INDUSTRIAL SUBSIDIES IN KUWAIT: AN ECONOMIC ANALYSIS AND EVALUATION

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DECLARATION

No part of the work contained in this thesis has been submitted for any other degree at this or any other university or institution of learning.

To my father Hajj Hamza
and my mother Hajjiya
Umm Haider in appreciation.

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ABSTRACT

This study was undertaken mainly to obtain information regarding size, forms and effects of industrial subsidies in the State of Kuwait. To accomplish this, a survey questionnaire was constructed and distributed by mail to the general managers of industrial firms in Kuwait. Secondary purposes were to understand some parameters about the structure of the manufacturing sector in Kuwait, the perception of the respondents about the industrial subsidies offered by the State, and what they consider to be the most important difficulties facing the Kuwaiti industrial sector.

A literature review of the theoretical issues which could provide a background to the study of industrial subsidies in Kuwait is presented. Also an overview sketch of the Kuwaiti economy, the manufacturing sector and the State administrative framework for the industrial sector is drawn. Then, the particular forms of subsidies which are available to the manufacturing sector in Kuwait will be studied.

The presentation of the results is obtained by means of percentages and correlations. Then, the findings are summarised, conclusions are drawn, and recommendations are made for possible future research studies to help improve studies of industrial subsidies in Kuwait.

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INTRODUCTION

The subject matter of this research is of great contemporary interest. Policy on subsidies, in general, is a major subject of debate in contemporary Kuwait owing, mainly, to the continuing slump in the international oil market which has reduced Kuwaiti oil exports and led to a drastic fall in the government's oil revenues.

In view of the importance of, and interest in, the subject of industrial subsidies as perceived by the industrial firms in Kuwait, it was felt that this study could make an important contribution in improving understanding of the effect of subsidies on industrial firms and that, in the course of examining this topic, considerable information about the nature and extent of industrial subsidies in Kuwait could be gathered.

It has been useful in this thesis to distinguish between the reporting of subsidies and the appraisal of subsidies. The former refers to how well governments publicly identify the magnitude of subsidies granted, the identity of recipients and the methods of final transfer employed. The latter refers to how well the economic consequences of the subsidies are identified, both on an *ex ante* and an *ex post* basis, for internal decision-making purposes. As will be discussed in the following chapters,

neither the reporting nor the appraisal of subsidies is an exact science, and no universally accepted, precise and easily applied techniques to perform either task can be found. It is because of the difficulty both of identifying and of appraising subsidies that it is hoped that this study has some contribution to make.

No hypotheses are formulated in this research as it is mostly exploratory and analytical. In this regards we quote the following from M. Stacy[1]:

> "Some people consider that a piece of social research is not scientific unless it has a clearly defined hypothesis which it sets out to test. This would appear to be too narrow a view. In an unknown field it is not possible to set up sufficiently clear hypotheses for testing to form a basis for research. Hypotheses which are worth testing can only be developed in an area about which a good deal is known, i.e. where a great deal of empirical field data is already collected. Before this stage most research is of an exploratory nature".

This research does not explore specific predictions of relationships based upon theoretical derivations, since there was little previous research in general, and about industrial subsidies in the third world in particular, from which such theory could be drawn. It has been anticipated that this purely exploratory analysis would be instrumental in the discovery of significant variables and basic relationships useful for further research.

Mainly three methods have been used in this study: theoretical analyses, description of the Kuwaiti manufacturing

sector and its administrative framework as well as description of industrial subsidies policy, and a questionnaire survey analysis.

Theoretical analysis of the issues is concentrated especially in Chapter One, but also figures in other chapters. No new ground has been broken in this analysis, which largely follows that used by other industrial economists, but it has been adapted to the need for a theoretical structure to guide the (questionnaire) analysis for this study.

A description of selected industrial indicators for Kuwait as well as the industrial sub-sector, size, etc., is presented in Chapter Two. Also, an evaluation of the licencing system as practised in Kuwait and the Government administrative setting for the manufacturing sector are scrutinised.

Furthermore, a good deal of description of policies has naturally been given, concentrated especially in Chapter Three, since a comprehensive account of all the important domestic industrial subsidies was needed in order to define the scope of the questionnaire analysis. The importance of this descriptive work should not be underestimated, since in an era of rapid developments in the industrial sector and frequent changes of policies in practice, it is essential to have a clear view of what has

been happening as a basis for more sophisticated work on clarifying the effects of policies.

