However, some of the subsidies, such as the Saudis training subsidy, were kept separate to distinguish them from other subsidies for analysis purposes. Sorting the results according to the economic activity type will help in distinguishing agricultural subsidies, for example, from other subsidies that might fall under the same title. Now we discuss the subsidy programme as it is evaluated by the respondents.

#### 8.4.1 THE ROLE OF SUBSIDIES

First, we explore how many private establishments have benefited in general from the subsidy programme. The results show that 216 private establishments, or 96 per cent of the total sample, have benefited from one type or more of the government subsidy programme. Table 8.8 gives more details about the number of beneficiaries and their activities. This very high percentage no doubt affects positively the private sector activities, as we shall see later.

We now investigate which subsidy has accrued the highest number of beneficiaries, and which is the most important according to the respondents' accounts. The subsidy programme that accrued the highest number of beneficiaries was the lands' grant programme from which 162 respondents, or 72 per cent of the total sample, benefited. Seven other respondents stated that they have, almost, obtained land. Another 10 respondents said that they did not obtain land.

That 157 respondents, or 97 per cent of the total beneficiaries, have obtained land for the purpose of establishing a project, and 9 respondents for extending an existing project, indicates the important role that the programme plays in stimulating private investment. For agricultural lands, in particular, where the land is the main production factor, the programme is considered to be successful.

We asked those respondents who did not benefit from such a programme to state the reason that prevented them from doing so. Only 5 respondents answered that question; one said he applied but his application was rejected, another said he did not need it, and two stated that they did not know about it.

Of those 162 beneficiaries, 110 or 68 per cent obtained industrial land which means that more than 94 per cent of the industrial units of our sample benefited from the programme. It implies, also, that the industrial units are located, mainly if not totally, on the industrial estates built by the government. This high percentage of industrialists using the industrial estates reflects the success of the government policy toward building modern industrial estates to attract domestic investors. Moreover, the cheap rents of these industrial lands has a great impact on reducing costs, particularly for new establishments. Of the 162 beneficiaries, 104 or 64 per cent, agreed (64 agreed strongly) that accruing the land has a great role in reducing the establishment's costs. This is not surprising when we know that lands' business in the country has been among the most profitable investments during most of the last fifteen years which implies the high rental prices of such production factor.

However, some comments suggested some points that should be considered by the Ministry of Industry and Electricity (MOIE) who control and run these estates. One industrial

manager said that though the period of the leasing contract of the land between the Ministry and the factories is 25 years, it is not clear what will be the situation after that. Another comment suggested that the Ministry should make sure that the necessary facilities and services are provided to the land before distributing them to avoid any problems caused by a delay in providing such facilities.

Regarding agricultural land, we found that 51 respondents, or more than 52 per cent of the total farmers, have obtained free agricultural land through the Agricultural Land Distribution Programme carried out by the Ministry of Agricultural and Water (MOAW). This means that more than half of the existing farm land has been distributed by the governments free of charge to the various farmers and agri-businessmen. This in fact is most true about the central region, rather than other regions, since the distributed land is concentrated in the central and northern region according to the results reached by Al-Obaid where his field research findings revealed that 81 and 44 per cent respectively of the distributed land in Saudi Arabia was in the Central and Northern Regions.<sup>4</sup> The reason for the concentration of distributed land in these two regions might be attributed to two factors; the availability of underground water in these regions; and the nature of the land which is vast arable land.

The high proportion of distributed land no doubt affected positively agricultural production. The country's achievement of self-sufficiency in wheat production is obvious evidence of the positive effects of the programme, since a large number of the 51 respondents who accrued free land, or 22 farmers, are producing grain. Furthermore, 35 per cent or 18 respondents produce mixed agricultural product, which includes wheat, while the other 22 per cent, or 11 respondents, are

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<sup>4</sup> Al-Obaid, A.A., 1987, p. 299.

agricultural projects. Moreover, distributing the land free of charge makes the agricultural investment easier to carry since the cost of the fixed capital, the land here, is almost zero. Around 86 per cent of the beneficiaries stated that obtaining the land had reduced their costs. Additionally, all the respondents obtained the land for the purpose of establishing a business.

The only concern about the high proportion of land being in the Central Region is the water issue. The farmers in the Central Region depend mainly on underground water aquifers which are not rechargeable. On the other hand, most of them grow grain which, using the present irrigation system, consumes a lot of water. Therefore, it could be said that the land distribution programme has a negative effect on depletable underground water resources.

The second subsidy, in terms of the large number of beneficiaries, is import duties exemption. Of the total sample, 116 respondents or 51.6 per cent stated that they obtained import duties exemption on their imports of exempted materials. We found that most of them were from the industrial sector. More accurately, of the total 117 industrial establishments of our sample, 103 or 88 per cent accrued import duties exemption. The 103 beneficiaries represent: 86 per cent small industrial establishments, or 37 respondents; 88.4 per cent medium industrial establishments, or 38 beneficiaries; and 90 per cent large industrial establishments, or 28 beneficiaries. The establishments to benefit most are those producing consumer products, 29.3 per cent of the total. The engineered products producers come second with 25 per cent.

So, it is obvious that this subsidy has a positive impact on the private establishments since it helps reduce their production costs. Of the 116 beneficiaries all, except one, agreed (85 of them agreed strongly) that the duties exemption

has a great impact on reducing their production costs. However, the extent of that impact depends on the amount of exempted imports they are given. As the value of the exempted imports of raw materials, machinery and spare parts in 1987 amounted to SR 5.7 billion, and was divided equally between machinery and raw materials, this explains the importance of the subsidy in both reducing production costs and increasing investment volume.

Of the agricultural establishments which have benefited from the subsidy, 10 are agricultural projects and 4 are mixed agricultural producers. The import duties exemption is granted by the Ministry of Industry and Electricity and therefore those agricultural producers who benefited from this subsidy might be of two types: either they are agri-businessmen who are eligible for both agricultural and industrial incentives, or they import animal feed, such as barley, which is classified as consumption food and hence exempted from duties.

The answers of the 12 respondents who did not benefit from the programme and regarding the reasons indicate that: 4 respondents said they did not know about it, 4 said they did not need the subsidy, 3 did not meet the required conditions, and one respondents applied but his application was rejected.

The production factors subsidy comes third in terms of the number of beneficiaries. Ninety-seven respondents benefited from this subsidy, 43.1 per cent of the total sample unit. Most of them (83.5 per cent), or 81 respondents, are agricultural producers (around 83 per cent of the agricultural sample). This is normal since the Agricultural Bank is the only government agency that provides such subsidies for the farmers to purchase agricultural machinery, engines, pumps, and other equipment. However, the existence of 16 industrial establishments, distributed equally between the different industrial sectors, poses a question regarding the source of

the subsidy they have obtained. A possible source could be the special subsidy programmes provided by the government for special cases, and/or it could be the designed programmes initiated occasionally by the Ministry of Finance and National Economy for particular purposes, as we discussed in Chapter Five. Moreover, they could be agro-industrial establishments which are eligible for subsidies from both SAAB and SIDF.

The high percentage of agricultural establishments benefiting from the production factors subsidy programme implies the transformation of the agricultural sector from a traditional to a modernised one which uses a new mechanisation process. In addition, the programme reduced largely the production costs of the private establishments and 84 respondents, or 86.6 per cent of the total beneficiaries agreed (48 agreed strongly) that it did help in reducing their costs. Only two respondents disagreed strongly that it reduced that costs.

We found that the grain producers are first in terms of benefiting from the production factors subsidy since they account for 37.1 per cent of the total beneficiaries. Of the 39 grain producers of our sample, 36 or 92.3 per cent did benefit from that programme. In second place comes the mixed agricultural producers with 28 farmers benefiting from the programme, or 28.9 per cent of the programme's total beneficiaries (this is 72 per cent of the total producers of mixed agricultural products). Third come agricultural projects where 18 or 18.6 per cent of the beneficiaries obtained the subsidy (72 per cent of the total agricultural projects). We know from Chapter Five that 37 per cent of the total subsidies provided by SAAB went for engines and pumps and it is not surprising since such equipment is essential in an arid country like Saudi Arabia where farming depends mainly on underground water for irrigation. But on the other hand,

the grain producers being the main beneficiaries again raises concern regarding water resources.

Furthermore, with 27 per cent of the subsidies provided by SAAB going to agricultural machinery, the total subsidies provided by SAAB for the purchasing of engines, pumps and agricultural machinery reached 64 per cent of the total subsidies. This large percentage can be attributed to two factors. First, the large area of arable land which induced the horizontal expansion in agricultural areas and hence the need for more machinery and equipment. Second, the shortage of labour available for agriculture which increased dependency on capital-intensive production. This high percentage might also be attributed to the fact that the subsidy programme encouraged farmers to buy machinery and equipment beyond their actual needs. A study by the Riyadh Chamber of Commerce and Industry showed that engines on small farms are not used to their full capacity. It was found that on large farms an engine serves 52 hectares, while on small farms it serves 25.6 hectares, only half the area it could serve.<sup>5</sup> Thus, small farmers bear unnecessary costs through buying equipment in excess of their needs which leads to inefficiency in production since the marginal cost is more than the marginal revenue of engine. Moreover, inadequate maintenance services and provision of spare parts, which was mentioned by some respondents, might encourage farmers to obtain more and more equipment and to change it frequently. In fact, a study by SAAB supports this argument; it showed that the average life of tractors, ploughs, combine harvesters, engines and pumps is short, between 2.77 and 3.11 years.<sup>6</sup> We said before that 54

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<sup>5</sup> Riyadh Chamber of Commerce and Industry, "Agriculture Between Mechanisation and Aid", 1989.

<sup>6</sup> SAAB, "A study about mechanisation and agricultural development in Saudi Arabia", 1981.

agricultural establishments faced finance problems frequently, among them 45 whose capital is less than SR 5 million, or small-scale establishments. knowing that 36, or 80 per cent of those small agricultural respondents face finance problems frequently, have accrued a production factors subsidy gives some concern regarding the possibility that accruing such a subsidy might have contributed to such a problem. Another 10 small farmers, who were uncertain as to whether they face finance problems frequently, have also accrued that subsidy. The question is, how many of those agricultural establishments facing finance problems were in that position because of the subsidy programmes. Many businessmen mentioned cases in which the borrowers went bankrupt because they had involved themselves in investment beyond their abilities, mainly to benefit from the incentives provided by the government. Unfortunately, a detailed answer to this question is beyond the scope of this study for reasons, such as time limitation and lack of information.

Those who did not get a production factors subsidy were asked to state the reason for that. Only 14 respondents answered the question and their answers showed the follow; 7 respondents did not know about it, 3 did not need it, 2 did not meet the conditions, and 2 applied but could not get it.

Now we see how many respondents have benefited from other subsidy programmes. Ninety-three respondents, or 41.3 per cent of the sample, said that they have benefited from both the water and electricity subsidy programme, or one of them. Industrial sector units have benefited most from this subsidy, 70, or 60 per cent having benefited with consumer products and engineered products factories benefiting the most. In the agricultural sector, 21 farms, or 21.4 per cent of the total agricultural sample, benefited from the water and electricity subsidy programme. This percentage is normal since there are no water charges for agricultural use, and electricity



consumption is very little compared with industrial units, except for agricultural projects.

Investigating the capital of these 93 beneficiaries we found that 43 establishments, or 46 per cent, are small-scale establishments; 30 or 32 per cent are medium scale establishments, and the remainder have capital above SR 16 million.

Before we discuss the next subsidy programme, we mention here that many respondents questioned the existence of the water and electricity subsidy, claiming that there is in fact no such subsidy and they are charged a higher rate than the one set for residential areas. The reality is that the government pays subsidies to the electricity company to keep prices low, and therefore, selling electricity to the private establishments at the same rate as residential areas does include a subsidy. Moreover, because under the new system charges increase as consumption increases, some respondents might not realise that their charges are cheaper than those for residential areas. This may explain why, with more than 70 per cent of the beneficiaries being small- and medium-scale establishments, their consumption could be low and therefore they are charged less than others.

When we asked the respondents about the role of the water and electricity subsidy programme in reducing their costs, we found that all of them agreed, in fact 61 of them agreed strongly, that the subsidy has a great impact in reducing the costs of production.

Concerning the government purchasing of the private sector output, we know from Chapter Five that it includes, purchasing of wheat production, barley production, a certain amount of dates production, and priority of purchasing for locally manufactured goods. Eighty-one establishments benefited from the subsidy programme. Of these, 68 respondents, or 84 per cent, are in the agricultural sector,

and 13, or 16 per cent, are in the industrial sector. Classifying these beneficiaries according to their main products shows that 44.4 per cent or 36 beneficiaries produce grains which is mainly wheat or/and barley; 27, or 33.3 per cent, produce mixed agricultural products which include wheat, dates, or barley; 5, or 6 per cent, are agricultural projects; 5, or 6 per cent, produce engineered products; 2, or 2.5 per cent, produce consumer products; 2, or 2.5 per cent, produce building materials; and 4, or 4.9 per cent, produce other products. So, the agricultural sector, as expected, is heavily supported by the output subsidy since almost 70 per cent of the total agricultural respondents are receiving at least one type of output subsidy.