Chapters Four to Seven are concerned with the questionnaire analyses. Chapter four includes a description of the method of executing the questionnaire survey and the questionnaire design as well as how and why it was constructed in the particular way. Chapter Five will discuss the measurable type of subsidies which include those for electricity, water, fuel and land. Chapter Six will be concerned with the participating firms' structural issues which will include: ownership structure, year of establishment of projects, total capital employed, employment, industrial sectors, exports and industrial areas issues. Chapter Seven, on the other hand, will discuss the non-measurable forms of industrial subsidies in Kuwait. These will include: the conditions of industrial land, financial subsidies, customs duty protection, new subsidies suggested by respondents, and difficulties which are thought to face the manufacturing sector in Kuwait. Finally, Chapter Eight will summarise the findings and draw conclusions as well as suggesting some recommendations for further research.

Notes

(1) Stacy, M.; "Methods of social research", (London: Pergamon Press, 1970), p.6.

CHAPTER ONE

LITERATURE SURVEY: INDUSTRIAL AND SUBSIDIES POLICIES

Introduction

This review is intended to provide a background for the issue of subsidies, as well as a source of reference material for the economic analyst who is interested in subsidy evaluation. The review focuses on the techniques that have been described in the economics literature which can be brought to bear on the appraisal of subsidies. Within this focus, an effort has been made to be selective but reasonably comprehensive, with emphasis on those issues and items of most utility and interest to the policy analyst.

Accordingly, an attempt will be made to survey the definition of industrial policy in the economics literature. Licencing, which is a main instrument of industrial policy in developing countries, and which is extensively applied in Kuwait, will also be discussed in some detail.

The main body of discussion in this chapter will consist of reviews regarding issues related to subsidies policy. Defining subsidies is one of the difficulties of the field. Thus, the various definitions are reviewed as are the various criteria for their granting.

The economic effects of subsidies will also be discussed.

These will be classified under production, factor and capital subsidies. In addition, tariffs will receive attention, as they are considered to be one of the main instruments of industrial policy. Finally, the success or otherwise of subsidies in stimulating investment will also be considered.

Subsidies are not, as an Arab proverb says, a "road full of roses" to progress and economic prosperity, rather it is a road full of difficulties and many "bad" side-effects. These associated difficulties will, thus, also be discussed.

Industrial policy

Industrial policy is concerned with the actions of governments to change the structure, conduct or performance of firms, markets or industries, to improve efficiency and/or equity so that there is a net gain in economic welfare. To achieve these ends governments have policies for promoting competition in industries and markets, for regulating markets, industries and firms, for changing entrepreneurial behaviour, and for changing the structure and size of firms. Governments also have various policy instruments such as subsidies, tax changes, price controls, trade restrictions, trade liberalisation, public ownership, etc., to achieve their goals. Industrial policy can either be seen as part

of a deliberate set of policies to achieve particular ends, or it can merely be the particular response to individual problems as they arise, these ad hoc responses not being part of an overall strategy for industry. For example, the government might wish to rescue a bankrupt firm for a mixture of economic, political and social reasons.

The nature of industrial policy in a country will depend initially upon the kind of economic system that the country wishes to have. If it believes in the efficacy of competition and the power of free markets to bring about the best allocation of resources, then industrial policy will be about removing obstacles to competition and minimising government intervention. On the other hand, if the society questions the wisdom of relying on markets, then industrial policy will be based on the belief that resources in certain circumstances are better allocated by non-market means such as planning or discretionary administrative action.

Definition

Industrial policy is a term which has come into widespread use relatively recently, although the objectives which it attempts to promote have been pursued considerably longer. Ohlin has noted that "a decade of fairly lively discussion of industrial policy has not produced any sharply defined notion of what it embraces".[1] In fact,

there is no universally agreed definition of what objectives or what measures are embraced by "industrial policy", and it remains more ambiguous than the other areas of economic policy, such as monetary or fiscal policies. Therefore, many definitions have been offered depending on the study purposes of different people.