In Saudi Arabia, where government purchases constitute a large part of the total demand of the economy, the government has found it very important to direct its purchasing toward domestic production to help achieve its objective of building successful domestic industries. Moreover, industries in their early stages are in need of a secure market for their production to enable them to compete with foreign products, and government purchases enhance the sector's competitiveness. For that purpose, as we discussed in Chapter Five, many Royal Decrees have been issued instructing government departments to buy their needs from local producers as much as possible. So, it was expected that a large number of industrial producers benefit from such privileges since the economy in the last two decades has witnessed huge government expenditures on many development projects which should have resulted in an increased demand for local products. However, the results are very disappointing and show that only 13 respondents, or 11 per cent of industrial respondents, have sold their products to the government. That very low percentage gives cause for concern and the degree of implementing the regulations ordering government departments to buy their needs from local

producers needs to be investigated. In a study carried out by the Consulting Center for Finance and Investment,<sup>7</sup> five reasons were given for the inefficiency of these regulations:

- the regulations have not been taken seriously in government purchasing procedures;

- sufficient information about local products is not available to government departments;

- the absence of any regulation which can stop the purchasing procedures if they are not in accordance with the above incentive regulations;

- the industrial establishments have not followed up the fulfilment of these regulations. This is, in addition to an unwillingness on the part of industrialists to raise the issue individually lest any adverse results might affect their relations with these agencies;

- lack of communications between government officials and industrialists which allows a difference between the standards of products produced domestically and what is required by government departments.

The first three explanations seem more reasonable since local products are based on the standards required by the Saudi Arabian Standards Organisation which is a government agency; and because it is difficult to imagine that local producers are disregarding the opportunity to sell their products to the government because of the explanation given in the fourth reason.

Concerning the impact of the government purchasing programme on the profitability of the benefited establishments, we found that: 76 establishments, or 94 per cent of the beneficiaries, agreed (56 agreed strongly) that government purchasing has enhanced their establishments' profits; while 3 establishments disagreed with that.

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<sup>7</sup> Consulting Center For Finance and Investment, May 1984.

All the previous subsidy programmes were characterised by being used by a large number of beneficiaries. The other remaining subsidy programmes, namely, export duties exemption, raw material subsidies, price support, and TV advertisement discount, were not accrued by a large number of respondents.

The exemption from export duties were accrued by 26 respondents, or 11.6 per cent of the total sample. All the establishments, except one, are in the industrial sector. This low percentage is attributed to the concentration of the local industries on domestic markets rather than on international markets for their products marketing. This justification is supported by the survey findings that 162 establishments, or 72 per cent of the total sample, are directing their products to the local markets only; 40, or 17.8 per cent direct a maximum of 10 per cent of their products to foreign markets; 22, or 9.8 per cent may export up to 40 per cent of their products; and only one establishment exports up to 70 per cent of its products. In fact, 6 of the 26 establishments who obtained exemption of export duties are directing their products to the local markets entirely which means that they obtained that subsidy for some occasional exports. This information regarding the market orientation in Saudi Arabia indicates that private sector investment is directed toward enhancing the import substitution industries.

Certainly, export duties exemption affects domestic products positively since it reduces the costs and consequently the selling prices abroad, which in turn increases the competitive position of the local producers with foreign producers. All the beneficiaries agreed (15 agreed strongly) that the exemption enhanced their firms' profits. Regarding obstacles the 26 beneficiaries face in the export process, four main obstacles were mentioned, namely: barriers imposed by foreign countries, foreign low demand for their products, low production capacity, and lack of adequate

finance. So the provision of export exemption duties, in addition to other incentive programmes, assist in alleviating these obstacles. Unless private sector exports in Saudi Arabia reach a sufficient level, economic diversification of the economy to lessen dependency on oil will be difficult to obtain. Therefore, more incentives should be directed toward the exporting industries and exports in general.

We investigate now the raw materials subsidy programme to find out how many establishments have benefited from this subsidy. We found that only 24 respondents, or 10.7 per cent of the total, have benefited from the programme. This is very low percentage, especially in the agricultural sector where only 12 respondents said that they benefited from the subsidy. These results do not, in fact, reflect the real number of beneficiaries of the raw materials subsidy programme. This argument is supported by the fact that most, if not all, of the raw materials subsidies are paid directly to the importer of these materials, and therefore, the farmers might not feel that they are granted a subsidy when they buy such inputs. Also, because they are not the receiver of the cash subsidy, they consider themselves not subsidised although they receive the subsidised materials.

The price support programme, as we have seen before, is offered on a limited number of commodities, mostly agricultural commodities. These commodities are characterised usually by being necessary consumption goods with a low number of producers. Therefore, it was normal to find a low percentage of respondents benefiting from the programme. Of the total respondents, only 14 or 6.2 per cent (9 in the agricultural sector) have benefited from the price support programme.

Another subsidy which has a low number of beneficiaries is the TV advertisement discount. It was believed that such a subsidy would induce many establishments to benefit from it

because of the importance of market advertising, particularly for new industries. Yet, only 13 respondents, or 5.8 per cent of the total have benefited from the subsidy. Of those 13 respondents, 4 are in the agricultural sector, and 9 in the industrial sector. Some respondents' comments may explain the reason for the low percentage of beneficiaries of the TV advertisement discount programme. These suggested that the reason for not using the Saudi TV for advertising is because of the high charges. This argument might be supported by the fact that many local producers do advertise on some neighbouring countries' TV's which their broadcasting is received in the country.

Lastly, the least used subsidy programme is the Saudi training subsidy programme. Only 7 establishments, or 3.1 per cent of the total, accrued such a subsidy. Although this percentage was expected due to the fact that the country utilises the foreign labour heavily, it indicates a structural deficiency in the economy since it implies a slow process of substituting national workers for foreign ones.

The role of the subsidies policy in stimulating the investment of the private sector is understood from the previous finding, particularly, where the first three subsidy programmes, in terms of the high number of beneficiaries, are those which are directed toward the cost of equipment and machinery, in addition to land.

To support our previous conclusion, we asked the respondents whether the existence of the subsidies has affected decisions of the firm so that it is among the main motives for the establishment. The 201 answers to that question show that 137 or 68 per cent of the respondents agreed (51 agreed strongly) that the provision of the subsidies affected their establishment decision. On the other hand, 38 establishments, or 19 per cent of the respondents, disagreed that the subsidy programmes affected their

establishment's decision of the investment. In addition, 26 establishments, or 13 per cent, were uncertain.

Sorting them according to their type of activity illustrates that, in the agricultural sector 71, or 75.5 per cent of the 94 agricultural answers agreed that the subsidies programme affected their establishment decision, while 17 or 18 per cent disagreed. In the industrial sector, 65 or 62 per cent of the total 105 respondents agreed that the establishment decision was considerably affected by the programme, while 20, or 19 per cent of the total disagreed. So, the subsidy programme was one of the main factors attracting the investors.

Another important question was directed to the respondents, which said that 'the subsidies programme enhanced the production size of the establishment very much'. The reason for asking this question is the difficulty in obtaining appropriate information regarding the production quantities of the establishments which would enable us to be more precise about the effect on them by subsidies.

The respondents were therefore asked to state their agreement with the statement about the subsidies' effect on production. Of the 204 responses, 42 respondents, or 20.1 per cent of the total beneficiaries, agreed strongly that the subsidies enhanced their production sizes. In addition, 91, or 44 per cent of the total responses, agreed with that statement. Thus more than 65 per cent of the answers to that question agreed that the subsidies enhanced the production size. Ten respondents, or 4.9 per cent of the total, disagreed strongly with the statement, and 26, or 12.7 per cent, said they do not agree.

#### **8.4.2 IMPORTANCE OF THE SUBSIDIES**

Having reviewed how many respondents have benefited from

the subsidy policy, we aim now to investigate the importance of the subsidy programme to the respondents. The respondents were asked to list the first four subsidy programmes in terms of importance. The respondents' answers, as illustrated by Table 8.9, show that first was the import duties exemption programme. It was chosen by 57 respondents, or 25.3 per cent of the total. The production factors subsidy programme was selected as the most important subsidy by 47 respondents, or 20.9 per cent. The raw materials subsidy programme was given first place by 37 respondents, or 16.4 per cent.

In second position, the land grant programme was chosen by 38, or 16.9 per cent of the total respondents; the production factors subsidy was selected by 37, or 16.4 per cent; the government purchasing programme by 34, or 15.1 per cent; and import duties exemption by 33, or 14.7 per cent of the respondents.

Re-reading the respondents' answers after being sorted by respondents' activities type, resulted in changing the position of importance, which is normal because some subsidies are not available to some respondents. The import duties exemption, for example, still came first according to 53 industrial establishments, or 45.3 per cent of the industrial sample, while only 4 agricultural respondents put it first. The agricultural respondents put the production factors subsidy programme first. Government purchasing came second, according to the agricultural respondents; while the industrial respondents put the raw material subsidy programme second.

More important is to find out whether the importance of the subsidies would be ranked as they have been if the question asked is whether these subsidies are appropriate to the future needs of the private sector. Therefore we asked the respondents to re-rank the subsidies, according to their importance in case there would be a reforming for the current



subsidy programme to include only those subsidies which are very important to the respondents in the future. The question was directed to all respondents, even if they had not benefited from the current subsidy programme, and hence we added some suggested subsidies which we thought might be relevant, in addition to leaving space for any additional suggested subsidies. The additional suggested subsidies included marketing, research and development, feasibility study, and for organising exhibitions.

Although some subsidy programmes were chosen by some respondents to be first in importance, the answers show that no specific subsidy programme accrued the majority of answers. This was in fact, in contrast to what we were expecting. We thought that some programmes such as marketing, production factors, and import duties exemption were likely to be the most important subsidies for most of the respondents. Actually, two of them, production factors subsidies and import exemption, were chosen as most important in the subsidy programme, but not by the majority of the respondents. The production factors subsidy programme was chosen as the most important by 53 or 23.6 per cent of the total respondents. Forty-eight or 21.3 per cent of the respondents chose the import duties exemption programme as the most important. The land grant programme and raw materials subsidy programme were chosen as the most important by 37 or 16.4 per cent and 33 or 14.7 per cent, respectively, of the total respondent.

Regarding second place, the raw materials subsidy was chosen by 42, or 18.7 per cent of the respondents; production factors subsidy and import duties exemption were selected separately by 36, or 16 per cent, and marketing subsidy by 29, or 12.9 per cent of the respondents.

Of the 53 respondents, who chose the production factors subsidy as the most important subsidy, 39 were in the agricultural sector, 12 in the industrial sector, and 2 in

other sectors. Although the beneficiaries of this subsidy programme numbered 97 respondents, it was given the first place of importance for less than 49 per cent of them, nowadays and in the future. Only 13 respondents, who have not benefited from the factors subsidy programme, chose it as of first importance programme.

The 48 respondents who put import duties exemption in first place of importance were mainly from the industrial sector (42 industrialists). Knowing that 38 of them are of the 116 respondents who have benefited from the programme leads to the conclusion that only one-third of the current beneficiaries believe that import exemption is the most important subsidy for the future; and only 9 per cent of the non-beneficiaries believe it is the most important subsidy.

Of the 37 respondents who considered the land programme to be of first importance, only 29 of them were from the 162 respondents who have benefited from the programme. In the case of the raw materials subsidy programme, only 6 respondents of the 24 who had accrued this subsidy, put that programme in first place. For the land programme, it is normal to find that most of the beneficiaries do not give it first place of importance since they have previously obtained the land and their need for more in the future is rare. Also, raw materials with their current subsidised prices, which we argued that many of the farmers did not feel applied to them, might not be that important.

But what about other subsidies such as import exemption, factors subsidy, and marketing subsidy which are certainly related to the production process? Are they not important for investors in the future?, or is it the case that because most of them are important none of them accrued priority. We tend to think that the latter is the most likely explanation.

To confirm the importance of the subsidies to the private sector establishments, the respondents were asked to state

their agreement with the statement that 'the termination of the subsidy programme will not affect greatly the establishments' activities'. Of the 206 responses, 120, or 58 per cent did not agree (63 disagreed strongly) with the statement, and so they believe that termination of the subsidies would affect their activities. On the other hand, 53 or 25.7 per cent agreed (7 agreed strongly) that termination would not greatly affect their activities. Thirty-three respondents, or 16 per cent, were uncertain about the effect of termination of the subsidies.

Of the 95 agricultural respondents who answered the question, 66, or 69.4 per cent, disagreed (45 disagreed strongly) that termination would not affect their activities very much. Another 22 respondents, or 23.2 per cent, agreed (3 agreed strongly) that it would not greatly affect their activities. Of the 109 industrial respondents, 53 of them, or 48.6 per cent, disagreed, and 31, or 28.4 per cent, agreed. So, almost a quarter of the sample respondents felt that they could continue their activities without the subsidies. Moreover, 28 per cent of the sample did not objected strongly to the statement that termination of the subsidy programme would not affect their activities that much.

We can therefore conclude that some subsidy programme are not the main motivation behind some current investment and their cancellation or limiting them to new investment for a period of time, would not unduly affect private sector activities. The last question, regarding the effect of the subsidies on the establishment's decision about projects was very significant. It was obvious that many establishments could continue their activities without the support of the subsidies programme which led us to conclude that the subsidy programme is considered more important for new private investment than for the private sector in general. So, policy makers have to re-evaluate the current subsidies programme to

find out the best way of directing the subsidies to the best ends.

#### 8.4.3 ADMINISTRATION OF SUBSIDIES PROGRAMME

We now evaluate the administration of the subsidy programme according to the respondents' opinions. The respondents were given a statement that said 'the administration procedures of the subsidy programmes are complicated', and were asked to state their agreement or disagreement with it. Table 8.10 shows the general attitudes of the respondent regarding the subsidies' administration.

Generally speaking, of the 203 respondents who answered the question, 85 or 42 per cent agreed (32 agreed strongly) that the administration procedures of the subsidies are complicated. On the other hand, 71 respondents or 34 per cent of the total, disagreed with that statement (32 disagreed strongly). Forty-seven respondents or 23 per cent of the total, chose 'uncertain' as an answer. The complicated administration procedures regarding subsidies might be attributed to the fact that they are a distributing government money and tighter procedures are needed to ensure that the subsidies go to the right recipients. However, strict procedures could prevent the achievement of desired targets. Moreover, there should be a clear distinguish between difficult procedures aimed at optimum allocation of the subsidies, and difficult procedures resulting from inefficient management.

Regarding the subsidies' terms or conditions, the respondents were asked to say whether they agreed with the statement which says that they are very appropriate. Of the 199 respondents who answered this question, 122 or 61.3 per cent of the total, agreed (28 agreed strongly) that the subsidies' terms are very appropriate. Thirty respondents or

15.1 per cent disagreed (6 disagreed strongly) with the statement; while 47 or 23.6 per cent were uncertain.

A cross-tabulation has been made between the answers regarding the obtained subsidies, and the answers evaluating their administration, to give more specified evaluations of each subsidy programme. For the raw materials, we found that 50 per cent of the beneficiaries of that programme, or 12 respondents agreed that the administration procedures are very complicated; 7 respondents or 29.2 per cent, disagreed; and 5 respondents were uncertain. Some comments regarding the raw materials subsidy suggest that the complicated procedures of this subsidy programme force the beneficiaries to buy their needs from domestic dealers, instead of importing directly, and this, prevents them from accruing the whole amount of subsidy since part of it goes to the importer. The government should pay attention to such complaints to ensure the maximum utilisation of the subsidies instead of wasting them in this manner. As for the subsidies terms, 12 respondents agreed that the terms are very appropriate, and 5 disagreed with that.

In the case of the production factors subsidy programme, 45 respondents, or 46.4 per cent of the 97 beneficiaries, agreed that the administration procedures are complicated, while 35, or 36.1 per cent, disagreed that they are complicated; and 17, or 17.5 per cent, were uncertain. Concerning the subsidies terms, 60 respondents, or 61.8 per cent of the 97 beneficiaries, agreed that the subsidies terms are very appropriate; 17, or 17.5 per cent disagreed and consider them very inappropriate; and 20 respondents or 20.6 per cent were uncertain.

With respect to the import duties exemption, the administration procedures are complicated according to 41 respondents or 35.3 per cent of the 116 beneficiaries; 37 respondents or 32 per cent of the total said they were not

complicated; while 28 respondents were uncertain, and 10 respondents did not answer the question. The subsidies' terms are very appropriate according to 68 respondents or 58.6 per cent of the beneficiaries, and considered very inappropriate by 10 respondents or 10.3 per cent of the total.

The government purchasing administration procedures are complicated, in the opinion of 40 respondents or 49.4 per cent of the 81 beneficiaries of the programme, and are not considered to be complicated by 30 respondents or 37 per cent of the total. As for the subsidies' terms, 52 or 64.2 per cent of the benefited respondents agreed that they are very appropriate, while 16 or 19.7 per cent disagreed.

Lastly, the administration procedures of the land distribution programme are complicated, according to 56 or 35 per cent of the 162 benefited respondents; they are not complicated according to 49 or 30 per cent of the respondents; 35 or 22 per cent, were uncertain; and 22 respondents did not answer the question. Regarding the terms of the programme, 84 respondents or 52 per cent of the total agreed they are very appropriate; 16 or 10 per cent disagreed; 37 or 23 per cent were uncertain; and 25 respondents did not answer the question.

The respondents were asked two other questions regarding the administration of the subsidies' programme. The first was regarding the follow-up procedures, while the second was about the equal treatment of the applicants. Regarding the first question, 70 respondents or 32.4 per cent of the 216 beneficiaries agreed (25 agreed strongly) that there is no follow up procedure from any agency on the use of the subsidies. In contrast, 74 respondents or 34.3 per cent disagreed (19 disagreed strongly) that there is no follow-up procedure. Fifty-six respondents were uncertain as to whether there are follow up procedures, while 16 respondents did not answer the question.

In fact, there is a follow up procedure through written reports filled out by the respondents and sent to the appropriate government departments. But this procedure is obviously not initially sufficiently explained to the applicant, or insisted on by the agencies, and therefore the answers were divided almost equally between those who agreed and those who disagreed. From a supervision point of view, the follow-up procedures are obviously not good enough and should be improved as insufficiency follow-up procedures could well limit the role of the incentives in attaining their desired objectives. The investor might undertake a different investment than the one he proposed when he applied for the incentives, if there is no supervision of his activities. Therefore, the follow-up procedure is important and should involve a penalty system for those who do not fulfil the obligations agreed to.

The second question, about equal treatment for the applicants, is very important since its existence ensures efficiency in granting the subsidies. Of the 204 respondents who answered this question, 60 or 29.4 per cent, agreed (18 agreed strongly) that the subsidies are granted equally for all applicants; 44, or 21.6 per cent, disagreed (14 disagreed strongly), while 100 respondents were uncertain. There should be more strict supervision on the granting of subsidies to prevent any injustices that might occur since a sizeable proportion of the beneficiaries (one fifth of them) felt there was bias in the treatment they received under the subsidy programme.

## 8.5 The Protection Policy

As we mentioned in Chapter Five, the protection policy is the least used incentive policy in Saudi Arabia. The main reason for that is the government's commitment to the

principle of a free economy. However Saudi Arabia, like any other free market country, places import duty on most imported goods. What concerns us here is those duties put on imports as a means of protecting local producers, particularly new ones, from the competition of foreign producers. In the previous chapter we discussed the importance of foreign competition in affecting negatively domestic production. Therefore, it is important to investigate whether local producers consider foreign competition to be as we argued.

The respondents were asked to rank, according to importance, the factors affecting the demands on their products. Our aim is to find out the main factors affecting their products' marketing. The answers, as given in Table 8.11, show that foreign competition comes in first place in as much as it affect the demand on local production, for 94 respondents or 41.8 per cent of the total respondents, and in second place for 54 respondents or 24 per cent. Thus, generally speaking, foreign competition is a serious problem for many private sector establishments in Saudi Arabia regardless of their size or type of production. The two main factors that make foreign products more competitive compared to local products, in the respondents' view, as illustrated by Table 8.12, are their cheapness and the consumer confidence in them.

This result supports our previous argument that foreign competition is one of the main problem facing the domestic producers since they have the experience and the economy of scale to produce cheaper than the local producers, not to mention some illegal marketing policies.

The respondents were asked if they enjoy any type of trade protection against foreign products. Their answers showed that 97, or 43.1 per cent of the respondents' products are protected against foreign products, mainly in the form of tariffs. Of those 97 respondents, 70 or 72.2 per cent are in



the industrial sector; 26 or 26.8 per cent in the agricultural sector; and one respondents from an other sector. So, it is clear that the industrial sector is the most protected compared with other sectors since 60 per cent of its respondent are protected.

But the question to be asked is: Is that protection enough to protect the local producers from foreign competition? In some places, the tariffs are intended to be a source of revenue rather than a means of protection. Thirty-one respondents, or 32 per cent of those protected, 23 industrial establishments, and 8 agricultural establishments, agreed that the current protection is enough. On the other hand, 42 respondents, or 43.3 per cent stated that the current protection is not enough. Twenty-nine of these were in the industrial sector, and 12 in the agricultural sector. Twenty-one respondents or 21.6 per cent of the protected respondents said that the protection is just about enough. So, almost a quarter of the sample are protected fairly against foreign competition.

The next question, respecting the protection policy, was directed to the respondents asking them if their products are in need of customs protection against foreign products. Of the 96 respondents who answered the question, 63, or 65.6 per cent stated that their products are in need of protection against foreign products (3 were currently enjoying some type of protection). This means that around 28 per cent of our sample requested protection for their products. In addition, 16 respondents (one of them is enjoying protection now) or 7 per cent of the total sample, said that their products probably needed protection, while another 17 respondents said they did not need protection. Of the 63 respondents whose products are in need of protection, 35 are in the agricultural sector, representing 36 per cent of the agricultural sample, 27 respondents are in the industrial sector, representing 23

per cent of its sample, and one is in another sector. So, adding these 63 establishments to those 42 respondents who said that the current customs protection is not enough for them, makes a total of 105 respondents or 46.7 per cent of the total sample, who are in need, by different degrees, of protection policy.

We asked those respondents who said that they were in need of a protection policy if they have applied for it, or not, and if so what was the government response? We found that 27 respondents had applied for protection against foreign products. Of these, 2 were accepted, 9 were rejected, and 16 applications are still under study by the department concerned. However, 45 respondents who said that their products are in need of protection, have not applied.

#### **8.6 More Investigations on the Incentives Policy**

The positive results which we obtained previously and in the last chapter, regarding the role of incentive policies in the development of the private sector in Saudi Arabia, support the argument of those economists who see the incentives as an important tool in achieving some desired objectives. In the case of Saudi Arabia it was proved that the incentives were a main factor in stimulating private sector activities, and in solving some of the problems facing that sector.

The results of the written interview with 23 businessmen support, too, the previous findings. More than 78 per cent of them, or 18 respondents, stated that the performance and the effectiveness of the industrial lending policy were good (7 said very good); while 2 respondents, or 9 per cent said the opposite. The agricultural lending policy's performance and effectiveness were good, according to 70 per cent of them, or 16 respondents, while 4 others said they were reasonable, and 2 respondents said they were not good.

In respect of the subsidy policy, 14 respondents, or 61 per cent, said that the agricultural subsidies' performance and effectiveness were good, 3 said reasonable, and 3 respondents said they were not good. The performance and effectiveness of the import duties exemption programme is good in the view of 9 respondents, or 39 per cent, reasonable for 10 respondents, and not good according to 4 respondents. Water and electricity subsidies were good according to 13 respondents, or 56.5 per cent, reasonable in the opinion of 5 others, and not good according to the rest.

The industrial estates programme's performance and effectiveness were good according to 19 respondents, reasonable in the view of 2 respondents, and not good in the opinion of 2 others. The distribution of agricultural lands programme was good in its performance and effectiveness said 15 respondents, reasonable said 2 respondents, and not good said 4 others. The protection policy's performance and effectiveness were reasonable said 10 respondents, or 43.5 per cent, not good said 8 respondents, or 34 per cent, and good according to 4 respondents.

Consequently, the performance and effectiveness of the incentives policy in general was good during the previous period, except the protection policy, and to some extent the import duties exemption programme. Moreover, 15 respondents, or 65 per cent, agreed that termination of the incentives policy would affect strongly most of the projects which were established with the assistance of the policy.

We asked the respondents whether the current incentives policy is appropriate to meet the future needs of the private sector. The respondents' answers show that 35.6 per cent of them believe it would be appropriate, while 35 per cent said it would be to some extent, and 25 per cent said it will not be appropriate to meet future needs of the private sector. Bearing in mind the previously mentioned problems facing the

private sector, such as marketing, lack of experience, and financing, most of the establishments' and businessmen' answers emphasise the importance of re-evaluating the current incentives policy to direct it toward solving more effectively the sector's problems.

### **8.7 Limitations on the Effectiveness of Incentives**

The aim of this section is to highlight some issues associated with the application of the incentives policy during the previous period. These issues need to be pointed out in order to have the incentives policy in Saudi Arabia fully evaluated.

There is no doubt that the domestic economy was in need of such programmes to encourage the Saudi businessmen to invest domestically. This argument is supported by the results of the questionnaire and the interview where we found that among the factors that affected domestic investment is the incentives policy. Of the 23 interview respondents, which was directed to businessmen regardless of their activities, we found that 20, or 87 per cent of them, said that the economy was in real need of government support in terms of loans and subsidies. Thirty per cent of the respondents, or 7 answers, stated that the incentives were the first factor affecting their investment decision, while 3 respondents said it was the second.

Regarding the 225 establishments of the questionnaire's sample, 40 respondents, or 18 per cent of the total, stated that their investment decisions were affected very strongly by government incentives; while another 32 per cent, or 72, said they were affected strongly. So, half of the sample admitted that the incentives were a main factor affecting positively their investment decision.

Consequently, if the incentives policy is an important

tool in directing resources towards the desired activity, has it been used effectively, in Saudi Arabia, to achieve the objectives of the economic development policies? It might appear that there is a contradiction between our question here and what we concluded previously, that the incentives policy was successful in stimulating private sector activities. Thus, it is important to clarify what we mean by "effectively". Simply, what we mean is to find out whether the incentives policy has brought about the right outcome with the least costs.

Since to answer this question is difficult, and needs another thesis to accomplish it properly, we will limit ourselves to highlighting some issues that give some indications about the effectiveness of the incentives policy.

The defined objective of the incentives policy is to encourage the economic activities of the private sector to achieve economic diversification, and ultimately, the desired economic development. The desired activities of the private sector are best left to be identified by the concerned ministry such as the Ministry of Agriculture and Water, and the Ministry of Industry and Electricity. The approved projects by, for example, these two ministries are eligible to obtain the loans and subsidies provided by them, or by SAAB, and SIDF. The Ministry of Planning is then responsible for coordinating and integrating the different objectives of the Ministries to serve one general goal, the development of the country.

But we know from the previous chapter that government interests in planning the activities of the private sector as a part of the national development plans started with the Fourth Development Plan, and has been translated deeply in the Fifth Plan (1990-1995). So, planning for the private sector during the previous period was not carried out complementarily with other sectors of the economy. Alternatively, the sector

was encouraged to achieve one main objective, that is to increase the extent of its participation in the economy as much as possible. Having , largely achieved that objective, the government started calling upon the sector to play certain roles in the economy to ensure the optimum utilisation of its resources in achieving the development objectives.

For a country like Saudi Arabia, which is in need of many different types of investment in all sectors, that thought seems to be accepted. But even so, there should have been some kind of priorities in choosing the right industries, agricultural activities, etc. For example, the government strategy in developing the petrochemical industries should have been complemented by giving priority in obtaining incentives to those industries which use petrochemical final products as their inputs. Also, the agricultural sector activities have been directed toward some main products, such as wheat and milk. If these products were previously determine to be the outcome of the incentives, we should expect integrated industries with these products to be the outcome of the industrial incentives. But unfortunately, this is not the case, and the country still imports many products, even though they could be produced domestically using surplus raw materials.

The conclusion reached, then, is that the incentives were not planned so as to achieve well-planned integrated objectives that serve the economic development objectives of the country. This shortcoming, no doubt, limits the effectiveness of the incentives policy in achieving the desired objectives, such as economic diversification. The concentration of investment in certain activities, as a result of the absence of well-defined objectives, prevents the optimum utilisation of the available economic resources. Moreover, it increases the unnecessary and harmful competition between domestic industries. The respondents of the

questionnaire stated that domestic competition comes next after foreign competition in affecting the demand for their products. Competition is necessary, but would be better countered when investments are distributed more evenly between the sectors of the economy.

Another deficiency, which is mainly a result of the absence of well defined objectives of the incentives, that limit the effectiveness of the incentives, is lack of coordination between the government bodies providing the incentives, and other government bodies. This leads to the creation of many difficulties for the investors, and in some cases, contradictions occur and cancel out the role the incentives are intended to play.

Take as an example the import duties exemption programme. While the exempted materials should be approved by the Ministry of Industry and Electricity, the customs department in the Ministry of Finance and National Economy is the executive department; and some instances have been mentioned about refusing the latter to allow some approved materials to enter the country without paying the duties. The Council of Saudi Chambers' study regarding 'how to solve the private sector problems and develop its own resources, 1989', mentioned that the problems associated with the execution of the exemption programme are among the factors limiting its effectiveness.

Another example is duplication in the process of evaluating the projects. The feasibility of the project, for example, is examined by the Ministry concerned in order to offer it a licence. On the other hand, the incentives provider, such as SIDF, carries out its own investigation to ensure that the project is economically feasible so as to grant it the requested incentive. To save the investors' time, it would be more appropriate to have one department responsible for that purpose. By the same token, we find that

the farmer deals with at least three agencies in order to obtain the incentives, and that all three agencies carry out similar investigations.

Another form of lack of coordination is the existence of regulations that prevent the projects from functioning effectively. In this respect we give one example to illustrate the effects of such deficiency. Because the private sector depends heavily on foreign workers and, therefore, the foreign labour regulations issued by the Ministry of Labour and Social Affairs are a crucial factor in that respect. Many respondents, in addition to some Chambers' studies, have emphasised the importance of relaxing the regulations regarding imported agricultural workers. They argue that due to the nature of agricultural investment, the sector's labour requirement is very high in certain seasons, such as harvesting, but not in all seasons. However, the regulations are not flexible enough to allow farmers to import the right number of workers and, accordingly, they have to import a certain number workers and then keep them during the whole year bearing unnecessary additional costs.

Included in the previous argument is the absence of regulations necessary to ensure that the incentives are utilised by the right investors on the right investment. To illustrate this point, two examples are given. The first is regarding the subsidy provided to the importer of animal feed, or more specifically, barley. We mentioned before that the amount of imported barley in 1984/85 reached 6.3 million tons, while estimates determined the actual need of the country at that time to be around 2 million tons. The huge surplus was because the subsidy had been paid to the importer, directly, as soon as he proved that the commodity had entered the country, regardless of the actual sales of the importer. Many importers made their profit from selling only part of the imported quantity, and did not move the rest from the seaport.



Another example is exploitation of the provision of the subsidies by agricultural dealers who increased, unjustifiably, the prices of agricultural machinery and equipment, benefiting from their monopoly status. Many farmers complained that they were unable to benefit, fully, from the subsidies since large amounts of it went to the dealers.

Another issue that needs to be examined is the role of the incentive policy in producing some negative effects for the economy. We argue that there are two negative effects of the incentives policy worthy of mention. The first is the role of the incentives in increasing the intensive use of foreign labour by the producing economic sectors. The expansion of the private sector activities supported by the incentives policy was not met by a similar expansion in the use of Saudi workers. Although many factors contributed to such an outcome, the incentives have not been used as tools to solve this problem. There has not been any attempt in connection with granting the incentives, to influence the percentage of Saudi labour. Despite the subsidy programme for training Saudi workers, private establishments still have a long way to go in achieving a high rate of Saudi employment.

The big challenge facing Saudi Arabia, now and in the future, is its ability to increase its dependence on domestic labour in at least the crucial sectors. Agricultural and industrial sectors, for example, are dependent on foreign labour to a very large extent. The education policy, unfortunately, has been biased in favour of social science rather than applied science and vocational education.

The educational priority for a developing country, like Saudi Arabia, should be for those areas which complement other development programmes. The vocational education system in the country has, during the last few years, been disqualified from meeting the country's requirement of skilled labour. The

Fifth Development Plan admitted the need for improving the training and education systems to provide students with the skills and work habits that will enable them to function effectively in their field of specialisation.<sup>8</sup>

The second negative effect of the incentives policy is the increase in water consumption by the agricultural sector as a result of the expansion in subsidised activities. The sector consumes around 90 per cent of the water in the country. This figure is frightening in the case of an arid country like Saudi Arabia where most of its water comes from underground sources. The Fifth Development Plan aims to reduce the rate of water consumption in the country, and to re-evaluate the subsidies towards the cost of well drilling and pump purchases. Moreover, the Plan stated that the country's water reserve is still unknown, and that stopping work on preparing the national water plan was one of the constraints. It stated also that the production of wheat is one of the main reasons for the increase in agricultural water consumption.<sup>9</sup>

Although it is difficult to determine the extent of the water problem caused by the expansion of agricultural activities, particularly wheat growing, the decrease in water levels of wells in the country is obvious to everyone. If the policy makers do not have information regarding the water reserves of the country, it seems only rational not to expand largely those activities which are known to consume a lot of water. In the case of wheat, the policy makers argue that it is a strategic commodity which helps achieve the food security of the country.

While agree on the concept of 'strategic commodity', that

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<sup>8</sup> MOP, "Fifth Development Plan", p.117.

<sup>9</sup> Ibid., p.173.

does not justify the massive wheat production which is many times more than the needs of the country. Moreover, achieving a strategic commodity should not be at the cost of another strategic commodity such as water. There should be some sort of balance in achieving national objectives.

We would, also, argue that if the aim is to secure the food resources of the country, many other commodities have the potential to achieve that objective with minimum risk. For example, the country has a great number of high quality palm trees. It is the most popular tree in the country, and most Saudis have enough experience about it. The advantage of the palm tree, is its ability to survive in a harsh climate, such as that of Saudi Arabia in addition to the fact that it can survive with the minimum amount of water. Its fruit, dates, have a high nutritional value and could well serve the strategical objective.

Fish, on the other hand, is one of the most promising resources in the country. The available amount within the territorial waters is estimated to be 500 thousand tons per year, of which only 10 per cent is presently utilised. This is another commodity which should be developed, and would help achieve the government objectives in the agricultural sector.

**TABLE 8.1**  
**RESPONDENTS' ANSWERS**  
**REGARDING FINANCE PROBLEMS**

THE ANSWER	FREQUENCY	PERCENTAGE
NO FINANCE PROBLEM FACING FINANCE PROBLEM FREQUENTLY	122	54.2
UNCERTAIN	79	35.1
NO ANSWER	22	9.8
	2	0.9
<b>TOTAL</b>	<b>223</b>	<b>100.0</b>

**TABLE 8.2**  
**RESPONDENTS' ANSWERS REGARDING**  
**FINANCE PROBLEMS SORTED BY CAPITAL**

FACING FINANCE PROBLEM	0-5 M	6-15 M	16-40 M	41-OVER	TOTAL
YES	56	13	3	7	79
(PERCENTAGE)	70.9	16.5	3.8	8.9	35.6
(PERCENTAGE)	46.3	22.8	11.5	38.9	
NO	50	39	22	10	121
(PERCENTAGE)	41.3	32.2	18.2	3.3	54.5
(PERCENTAGE)	41.3	68.4	84.6	8.3	
				55.6	
UNCERTAIN	15	5	1	1	22
(PERCENTAGE)	68.2	22.7	4.5	4.5	9.9
(PERCENTAGE)	12.4	8.8	3.8	5.6	
<b>TOTAL</b>	<b>121</b>	<b>57</b>	<b>26</b>	<b>18</b>	<b>222</b>
	<b>54.5</b>	<b>25.7</b>	<b>11.7</b>	<b>8.1</b>	<b>100.0</b>

**TABLE 8.3**  
**RESPONDENTS' FINANCE SOURCES**

SOURCE	POSITION	FREQUENCY
DEVELOPMENT BANKS	FIRST	73
	SECOND	54
COMMERCIAL BANKS	FIRST	28
	SECOND	41
SELF FINANCE	FIRST	115
	SECOND	45
PERSONAL BORROWING	FIRST	7
	SECOND	28

TABLE 8.4  
RESPONDENTS' FIRST SOURCE OF  
FINANCE SORTED BY CAPITAL

CAPITAL GROUPS	DEVELOPMENT BANKS	% OF N	COMMERCIAL BANKS	% OF N	SELF FINANCE	% OF N
0-5 MILLION (N=122)	51	42	9	7	57	47
6-15 MILLION (N=57 )	14	25	11	19	30	53
16-40MILLION (N=27 )	4	15	4	15	18	67
41-UPMILLION (N=18 )	4	22	4	22	9	50

**TABLE 8.5**  
**LENDING POLICY'S TOTAL BENEFICIARIES**  
**SORTED BY LOANS' VALUE & SOURCE**

CAPITAL GROUPS	SIDF	SAAB	REDB	MOFNE	TOTAL
4 MILLION OR LESS	23	69	2	-	94
4-10 MILL.	19	10	1	2	32
10-20 MILL.	17	8	-	2	27
20-40 MILL.	10	-	-	-	10
40-60 MILL.	2	-	-	1	3
60-80 MILL.	1	-	-	-	1
MORE THAN 80 MILL.	2	-	-	-	2
TOTAL	74	87	3	5	169

**TABLE 8.6**  
**RESPONDENTS' PURPOSES OF OBTAINING LOANS**

THE PURPOSE	FREQUENCY	PERCENT
ESTABLISHING THE FIRM	107	47.6
EXPANDING THE FIRM	48	21.3
PURCHASING EQUIPMENT	101	44.9
OTHERS	2	0.9

**TABLE 8.7**  
**RESPONDENTS' ATTITUDES REGARDING**  
**LOANS' ADMINISTRATION**

THE STATEMENT	SA	A	UNC	DA	DAS
<b>COMPLICATED ADMINISTRATION PROCEDURES OF</b>					
SIDF	9	20	7	31	7
SAAB	11	26	11	31	10
REDB	-	1	-	2	-
MOF	1	2	-	2	-
<b>REASONABLE CONDITIONS OF</b>					
SIDF	13	42	7	7	4
SAAB	24	39	6	10	9
REDB	1	1	-	-	-
MOF	-	3	-	3	-
<b>LOAN'S VALUE NOT ENOUGH OF</b>					
SIDF	8	18	5	35	6
SAAB	19	23	8	27	11
REDB	-	1	-	-	1
MOF	1	-	-	3	1
<b>APPROPRIATE GRACE PERIOD OF</b>					
SIDF	12	37	6	19	1
SAAB	14	35	2	16	21
REDB	-	-	-	-	5
MOF	-	1	-	2	1
<b>ENOUGH REPAYMENT PERIOD OF</b>					
SIDF	9	38	5	20	2
SAAB	21	30	2	18	21
REDB	-	-	1	-	1
MOF	1	-	-	-	3

SA= STRONGLY AGREE      A=AGREE      UNC=UNCERTAIN  
DA=DISAGREE      DAS=DISAGREE STRONGLY



**TABLE 8.8**  
**RESPONDENTS BENEFITING FROM THE SUBSIDY**  
**PROGRAMME SORTED BY TYPE OF ACTIVITY**

TYPE OF SUBSIDY	AGRICULTURE	INDUSTRY	OTHERS
RAW MATERIALS	12	11	1
PRODUCTION FACTORS	81	16	-
IMPORT DUTIES EXEMPTION	13	103	-
GOVERNMENT PURCHASING	68	13	-
PRICE SUPPORT	9	5	-
LAND GRANT	51	110	1
EXPORT DUTIES EXEMPTION	1	25	-
TV. AD. DISCOUNT	1	12	-
SAUDIS' TRAINING	1	6	-
WATER & ELECTRICITY	21	70	2
OTHERS	1	-	-

**TABLE 8.9**  
**RESPONDENTS' RANKING OF THE SUBSIDIES**  
**ACCORDING TO THEIR IMPORTANCE**

TYPE OF SUBSIDY	FIRST	SECOND	THIRD
RAW MATERIALS	37	9	13
PRODUCTION FACTORS	47	37	13
IMPORT DUTIES EXEMPTION	57	33	25
GOVERNMENT PURCHASING	28	34	12
PRICE SUPPORT	-	-	-
LAND GRANT	24	38	44
EXPORT DUTIES EXEMPTION	-	-	-
TV. AD. DISCOUNT	1	-	6
SAUDIS' TRAINING	-	-	-
WATER & ELECTRICITY	3	19	33

**TABLE 8.10****RESPONDENTS' ATTITUDES REGARDING THE SUBSIDIES**

THE STATEMENT	SA	A	UNC	DA	DAS
COMPLICATED ADMINISTRATION PROCEDURES OF SUBSIDIES	32	53	47	48	23
APPROPRIATE CONDITIONS OF SUBSIDIES	28	94	47	24	6
SUBSIDIES PROVISION AFFECTED ESTABLISHMENT DECISION	51	86	26	23	15
SUBSIDIES PROVISION AFFECTED PRODUCTION SIZE	42	91	35	26	10
SUBSIDIES' TERMINATION DOES NOT AFFECT MY ACTIVITY	7	46	33	57	63
NO FOLLOW-UP ON SUBSIDIES' USE	25	45	56	55	19

SA= STRONGLY AGREE      A=AGREE      UNC=UNCERTAIN

DA=DISAGREE      DAS=DISAGREE STRONGLY

**TABLE 8.11****RESPONDENTS' RANKING OF THE FACTORS AFFECTING  
THE DEMAND ON THEIR PRODUCTS ACCORDING TO THEIR IMPORTANCE**

THE FACTOR	FIRST	SECOND	THIRD
LACK OF CONSUMERS' CONFIDENCE	19	36	60
FOREIGN COMPETITION	90	34	30
DOMESTIC COMPETITION	50	37	59
GULF REGION COMPETITION	4	20	80
SMALL SIZE OF DOMESTIC MARKETS	17	26	74

**TABLE 8.12**  
**RESPONDENTS' RANKING OF THE FACTORS**  
**ENHANCING THE FOREIGN PRODUCTS' COMPETITIVENESS**  
**ACCORDING TO THEIR IMPORTANCE**

THE FACTOR	FIRST	SECOND	THIRD
THEIR HIGH QUALITY	21	16	61
THE CONSUMERS' CONFIDENCE	45	22	52
THEIR CHEAP PRICES	46	38	49
ILLEGAL MARKETING PRACTICES	9	31	64
IMPORTER PERSONAL INFLUENCE	11	8	80
LACK OF SUFFICI. BARRIERS	24	29	70

## CHAPTER NINE

### CONCLUSIONS AND RECOMMENDATIONS

Developing countries, in their efforts to develop their economies, have adopted many policies to direct the resource towards the desired activities. Many types of incentive policies, such as subsidies, tax exemption, credit, and protection policy, have been introduced by these countries to achieve different objectives such as, investment stimulation, regional development, infant industry protection, etc. The criteria for granting these incentives depends on the desired objective. General incentives are provided to accomplish macro-economic goals such as increasing general level of investment in the country. On the other hand, incentives might be granted to encourage specific investment decisions such as establishing certain industries.

The use of the incentives as a tool for allocating resources between the desired activities is criticised by many economists. They argue that incentives do not provide the main motivation for investors to undertake certain investments, but other factors such as profitability and the investment climate. The literature survey on the studies evaluating tax incentive policies of many countries supported this argument since most of these studies found that tax incentives play a minor role in achieving the desired objectives.

Nonetheless, other studies showed that other types of incentives, particularly capital subsidy, affected investment decisions through reducing costs for investors, and hence

stimulating investment. The findings of this study support the use of the incentives as a means of encouraging the accomplishment of certain activities. Moreover, it should be borne in mind that the effect of some factors in limiting the role of the incentives in achieving their objectives should not be ruled out when drawing a conclusion on their use. These include, for example, the inefficiency in administering the incentives, the lack of coordination between them and other government regulations, and the absence of periodical evaluation of their procedures. The effect of these factors is neglected in many evaluation studies which has led to a bias in their judgment. However, some criticisms on the use of the incentives such as, the argument that it is difficult to estimate the appropriate subsidies required to achieve certain objective, are undoubted.

The purpose of this study was to evaluate the incentives policy in Saudi Arabia and to estimate its role in the development of private sector. Many findings were reached and the following sections present the main conclusions.

## **9.1 The Government Expenditures**

An important issue to be investigated to evaluate the incentives policy completely was the involvement of the government in the economy and its impact on private sector development. The government has been the main party behind the development process of the country. Through direct investment, in both the oil and the non-oil sectors, and in social overhead capital, which covers infrastructure and human resources, the development process was carried out. Financed by huge expenditure programmes, planning was the tool that has been used to achieve the development objectives. This active role of the government in the Saudi economy through planning and budgeting led to the dominance of government and its

sectors in the economy.

The growth and development of all economic sectors was very much influenced by the activities and policies of the government. The improvement in the infrastructure of the country has encouraged private sector activities. Moreover, government huge expenditures on development programmes, plus its investment in many sectors, created many profitable opportunities for the private sector. It has been found that the private sector GDP and investment were significantly related to government expenditures.

Government, depending on oil and being the main sector during the boom period, felt the need for diversifying the economy and, therefore, initiated many incentives to encourage private sector participation in the economy, particularly in agriculture and industry. These incentives have been provided in general for all private sector units. However, the agricultural and the industrial sectors have been subsidised more than other sectors, with the former being the most subsidised. The general finding of the study is that these incentives were of significant impact in stimulating private sector investment and production. Alternatively, their role in the development of the private sector was significant. The following sections provides more detailed conclusions.

## **9.2 The Private Sector Finance**

Finance is a fundamental element in the investment process of any country and Saudi Arabia is no exception. In Saudi Arabia, the financial system has not been playing an important role in financing the investment requirements of the private sector. Its role in mobilising resources by offering investment opportunities to savers and holders of financial assets, in disbursing funds to productive uses in the economy, and in ensuring efficient intermediation between sources and

uses of funds, is in need of further strengthening. The findings of the study showed that the financial intermediaries in the country were the smallest source of finance for the private sector. Moreover, it was found that more than one third of the private sector units in Saudi Arabia face financial problems frequently.

The private sector was in need of the government incentives programme which have been directed sufficiently towards facilitating the financing requirements of private sector establishments. Interest-free loans have been provided by the government to benefit businessmen in the country by offering them low cost liquidity. It was found that the government development banks occupy a respectable position among sources of finance for the privates sector. This states clearly the success of the government lending policy in fulfilling the gap in financial markets of Saudi Arabia. Self finance, however, was found to be the main source of funds for most of the private sector units.

The fact that 75 per cent of our sample benefited from the government lending policy leaves no doubt that the private sector has been affected positively through fulfilling its needs of finance by that policy. Moreover, the government lending policy succeeded in relieving the financial problems of the private sector. This is most true for the agricultural sector where 75.5 per cent of its sample agreed that the government loans helped in solving their financial problems. For the industrial sector, 56.4 per cent of its sample agreed that the loans provided helped them in solving their financial problems. In fact, the lending policy was of great help for those establishments facing financial problems frequently. The findings suggest that most of the small private establishments (capital of SR 5 million or less) facing financial difficulties have benefited from the lending policy in reducing the extent of such difficulties. On the other

hand, the government loans helped in solving the financial problems even of those who do not face financial difficulties frequently.

### 9.3 Private Investment

The main objective of the incentives policy in Saudi Arabia is to stimulate the general level of investment in the private sector. It was found that the government lending policy has stimulated net investment in the economy through supporting the existence of more than 47.6 per cent of the private sector's units, and expanding the size of another 21.3 per cent. Most of the businessmen interviewed, or 83 per cent, agreed that a lot of private investment was undertaken because of the incentives. 69 per cent of the beneficiaries were not able to undertake their investment activity without the loans provided by the government. The regression analysis support the previous findings and a highly significant relationship between the private investment and the government lending policy was found.

The results showed that 96 per cent of the private sector sample benefited from one or more types of the government subsidies. Land grant programme is first in terms of the large number of beneficiaries. Second is the import duties exemption. In third place comes the production factors subsidy. The role of the subsidies policy in stimulating the investment of the private sector is clear from the previous finding, particularly, where the first three subsidies, in terms of the high number of beneficiaries, were those directed toward the cost of equipment and machinery, and the land. This conclusion is, also, supported by the fact that 60 per cent of the respondents were affected by the subsidies when they decided to establish their firms. The regression analysis results state clearly the significant impact the



subsidies and the loans, provided by the government, have had on the private sector investment and production.

The protection policy has the least impact on the private sector activities. The lack of enough protection for domestic products enhanced the competition by foreign products. Such a situation discourages the private investment since it increases the risk associated with it.

#### **9.4 Incentives Administration**

Since administrating the incentives is an important factor in determining the effectiveness of the incentive policies, the study paid sufficient attention towards evaluating it. In general, the most concern regarding the incentives policy is with its administrative procedures. In Saudi Arabia it was expected to find inefficient management as a factor limiting the effectiveness of the incentives. Moreover, the lack of coordination between the incentives' provider and other government agencies has some impact on complicating the administrative procedures of the incentives.

On the other hand, the incentives conditions were reasonable in general, which reflects the desire of the government to have as many investors as possible benefit from the programme, and hence increase their participation in the economy. The only concern here is the possibility that the easy conditions of some incentive programmes have been the reason behind the misuse of some of these incentives.

Among the complaints of the respondents regarding the incentives policy was the small value of loans. Although it was normal and expected to find some investors unhappy with the loans they have been given, since it is difficult to provide them the right amount, the loans' values are an important measure in attracting the investors to invest. The finding suggests that a considerable number of beneficiaries

were unhappy with the loan values which emphasise the importance of commercial bank participation in fulfilling the financial needs of the private sector.

The findings of the study, regarding grace and repayment periods, show that many respondents were unhappy with their terms. One third of the agricultural respondents, and one fifth of the industrial respondents said the grace and repayment periods were not appropriate. Other lending programmes were criticised similarly which raise the concern about having adverse effects of the loans. So, generally speaking, the incentives' administration is good, but could be more efficient with the introduction of an efficient management system and a periodical review of its terms to take into consideration any attached problems.

## 9.5 Some Issues of Concern

Although the previous conclusions indicated the significant role of the incentives policy in developing the private sector in Saudi Arabia, some issues of concern need to be highlighted. The most important one is the excessive use of non-renewable underground water by farmers. The agricultural sector, being the most subsidised sector, raised the concern that the incentives policy's role in stimulating private investment affected negatively an important natural resource - water. The extent of the problem is not known since no information is available regarding the water reserve in the country.

The second concern is the overwhelming dependence of the private sector on foreign workers. Although it is normal for the private sector to use foreign labour because of the shortage of skilled national labour, the extent of the use is unjustifiable. The only justification is the cheap cost of foreign labour compared with national labour. The government

provides subsidy for training Saudi labour to any Saudi establishment. However, this subsidy has been one of the least used programmes, and the main reason could be the low percentage of Saudis employed by the private sector.

The third issue is the suitability of the incentives policy to meet the current and future needs of the private sector. The problems facing the private sector enhance the need to reform the incentives policy to direct it towards solving such problems. Unless these problems are solved, using the incentives in the future as a tool of attracting the investors might lose its importance.

Lastly, the study found some evidence that some of the incentives were obtained by some beneficiaries who were able to undertake the investment concerned without them. This raises the question about the possibility of having wasted some resources unnecessarily. A close supervision, and a strict procedure in selecting the areas to be supported could have reduced such losses.

## **9.6 The Recommendations**

With reference to the previous conclusions, some recommendations are made to help the Saudi planners and decision makers formulate future adjustments for improving the effectiveness of the incentives policy so it can achieve optimum fruits.

1- To have the incentives policy work effectively in promoting private sector investment, it is necessary to define the objectives to be achieved. These objectives must be in accordance with the general development objectives and take into account all the resources of the country. These objectives should be set with the cooperation of all concerned agencies including the private sector. Moreover, there should be an assigned period for the incentives policy to achieve its

objectives and the course of the incentives should be known to each investor.

A practical method for increasing the effectiveness of the incentives policy would be through establishing a government agency to take the responsibility of providing and administering the incentives currently provided by different agencies. Such an agency will ensure the optimum use of the incentives and eliminate unnecessary procedures and problems associated with the current incentives system in the country. It will function as a central agency that works to implement different objectives of different agencies to the benefit of both the private sector and the economy in general.

The private sector must be represented in such agency to ensure its effectiveness. Among the responsibility of such agency is the work toward having complementary cooperation between the different regulations and the incentives policy to ensure the success of the latter. Also, the agency should supervise the use of the incentives, and make sure that government agencies comply with and perform the incentives policy. The government should provide that agency with qualified employees to enhance its efficiency and in turn the performance of the incentives policy.

2- More attention should be paid to improve the financial system in the country and the government must work toward eliminating the constraints preventing it from working perfectly. The commercial banks should be allowed and encouraged to undertake investment directly and jointly with local investors. Also, they should be encouraged to offer businessmen investment opportunities based on the principal of sharing profits and losses to encourage investors refusing to deal with the commercial banks for religious reasons. Additionally, development banks' policies should be modified to include provision of joint investment opportunities between them and the private investors. The government should also

allow the establishment of Islamic banks to give the opponents of the current banking system the opportunity to express themselves in a free market economy.

3- Water is the main concern for all the countries in the Middle East, and Saudi Arabia is no exception. The investment direction of the agricultural sector should be chosen carefully to take into account the water reserve of the country. The current agricultural activities are likely to create future problems for the country and, therefore, must be reorganised. Additionally, new regulations regarding the use of water by farmers must be issued to reduce the current irrational consumption. Also, the incentives should be directed toward encouraging the use of modern irrigation systems that suit the Saudi conditions.

4- The government should consider the possibility of providing its international aid in the form of domestic goods and services instead of cash. Such policy will encourage domestic investment and introduce the Saudi products to new markets.

5- The government has the responsibility of employing Saudis. The private sector, however, should also take part of that responsibility. Thus it is important to encourage Saudi labour utilisation by the private sector by all means to ensure the long run success of domestic investment. The government could bear part of the Saudis salaries employed by the sector. Moreover, the government should force firms, which are in contract with its departments, to employ certain number of Saudis. Such procedures, in the long run, will increase the number of skilled national workers.

6- The unification of small businesses in the country should be encouraged to ensure optimum use of resources and reduce possibilities of failures of small and weak investment. This will increase the ability of the private sector to compete efficiently and eliminate the shortcomings associated

with small businesses. The incentives policy can be used in achieving this important objective.

7- Information is a very important factor in economic activities, and therefore, part of the incentives should be directed towards encouraging the establishment of agencies that work in providing such an important element.

8- Stricter regulations should be adopted to prevent any types of illegal practices that harm the activities of private sector. The trade barriers, which are a common practices in many developed countries, should be used to protect the economy from foreign competition, particularly, the illegal practices.

9- As a means of encouraging the private sector, the government should allow the private sector to participate in the activities of the oil sector individually, or jointly with the public sector.

## APPENDIX ONE

### THE QUESTIONNAIRE

Please Answer the Following Questions :

- 1- The location \_\_\_\_\_
- 2- Type of Activity  
( ) agricultural ( ) Industrial ( ) Other \_\_\_\_\_
- 3- Main Product \_\_\_\_\_
- 4- The capital \_\_\_\_\_ Saudi Riyals(SR)
- 5- Total Investment \_\_\_\_\_ SR
- 6- Is financing one of the problems the firm faces frequently ?  
( ) Yes ( ) No ( ) Not sure
- 7- What are the regular sources of finance that are available to you[Rank in order of importance where no.(1) is the most important source and so on to no.(7) the least important one].
  - a- Commercial banks ( )
  - b- Governmental Development Banks ( )
  - c- Ministries Lending Programs ( )
  - d- Private Lending Establishments ( )
  - e- Personal Borrowing ( )
  - f- Self-Finance ( )
  - g- Others(Please specify) \_\_\_\_\_ ( )
- 8- If you have obtained a loan from one of the following government's lending program, please write the amount of the loan in front of the right source.
  - a- Industrial Development Bank \_\_\_\_\_ SR
  - b- Agricultural Development Bank \_\_\_\_\_ SR
  - c- Real-Estate Development Bank \_\_\_\_\_ SR
  - d- Ministry of Finance \_\_\_\_\_ SR
  - e- Ministry of Agriculture and Water \_\_\_\_\_ SR
  - f- Ministry of Electricity and Industry \_\_\_\_\_ SR
  - g- Other \_\_\_\_\_ SR
- 9- What is the purpose that you obtained the loan for(you can choose more than one answer).
  - a- Establishing the project ( )
  - b- Expanding the project capacity ( )

- c- Financing the purchase of machineries & equipments ( )  
d- Other \_\_\_\_\_ ( )

10- Please read the following statements and indicate your extent of agreement with them(AS= agree strongly; A= agree; UC= uncertain; D= disagree; DS= disagree strongly.):

DS D UC A AS

a- The required conditions for obtaining the governmental loans are very reasonable.

- 1- Industrial Development Bank ( ) ( ) ( ) ( ) ( )  
2- Agricultural Development Bank ( ) ( ) ( ) ( ) ( )  
3- Real-Estate Development Bank ( ) ( ) ( ) ( ) ( )  
4- Ministry of \_\_\_\_\_ ( ) ( ) ( ) ( ) ( )

b- The administrative procedures in the government's lending institutions are complicated.

- 1- Industrial Development Bank ( ) ( ) ( ) ( ) ( )  
2- Agricultural Development Bank ( ) ( ) ( ) ( ) ( )  
3- Real-Estate Development Bank ( ) ( ) ( ) ( ) ( )  
4- Ministry of \_\_\_\_\_ ( ) ( ) ( ) ( ) ( )

c- The value of governmental loans that you have been granted did not satisfy your firm's financial needs.

- 1- Industrial Development Bank ( ) ( ) ( ) ( ) ( )  
2- Agricultural Development Bank ( ) ( ) ( ) ( ) ( )  
3- Real-Estate Development Bank ( ) ( ) ( ) ( ) ( )  
4- Ministry of \_\_\_\_\_ ( ) ( ) ( ) ( ) ( )

d- The grace period of governmental loans is appropriate.

- 1- Industrial Development Bank ( ) ( ) ( ) ( ) ( )  
2- Agricultural Development Bank ( ) ( ) ( ) ( ) ( )  
3- Real-Estate Development Bank ( ) ( ) ( ) ( ) ( )  
4- Ministry of \_\_\_\_\_ ( ) ( ) ( ) ( ) ( )

e- The repayment period of the governmental loans is enough.

- 1- Industrial Development Bank ( ) ( ) ( ) ( ) ( )  
2- Agricultural Development Bank ( ) ( ) ( ) ( ) ( )  
3- Real-Estate Development Bank ( ) ( ) ( ) ( ) ( )  
4- Ministry of \_\_\_\_\_ ( ) ( ) ( ) ( ) ( )



DS D UC A AS

f- The provision of governmental loans has helped in solving the firm's financial problems.

- |                                  |                     |
|----------------------------------|---------------------|
| 1- Industrial Development Bank   | ( ) ( ) ( ) ( ) ( ) |
| 2- Agricultural Development Bank | ( ) ( ) ( ) ( ) ( ) |
| 3- Real-Estate Development Bank  | ( ) ( ) ( ) ( ) ( ) |
| 4- Ministry of _____             | ( ) ( ) ( ) ( ) ( ) |

h- The termination of the lending policy will not affect my firm's activities. ( ) ( ) ( ) ( ) ( )

g- The required conditions for obtaining the governmental loans are applied on all investors equally. ( ) ( ) ( ) ( ) ( )

11- If you have not obtained any loan from any government's lending institutions; what is the reason? (chose the right answer by putting(x) in the appropriate place).

- |  |     |
|--|-----|
| a- I don't know about these government's lending institutions. | ( ) |
| b- I don not fulfil the required conditions.                   | ( ) |
| c- I do not need the governmental loans.                       | ( ) |
| d- loan value does not encourage me to apply for it.           | ( ) |
| e- I applied, but I could not get it.                          | ( ) |

12- Was it possible for you to undertake the activity that you obtained the loan for without that loan ?

- |         |        |
|---------|--------|
| ( ) Yes | ( ) No |
|---------|--------|

13- If your answer to the previous question was, Yes, why did you apply for it?

- |   |     |
|---|-----|
| a- To benefit from the provision of governmental loans.                           | ( ) |
| b- To make sure that the project is sound.  | ( ) |
| c- The primary studies showed that it is necessary to obtain a governmental loan. | ( ) |
| d- In response to the request of foreign partner.                                 | ( ) |
| e- To repay some debts.   | ( ) |
| f- To use the loan in another activity.   | ( ) |
| d- Other( Please specify) _____   |     |

14- If you please, list below those activities, which are not included in the government lending programs, and you think that they should be included.

- a- \_\_\_\_\_
- b- \_\_\_\_\_
- c- \_\_\_\_\_
- d- \_\_\_\_\_

15- If you have benefited from any type of the following government subsidies, please put(x) in the right place.

- a- Raw materials subsidy ( )
- b- Production factors subsidy ( )
- c- Import duties exemption ( )
- d- Government Purchase of output ( )
- e- Product price support ( )
- f- Land grant ( )
- g- Export duties exemption ( )
- h- TV. advertisement discount ( )
- i- Saudis training subsidy ( )
- j- Water & electricity subsidies ( )
- k- other \_\_\_\_\_ ( )

16- Of the previous subsidies, what are the most important four subsidies ?

- a- \_\_\_\_\_
- b- \_\_\_\_\_
- c- \_\_\_\_\_
- d- \_\_\_\_\_

17- Please list below the subsidies that you have not benefited from in front of the appropriate reason.

- a- I applied and could not get it \_\_\_\_\_
- b- I don not need it \_\_\_\_\_
- c- I don not fulfil the conditions \_\_\_\_\_
- d- Others \_\_\_\_\_

18- Please read the following statements and indicate your extent of agreement with them(AS= agree strongly; A= agree; UC= uncertain; D= disagree; DS= disagree strongly).

DS    D    UC    A    AS

- a- The following subsidies have reduced my production costs very much:

- 1- Production factors subsidies ( ) ( ) ( ) ( ) ( )
- 2- Raw materials subsidy ( ) ( ) ( ) ( ) ( )

	DS	D	UC	A	AS
3_ Import duties exemption	( )	( )	( )	( )	( )
4_ Water & electricity subsidies	( )	( )	( )	( )	( )
5- Saudi training subsidy	( )	( )	( )	( )	( )
6- Other _____	( )	( )	( )	( )	( )

b- The following subsidies have increased the firm's profits much.

1- Government purchase of output	( )	( )	( )	( )	( )
2- Export duties exemption	( )	( )	( )	( )	( )
3- TV. advertisement discount	( )	( )	( )	( )	( )
4- Price support	( )	( )	( )	( )	( )
5- Other _____	( )	( )	( )	( )	( )

c- Administrative procedures of the subsidies are complicated. ( ) ( ) ( ) ( ) ( )

d- Required conditions of obtaining the subsidies are very appropriate. ( ) ( ) ( ) ( ) ( )

e- Establishment decision of the firm was affected mainly by the provision of the subsidies. ( ) ( ) ( ) ( ) ( )

f- Production size has increased due, largely, to subsidies. ( ) ( ) ( ) ( ) ( )

g- The termination of the subsidies program will not affect much the firm activities. ( ) ( ) ( ) ( ) ( )

h- There is no follow-up procedure from any government agency on my use of the subsidies. ( ) ( ) ( ) ( ) ( )

i- Granting the subsidies is done for all investors at equal rate. ( ) ( ) ( ) ( ) ( )

19- If there is a re-form for the subsidies program, what is the importance of each kind of the following subsidies[ please Rank in order of importance where no.(1) is the most important source and so on to no.(13) the least important

a- Export subsidy	( )
b- Production factors subsidy	( )
c- Raw materials subsidy	( )

- d- Import duties exemption ( )
- e- Marketing subsidy ( )
- f- Research & Development subsidy ( )
- g- Exhibitions organisation subsidy ( )
- h- Employees training subsidy ( )
- i- Feasibility study subsidy ( )
- j- Water & Electricity subsidy ( )
- k- Others( please specify)
- 1- \_\_\_\_\_ ( )
- 2- \_\_\_\_\_ ( )

20- If you have obtained a land freely or at low charges, have you used it for the same purpose that has been granted to you for?

( ) Yes ( ) No ( ) Approximately

21- Why did you ask for the land for

- a- To establish the project ( )
- b- To enhance and support the existed project ( )
- c- To use in other profitable activity ( )
- d- To benefit from the grants program ( )
- e- To save for future needs ( )
- f- Other(Please specify) \_\_\_\_\_

22- If your products enjoy one of the following protection policies, please put (x) in the right place.

- a- Import duties ( )
- b- Quota system ( )
- c- cash subsidy ( )

23- If your products enjoy any protection policy, is the protection enough?

( ) Yes ( ) No

24- If there is no protection for your products, do you think you are in need of such a protection ?

( ) Yes ( ) No

25- If the answer for the previous question is Yes, have you submitted a request for protection?

- ( ) Yes, and they accepted my request
- ( ) Yes, and they rejected my request
- ( ) Yes, and the request is under study
- ( ) No, I have not submitted any request

26- Please rank in order of importance the impact of the following factors on the demand on your products[Put no.(1) for the factor that has the greatest impact, and so on to no.(7) which has the least impact].

- a- Lack of consumer's confidence in national products ( )
- b- Foreign competition ( )
- c- Domestic competition ( )
- d- GCC competition ( )
- e- Small size of local market ( )
- f- Others(Please specify)
- 1- \_\_\_\_\_ ( )
- 2- \_\_\_\_\_ ( )

27- Rank in order of importance the role of the following factors in strengthening the competition of foreign product[Put no(1) for the most important factor, and so on to no.(8) the least important one].

- a- Its high quality ( )
- b- Consumer's confidence in foreign product ( )
- c- Its cheap price due to its cheap costs ( )
- d- Illegal methods of its marketing(such as,dumping, the false use of famous marks...etc) ( )
- e- The personal influence of its importers ( )
- f- The absence of customs protection ( )
- g- Others(Please specify)
- 1- \_\_\_\_\_ ( )
- 2- \_\_\_\_\_ ( )

28- What are the obstacles that face you exports?(please put (x) in the right place).

- a- The Lack of financial resources ( )
- b- The imposed barriers by foreign countries ( )
- c- The low quality of my products ( )
- d- The low foreign demand on my product ( )
- e- The low current of production capacity ( )
- f- Others -----

29- Is there any government investment in the same sector you are investing in?

( ) Yes

( ) No

30- If the answer is Yes for the previous question, what is its impact on your investment?

( ) It has positive impact

- ( ) It has negative impact  
( ) It has positive and negative impact  
( ) It has no impact

31- What are the government investments that you think your firm could undertake?

a- \_\_\_\_\_

b- \_\_\_\_\_

c- \_\_\_\_\_

d- \_\_\_\_\_

32- What is the firm's establishment date ? ---/---/-----

### 33- Market Orientation

- ( ) Domestic Market               ( ) International Market  
 ( ) Both Markets     with \_\_\_\_\_% for domestic market, and  
                         with \_\_\_\_\_% for international market

34- The Ownership	% Saudi	% Foreign
-------------------	---------	-----------

35- Total Employees	% Saudis	% Non-Saudis
---------------------	----------	--------------

36- What was the impact of the following factors on your decision to set up the establishment? (VSI=Very Strong impact, SI= Strong impact, WI= weak impact, VWI=very weak impact, NI= no impact).

NI VWI WI SI VSI

- |   |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|
| a- Gain profits                         | ( ) | ( ) | ( ) | ( ) | ( ) |
| b- Invest the surplus of money you have | ( ) | ( ) | ( ) | ( ) | ( ) |
| c- Try your chance with investment      | ( ) | ( ) | ( ) | ( ) | ( ) |
| d- Benefit from government support      | ( ) | ( ) | ( ) | ( ) | ( ) |
| e- The request of the foreign producers | ( ) | ( ) | ( ) | ( ) | ( ) |
| f- Others(please specify)               | ( ) | ( ) | ( ) | ( ) | ( ) |

\*\*\*\*\*

## APPENDIX TWO

### THE INTERVIEW

#### A- GENERAL INFORMATION :-

- 1- Age \_\_\_\_ years
- 2- Years of experience \_\_\_\_ years
- 3- Economic activity you practice?  
☐ Agriculture      ☐ Industry      ☐ Trade  
☐ construction      ☐ Services      ☐ Other \_\_\_\_\_
- 4- Approximate capital \_\_\_\_\_ Saudi Riyals
- 5- The place of your investment and its share to your total investment?  
☐ In Saudi Arabia \_\_\_\_%      ☐ Overseas \_\_\_\_%

\*\*\*\*\*

#### B- EVALUATION OF GOVERNMENT INCENTIVES POLICY :-

1- What are the importance of the following factors in attracting you to invest domestically? [Rank them in order of importance where no.(1) is the most important factor and so on to no.(7) which is the least important one].

- |                                     |                          |
|-------------------------------------|--------------------------|
| a- Physical infrastructure          | <input type="checkbox"/> |
| b- Investment opportunities         | <input type="checkbox"/> |
| c- Government support               | <input type="checkbox"/> |
| d- Political and economic stability | <input type="checkbox"/> |
| e- Investing surplus money          |                          |
| f- Economy development              | <input type="checkbox"/> |
| g- Other _____                      | <input type="checkbox"/> |

2- Do you think that the national economy was in need of Government support(loans...subsidies...etc.) to be able to developed? and what do you think the reasons?

☐ Yes      ☐ No      ☐ Don't Know

For the following reasons:

- 1- \_\_\_\_\_
- 2- \_\_\_\_\_
- 3- \_\_\_\_\_

7- Please read the following statements and indicate your extent of agreement with it (AS= agree strongly; A= agree; UC= uncertain; D= disagree; DS= disagree strongly):

AS A UC D DS

- National economy accommodates both government & private investments. ( ) ( ) ( ) ( ) ( )
- Government investment is concentrated in some investments that private sector can not undertakes alone. ( ) ( ) ( ) ( ) ( )
- Government investment has created many investment opportunities for private sector. ( ) ( ) ( ) ( ) ( )
- Private sector investments still less than its ability's magnitude. ( ) ( ) ( ) ( ) ( )
- A lot of private sector projects were established as a result of the provision of government incentive programs. ( ) ( ) ( ) ( ) ( )
- The termination of Government incentive policies will paralyse many private sector projects that were established as a result of government incentive programs. ( ) ( ) ( ) ( ) ( )
- Government incentive programs have helped in creating many projects that fit the nature of national economy. ( ) ( ) ( ) ( ) ( )
- Big investors are the most benefited group from government incentives. ( ) ( ) ( ) ( ) ( )

8- What are the sectors that have, more than the others, the ability to achieve the development objectives of national economy?

- a- \_\_\_\_\_
- b- \_\_\_\_\_
- c- \_\_\_\_\_

9- What are the main problems the face private sector in Saudi Arabia?

- a- \_\_\_\_\_
- b- \_\_\_\_\_
- c- \_\_\_\_\_
- d- \_\_\_\_\_
- e- \_\_\_\_\_

10- If you have any comments or would like to add any thing, please write it down.



## BIBLIOGRAPHY

Agel, J.N., "Subsidy to Capital Through Tax Incentives", In Parthasarathi, S., "Fiscal Issues in South-East Asia", (Oxford University Press, 1986), pp.48-79.

Aliqtisad Magazine, "Joint-Ventures Enterprises in Industry", No.179, February 1988, pp.8-15, (Arabic).

-----, "New Investment Opportunitites in The Eastern Province", No.206, April 1990, p.37, (Arabic)

-----, "Export is a Strategical Objective of the Development Plans", No.192, February, 1989, (Arabic).

Al-khateeb, M.N., "Saudi Export : Wining the Challenges", Alyamamah Magazine, No.1183, Wednesday 28 Jumadlula, 1412 (1992), pp.48-49.

Al-moneif, M., "An Evaluation to the Role of Agricultural Subsidies in Saudi Arabia", Majlat Alkaleej Wa Aljazeerah Alarabiah (Gulf & Arabian Peninsula Studies Journal), Vol. 52, Year 13, 1988, pp.131-166, (Arabic).

Al-Obaid, A., "Agricultural Development in Saudi Arabia : Policies and Evaluations", (Ph.D. Thesis, University of Leicester, 1987).

Al-Riyadh Newspaper, "Ending of the Seminar About the Investment Opportunities in Foodstuff Industry", No.8385, Sunday, June 9, 1991, p.10, (Arabic).

-----, "The Recommandations of the Foodstuff Industry Seminar", No.8394, Tuesday, June 18, 1991, p.10, (Arabic).

-----, "Economic Offset Program", No.7849, Tuesday, December 19, 1989, pp.14-15, (Arabic).

Al-Saigh, N.M. "A Method for financing the private sector's development projects by development banks: the Saudi Arabian Experience", (An Unpublished Ph.D. Thesis,

University of Kentucky, U.S.A., 1979. p.61).

Anderson, G.J., "Investment and Profits in the Industrial and Commercial Sector", In Martin, W.E., "The Economic of the Profit Crisis", (London: HMSO Books, 1981), pp.147-181.

Apostolakis, B.E., "The Subsidy Incidence on Industrialisation", Rivista International di Scienze Economiche e Commerciali, Vol.34, No.4, 1987, pp.291-307.

Arab Banking Corporation, "The Arab Economic Structure and Outlook: Saudi Arabia", February, 1990.

Asharq Al-Awsat Newspaper, "Within Al-Yamamh Defence System Agreement : Five new projects in the offset program with Britain", No. 4747, Wensday 27 of November, 1991, p 14, (Arabic).

-----, "Saudi Poultry's Producers Inrecrease Their Campaign Against 'export dumping' of France and Brazil", No. 4851, Tuesday, March 10, 1992, p.10, (Arabic).

-----, "Supplement About National Industries", Sunday, December 12, 1991.

-----, "End of the First Saudi Industrial Investors Semiar", No.4896, Friday, April 24, 1992, p.10, (Arabic).

-----, "Supplement About Banks and Investment in Saudi Arabia", No.4923, Thursday, May 12, 1992, pp.11-22.

Azhar, B.A. and S.M Sharif, "The Effect of Tax Holiday on Investment Decisions: An Empirical Analysis", Pakistan Development Review, 1974, pp. 409-432.

Balassa, B., "The Process of Industrial Development and Alternative Development Strategies", (Washnigton D.C: the World Bank), Staff Working Paper, no. 438, October 1980, pp. 8-9.

Balassa, B., "Export Incentives and Export Performance in

Developing Countries: A Comparative Analysis",  
Weltwirtschaftliches Archiv (Review of World Economics),  
Vol.114, 1978, pp.24-59.

Balassa, B., and M. Sharpston, "Export Subsidies by Developing Countries: Issues of Policy", (Switzerland: Imprimerie Vaudoise Lausanne, November, 1977).

Baldwin, R.E., "Nontariff Distortions of International Trade",  
(London: George Allen & Unwin LTD, 1971).

Ba-Sheikh, A., "An Analysis of the Operation of the Saudi Industrial Development Fund", (Ph.D. Thesis, University of Kent at Canterbury), 1985.

Bell, J., "Doing Your Research Project : A Guide for First-Time Researchers in Education and Social Science",  
(Milton Keynes: Open University Press, 1987).

Bergstorm V., and J. Sodersten, "Inflation, Taxation and Capital Cost", In Eliasson G., and J Sodersten, "Business Taxation, Finance and Firm Behaviour", ed.,  
(Stockholm : The Industrial Institute for Economic and Social Research, 1981), pp. 48-79.

Bilsborrow, R.E. and R.C. Porter, "The Effect of Tax Exemption on Investment By Industrial Firms in Colombia",  
Weltwirtschaftliches Archiv. Vol. 108, 1972. pp.398-425.

Bischoff, C.W., "Hypothesis Testing and Demand for Capital Goods", Review of Economics and Statistics, Vol.51,  
1969, pp.354-368.

Blake, C., "The effectiveness of Investment Grants as a Regional Subsidy", The Scottish Journal of Political Economy, Vol. 19, Feb. 1972, pp.63-71.

Blejer, M.I., and M.S. Khan, "Government Policy and Private Investment in Developing Countries", (Washington D.C : IMF Staff papers, vol.31, 1984), pp.379-403.

Bryce, M.d., "Policies and Methods for Industrial Development", (London: McGraw-Hill Book Company Inc., 1965).

Carlsson, B., "Industrial Subsidies in the Nordic Countries" ,  
In, Mikklsen, A., "Economic Growth in Nordic  
Perspective".

Chen-Young, P.A., "A Study of Tax Incentives in Jamaica",  
National Tax Journal, 1967, pp.292-308.

Coen, R., "The Effect of Cash Flow on the Speed of  
Adjustment", In, G. Fromm (ed), "Tax Incentives and  
Capital Spending, Studies of Government Finance",  
Brookings Institution, Washington, 1971, pp.131-169.

Consulting Center For Finance and Investment, "A Study Toward  
Developing the Government Purchasing System in Favor of  
Local Industries", May, 1984, (Arabic).

Corden, W.M., and G. Fels, "Public Assistance to Industry:  
Protection and Subsidies in British and Germany", (U.K,  
Bristol: Western Printing Services LTD, 1976).

Corker, R., O. Evans, and L. Kenward, "Tax policy and Business  
Investment in the United States: Evidence from 1980s",  
IMF Staff Papers, Vol. 36, 1989, pp.31-62.

Council of Saudi Chambers of commerce & indsutry,  
"Implementing the Optimum Use of the Private Sector  
Resources and Capabilities Toward Building a  
Diversification Producing Structures ", Working Paper  
presented to the Fourth Saudi Busnissmen conference,  
Jeddah, May 29-1 June 1989.

-----, "Present And Future of Agriculture in the  
Kingdom", Working Paper presented to the Second Saudi  
Busnissmen's conference, Jeddah, May 29-1 June 1989,  
(Arabic).

-----, "Documents and Achievements", (Proceeding  
Papers of the First Businessmen's Conference, Dammam,  
Eastern 17-29 Jumadalula 1403 H), Riyadh, 1403.  
(Arabic).

-----, "Documents and Achievements", (Proceeding  
Papers of the First Businessmen's Conference, Riyadh 5-7  
Rajab 1405), Riyadh, 1405, (Arabic).

-----, "Documents and Achievements", (Proceeding Papers of the First Businessmen's Conference, Abha 15-18 Rajab 1407), Riyadh, 1407, (Arabic).

-----, "Documents and Achievements" , (Proceeding Papers of the First Businessmen's Conference, Jeddah 24-27 Shawal 1409), Riyadh, 1409, (Arabic).

-----, "Developing the Structure of the Private Sector to Face the Development Challenges in Next Period", Working Paper presented to the Second Saudi Busnissmen's conference, Jeddah 29 May June, 1989, (Arabic).

-----, "A Study Regarding How to Solve the Private Sector Problems and Develop its Own Resource", Riyadh, 1989, (Arabic).

-----, "The Unutilised Resources in Some of the private Sector Activities", Riyadh, 1989, (Arabic).

-----, "The Current and Future of National Industry in the Kingdom", Riyadh, 1985, (Arabic).

David, Cristina C., "Credit price policies in Philippine Agriculture", In Adams, D.W., Pischke, J.B., eds., "The undermining Rural Development With Cheap Credit", (Boulder, colo., USA, and London: Westview Press, Inc., 1984), pp 210-224.

Denton, G., and S.O. O'cleireacain, "Subsidy Issues in International Commerce", (London: Trade Policy Research Center, Tahmes Essay No.5, 1972).

Donges, J. B., "A Comparative Survey of Industrialisation Policies in Fifteen Semi-Industrial Countries", Weltwirtschaftliches Archiv (Review of world Economics), Vol.112, 1976, pp. 626-657.

Eastern Province Chamber of Commerce and Industry, "Scope and Policies of Private Industrial Investment in the New Stage", 1986, (Arabic).

-----, "Toward a Policy that Encourgae the Export of Private Sector in the Kingdom", Saudi Council

of industrial and commercial Chambers, Riyadh, 1987, (Arabic).

Eisner, R. and M. Nadiri, "On Investment Behaviour and Neoclassical Theory", Review of Economics and Statistics, Vol.50, 1968, pp.369-382.

El-Mallakh, R., "Saudi Arabia: Rush to Development", (London: Croom Helm Ltd., 1982).

-----, & D. El-Mallakh, "Saudi Arabia: Energy, Developmental Planning, and Industrialization", (USA: D.C. Heath and Company), 1982.

Fledstein, M. "Tax Incentives, Stabilisation Policy and The Proportional Replacement Hypothesis: Some Negative Conclusions", Southern Economic Journal, 1974, pp.545-552.

Galenson, A., "Investment Incentives for Industry: Some Guidelines for Developing Countries", World Bank Staff Working Paper, No. 669, 1984, (Washington, D.C.: The International Bank for Reconstruction And Development).

Gandhi, V.P., "Effects of Tax Incentives on Investment and Employment", In Shome, P., ed., "Fiscal Issues in South-East Asia", (London: Oxford University Press, 1986), pp.27-47.

Gandolfo, G., "International Economics", (Germany: Springer-Verlag Berlin Heidelberg, 1986).

Gillis, M.; Perkins, D.H.; Roemer, M.; and, Snodgrass, D.R., "Economic of Development", (London: W.W. Norton & Company, Ltd., 1987).

Goodman, D.E., "Industrial Development in The Brazilian North-East: An Interim Assessment of The Tax Credit Scheme of Article 34/18", in Roett, R., ed., "Brazil in The Sixties", (Missouri, USA: Vanderbilt University Press, 1972).

Grain Silos & Flour Mills Organization, "GSFMO's Objectives and Acheivements", 1990, (Arabic).

-----, "Saudi Wheat in International Markets", August, 1989.

-----, "Annual Report 1407/1408", 1987, (Arabic).

Greene, J., and D. Villanueva, "Private Investment in Developing Countries : An Emperical Analysis", (Washington D.C : IMF Staff papers, vol.38, 1991), pp.33-58.

Guerard, M., "Fiscal Versus Trade Incentives for Industrialisation", Finance and Development, Vol.12, June 1975, pp.19-22.

Gulf Economic & Financial Report, "The Industrial Challenge in the Gulf", Vol. IV, No.9, November 1989

Hall, R. and D. Jorgenson, "Tax policy and Investment Behaviour", American Economic Review, Vol. 57, 1967, pp.391-414.

Hamid, N. and K. Hussein, "Regional Inequality and Capitalist Development", Pakistan Economic and Social Review, Autumn, 1974, pp. 255-288.

Hamilton, C., "Public Subsidies to Industry: The case of Sweden and its Shipbuilding Industry", World Bank Staff Working Papers, no, 566, (Washington, D.C.: The World Bank, 1983).

Harber, Jr.P., "Brazil's Fiscal Incentive System and The Northeast: An Econometric Analysis", Journal of Economic Development, Vol.8(1), July, 1983, pp.131-159.

Helliwell, J. and R. Glorieux, "Forward looking investment and Behaviour", Review of Economic Studies, 1970, pp.499-516.

Hughes, H., "Achievements and Objectives of Industrialisation", In Cody, J. et al.(eds.), Policies for Industrial Progress in Developing countries, (London: Oxford University Press, 1980), Published for World bank.

Hughes, H. and You Poh Seng, "Foreign Investment in

Singapore", (Canberra: Australian National University Press, 1969).

Ismail, T., & N. Al-Rebaei, "The Role of the Private Sector in Gulf Industrialisation: Its Current Position and Development Sources", Gulf Organisation for Industrial Consultant : Majlat Altawan Alsinai fi Elkhalej Alarabi (Magazine of Industrial Cooperation in Arabian Gulf), No. 39, January, 1990, pp.6-18, (Arabic).

Jalal. M. B., "The Industrialization Option & the role of the National Industrialization Company in its Implementation", 1983.

-----, "The Industrialization Option between the Reality, Potentials, and Challenges", National Industrialization Company, March 1989, (Arabic).

Jeddah Chamber of Commerce and Industry, "Investment Opportunities Available to the Private Sector within the Development Plan Framework", Council of Saudi Chambers of Commerce and Industry, Riyadh, 1987, (Arabic).

Jentoft, S., and K.H. Mikalsen, "Government Subsidies in Norwegian Fisheries: Regional Development or Political Favouritism?", Marine Policy, Vol. 11, pt. 3, 1987, pp.217-228.

Johany, A.D., M. Berne and J. Wilson Mixon, "The Saudi Arabian Economy", (UK, Kent : Croom Helm Ltd, 1986).

Johnson, H.G., "Tariffs and Economic Development: Some Theoretical Issues", In, D. Wall, ed., "Chicago Essays in Economics Development", (London, Chicago: The University of Chicago Press, 1972), pp.271-299.

Jones, T.T., and T.A.J. Cockeril, "Structure and Performance of Industries", (London: Philip Allen, 1984).

Jorgenson, D., "Capital Theory and Investment Behavior", American Economic Review, vol. 53, May 1963, pp.247-259.

-----, "The Theory of Investment Behavior", In R. Ferber (ed.), "Determinants of Investment Behaviour", Universities-National Bureau Conference, Series No. 18,



(New York: Columbia University Press, 1967), pp.129-155.

-----, "Investment Behavior and the Production Function", Bell Journal of Economics and Management Science, Vol.3, Spring 1972, pp.220-251.

Katz, B., "Mexican Fiscal and Subsidies Incentives For Industrial Development", The American Journal of Economics and Sociology, Vol. 31, No.4, October 1972, pp.353-360.

King, M.A, "Taxation and Investment in A Vintage Investment Model", Journal of Public Economics, Vol.1, 1972, pp.121-147.

King, T., "Mexico: Industrialization and Trade Policies Since 1940", (London: Oxford University Press, 1977), pp.103-105.

Kuwajkeah, M., "Industrial Development Incentives in Arabian Gulf States: Their Status and How to Develop them", Gulf Organisation for Industrial Consultant : Majlat Altawan Alsinai fi Elkhalej Alarabi (Magazine of Industrial Cooperation in Arabian Gulf), No. 21, July, 1985, pp.9-40.

Leite, S.P. and R. Vaez-zadeh, "Credit Allocation and Investment Decisions: The Case of The Manufacturing Sector in Korea", World Development, Vol.14(1), 1986, pp.115-126.

Lent, G.E., "Tax Incentives for Investment in Developing Countries", IMF Staff Paper, Vol.14, 1967, pp.249-321.

Lim, D., "Fiscal Incentives and Direct Foreign Investment in Less Developed Countries", The Journal of Development Studies, Vol.19, pt.2, January 1983, pp.207-212.

Looney, R., "Saudi Arabia's Development Potential", (USA, Massachusetts: D.C. Heath & Company), 1982.

Lund. P. "The Econometric Assessment of The Impact of Investment Incentives", in: Whiting, A., "The Economics of Industrial Subsidies", (London: Her Majesty's Stationery Office , 1976), pp.245-265.

Mason, e., & W. Bramble, "Understanding conducting research: Applications in education and behaviour sciences", (New York: McGraw-Hill, 1978).

Mead, W., "The System of Governement Subsidies to the Oil Industry", Natural Resources Journal, January 1970, Vol. 10, pp.113-25.

Middle East Economic Digest, "Saudi Industry: Special Report", london, November 1984, pp. 1-28.

-----, "Saudi Arabia: Special Report", June 1987.

-----, "Saudi Arabia: Special Report", November 1987.

-----, "Saudi Arabia Gets Tough on Spending", March 1985.

-----, "All changes for Saudi Oil", June 13, 1987, pp.6-7.

Ministry of Agriculture and Water (MAW), "Agricultural Sector Development : Graphical Indicators", Riyadh, iss. no. 4, 1989.

-----, "A Guide to Agricultural Investment in Saudi Arabia", Riyadh, 1984.

-----, "The Fourth Plan For The Agricultural Sector 1985-1990", Riyadh, 1985,(arabic).

-----, "Annual Bulletin of Current Agricultural Statistics : Sample Survey 1984-85", 1986.

Ministry of Defence and Aviation, "Economic Offset: Manufacturing and Technology", Undated.

Ministry of Finance & National Economy (MOFNE), "Government Subsidies and Loans During Fifteen Years 1972-1985", 1985, (Arabic).

-----, "The Statistical Indicator", No.13, 1988, p.80.

-----, "Saudi Arabia's Strategy of Economic Growth Emphasizes Enhanced Role for Private Sector", Issues &

Trends: Periodical Report, no. 126, April 3, 1985, p.1.

-----, Central Department of Statistics, "The National Accounts of S.A", various issues 1963-1988.

Ministry of Industry and Electricity, "Industry & Electricity : Progress and Achievements", undated.

Ministry of Planning, "First Development Plan: 1970-1975", (Riyadh: Ministry of Planning).

-----, "Second Development Plan: 1975-1980", (Riyadh: Ministry of Planning).

-----, "Third Development Plan: 1980-1985", (Riyadh: Ministry of Planning).

-----, "Fourth Development Plan: 1985-1990", (Riyadh: Ministry of Planning).

-----, "Fifth Development Plan: 1990-1995", (Riyadh: Ministry of Planning).

-----, "Achievements of the Development Plans: 1970-1987", (Riyadh: Ministry of Planning, 1989).

Montagu, C., "Industrial Development in Saudi Arabia", (London: The Committee for Middle East Trade), 1987.

Niblock, T., "State, Society and Economy in Saudi Arabia", (UK, Guilford: Biddles Ltd.), 1982.

Oulton, N., "Aggregate Investment and Tobin's Q: The Evidence From Britain", Oxford Economic Papers, vol.33, 1981, pp.177-202.

Presley, J.R., "A guide to The Saudi Arabian Economy" (London: Macmillan, 1984).

Pryder, P.L.Jr., "Incentives to Economic Development", In, Myer, J.A., ed., "Meeting Human Needs: Toward a New Public Philosophy", (Washington & London: American Enterprise Institution for Public Policy Research, 1982), pp.201-212.

Ramaswami, V., "Trade and Development: Essays in Economics",  
(London: George Allen & Unwin Ltd., 1971).

Reca, L.G., "Argentina: Country Study of Agricultural Prices and Subsidies", World Bank Staff Working Paper, no. 386,  
(Washington, D.C.: The World Bank, April 1980).

Reed, S., "The Saudis Brace for Hard Times", The Nation, March  
15 1986, pp.297-300.

Reuber, C.L., "Private Foreign Investment in Development",  
(OECD; Oxford: Clarendon Press, 1973), pp.132-135.

Riyadh Chamber of Commerce and Industry, "Domestic Production Between the Consumption and Export", Riyadh, 1989,  
(Arabic).

-----, "Agriculture between mechanisation and aid",  
1989, (Arabic).

-----, "Potentials of Industrial-Agricultural Integration", Riyadh, 1989, (Arabic).

-----, "The Role of Agricultural Joint-Stock Companies in Development Process", Riyadh, 1990, (Arabic).

-----, "The Role of Commercial Banks in Financing Private Sector", Riyadh, Shaban 1408 (1988). (Arabic).

Robinson, H., "The Motivation and Flow of Private Investment",  
(California, USA: International Development Center, Stanford Research Institute, 1961).

Ross, G.S. and J.B. Christensen, "Tax Incentives For Industry in Mexico", (Cambridge, Mass.: Harvard Law School, 1959), p.ix.

Rowley, R.G.R., "Fixed Capital Formation in The British Economy 1956-1965", Economica, 1972, pp.177-189.

Sandborge, D. "The Development of the Saudi Private Sector During the Previous Decade", MOFNE, Issues & Trends  
(Periodical Report), no. 173, June 1987, p.9, (Arabic).

Saudi Arabian Agricultural Bank (SAAB), "Saudi Arabian

Agricultural Bank In Twenty Years", (undated, 1984-).

-----, "The Guidelines for Lending and Subsidy policies As From 1/7/1406 H", 1987, (Arabic).

-----, "Annual Report", (several issues 1979-88).

-----, "The Statistical Guide for Specialised Agricultural Projects Financed by the Bank Till 30/12/1410 H", 1990, (Arabic).

-----, "A study about mechanisation and agricultural development in Saudi Arabia", 1981, (Arabic).

Saudi Arabian Monetary Agency (SAMA), "Annual Report", several Issues 1970- 1989.

-----, "Statistical Summary", (Riyadh: SAMA, 1989).

-----, "Annual Report 1407/08", (Arabic).

Saudi Basic Industries Corporation, "SABIC 1406 H-1986A D", (Riyadh: SABIC, 1986).

Saudi Business, "Government loans, subsidies promote Kingdom's developing private sector", April 16, 1983, pp.14-15.

Saudi Consulting House, "A Guide to Industrial Investment", (Riyadh: Saudi Consulting House), 8th Edition, 1990, (Arabic).

Scandizzo, P.L., "Methodologies for Measuring Agricultural Price Intervention Effects", World Bank Staff Working Paper, no. 394, (Washington, D.C.: The World Bank, June 1980).

Schultz, T.W., ed., "Distortion of Agricultural Incentives", (London: Indiana University Press), 1978.

Sellitz, c. et al., "Research method in social relations", (New York : Hold, 1959).

Shafaeddin, M., "Agricultural Price Policies and The Oil Boom: Wheat and Meat in Iran, 1962-78", Food Policy, May 1988 pp. 185-198.

Spss Inc., "Spss-x User's Guide", 3 rd. Edition, 1988.

Sundararajan V., and S., Thakur, "Public Investment, Crowding Out, and Growth: A Dynamic Model Applied to India and Korea", IMF Staff papers, vol.27, 1980, pp.814-855.

Tanzi, V., "Tax Incentives and Economic Development: The Ecuadorian Experience", Finanz Archiv, Vol. 28, 1969, pp. 226-235.

The Middle-East, "Saudi Arabia: Special Survey", April, 1982.

The Wall Street Journal, "Saudi Arabia: Special Report", July 28, 1989.

Thirlwall, A.P., "Growth and Development: With Special Reference to Developing Economies", (London: The Macmillan Press Ltd., 1983).

Thomas, R., "The fiscal Incentives to Invest: Liquidity V. Profitability Aspects", The scottish Journal of Political Economy , Vol.19, Nov. 1972, pp.273-286.

Tobin, J., "A General Equilibrium Approach to Monetary Theory", Journal of Money, Credit, and Banking, Vol.1, February 1969.

Tobin, J., and W.C. Brainard, "Asset Markets and The Cost of Capital", In B. Balassa, and R. Nelson (ed.), "Economic Progress, Private Values, and Public policy", Essays in Honour of W. Fellner, (Amsterdam: North-Holland, 1977).

Todaro, M., "Economic Development in The Third World", (New Yoek: Longman Inc., 1985).

Tuncalp, S., & U. Yavas, "Agricultural Development in Saudi Arabia: Present Status and Prospects", Third World Planning Review, Vol.5, No.4, November 1983, PP.333-347.

Turner, P., "Investment Theory and Evidence", Economic Review, Vol.6, no.3, 1989. pp.21-23.

Usher, D., "The Economics of Tax Incentives to Encourage Investment in Less Developed Countries", Journal of Development Economics, Vol.4, 1977, pp.119-148.

Von Pischke, J.D., "The Political Economy of Specialized Farm Credit Institutions in Low-Income Countries", World Bank Staff Working Paper, no. 446, (Washington, D.C.: The World Bank, 1981).

Wai, U.T., and C.H. Wong, "Deteerminants of Private Investment in Developing Countries", The Journal of Development Studies, vol.19. no.1, Oct. 1982, pp.19-36.

Wells, R.J.G., "Producer Subsidies in the Dairy Industry in Peninsular Malaysis", Journal of Economic Studies, Vol.8, no.2, 1981, pp.57-64.

Westphal, L.E., "Empirical Justification For Infant Industry Protection", World Bank Staff Working Paper, No.445, (Washington, D.C.: The World Bank, 1981).

Winters, L.A., "International Economics", (London: Unwin Hyman, 1985).

Yoshikawa, H., "On the 'q' Theory of Investment", American Economic Review, vol.70, 1980, pp.739-743.