An Open University course book[2] offers this definition of the term: "Micro-level policies, specifically directed at the business sector (or sub-sector), which seek to change business performance in ways deemed desirable by the government". Another definition put forward by the Organisation for Economic Cooperation and Development[3] is: "a focus of attention on a set of objectives related to industrial activity and development". This definition Grant[4] notes is "the kind of weak compromise definition".

Devine[5] defined industrial policy for his purposes as follows: "industrial policy as discussed in this section is concerned with intervention at the level of the specific industry or firm and the extent to which this is related to an overall plan or strategy for the development of the economy".

National industrial policies are determined mainly by two factors, the particular set of national problems facing the governments, and the governments' assessments as to how the problems can best be overcome.[6]

In conclusion, there is not a single all purpose

definition of the term "industrial policy" used and implied in the economic policy literature. However, we take it to mean and include government intervention in the industrial sector.

Industrial licencing

The term "licencing" will be used to refer to all discretionary controls of private industrial investment used as an industrial policy weapon to plan and control industrial development. Licencing is used to control the quantity and quality of projects and the direction of new investment. Control can be exercised over the number of enterprises established in each branch of industry and the size, nature, and quality of each project to be established. In this way, it is thought that fragmentation of production into a large number of small-scale operating units may be avoided; capacity may be kept in relation with the expected growth of demand and attention may be paid to the choice of appropriate technology.

Licencing not only makes demands on the licencee, but also confers privileges. The possession of a licence whether to import raw materials or inputs or to produce a certain volume of goods, gives the possessor monopolistic privileges from which he can obtain an economic "rent".

Objectives

Objectives for industrial licencing differ between different countries. However, certain common objectives may be conceived. These include: (i) To insure that only high priority investments are undertaken. (ii) To attempt to ensure the long-run efficiency of the industrial sector by restricting licences only to those investors who plan to build a plant of the minimum efficient size and by assuring full-capacity operation of all plants of efficient scale. (iii) To control monopolistic tendencies which may result from scarcities in entrepreneurial talent and imperfections in capital markets. (iv) To control foreign investments.(7)

Although the objectives of industrial licencing may appear very sound, however, the experience of some developing countries which have relied heavily on this system for their industrialisation has shown that its proper administration is indeed very difficult if not impossible and its ill effects may outweigh its advantages.(8)

Evaluation

It is very difficult to appraise and evaluate the impact of the licencing system alone on the industrial sector and the allocation of resources. Indeed, the industrial sector is affected by a host of government policies and market forces, and one should think of the effects of these

policies in combination with one another.[9]

Similarly, it is difficult to judge to what extent the licencing system alone has been successful in achieving the objectives of control and whether such objectives would not have been achieved in the absence of such a control system. The objectives of the licencing system are so broad in nature that it makes the evaluation of the success of the system even more difficult.[10]

Little, Scitovsky and Scott[11] note that for licencing systems to be effective and selective, private initiative must be excessive and in need of curbing. Licencing would be a mere formality if individual investment plans added up to no more investment than is economically feasible.

In order to be able to judge the overall effectiveness of licencing, some account of the social costs of licencing may be made. The following include some disadvantages of the licencing system: (i) Uncertainties as a result of the lack of the assurance that a permit will actually be granted, and that a comprehensive licence for all phases of an industrial project may not be granted. (ii) Delays and long-time periods between a firm's decision to invest and the actual beginning of the construction of a project are inevitable results of such a discretionary system. (iii) Encouragement of monopolies and large-scale enterprises as they are generally able to devote more

resources and are more able to bear the higher waiting costs of the processing of licence applications than are medium- and small-firms. (iv) Unlike price system policies, licencing can regulate firms' entry into an industry, but it can not alone create positive incentives for entering the industry. (v) Absence of economic criteria. A paradox of licencing is that it is undertaken to improve both efficiency and equity in resource allocation, but rarely is an explicit criteria of efficiency and equity adopted by licencing authorities. Licencing decisions are often ad hoc, relying on subjective judgements about the merits of individual applications without giving clear indications of the substantive factors involved in the decision.(12)

Another major problem of the licencing system arises from the task of matching the productive capacity to the estimated market requirements, which is practised in many developing countries. Indeed, it is very difficult to forecast accurately the demand for a given product under changing conditions. The system which tries on the one hand, to match production to demand; and on the other hand, to ensure that the licensed producer is accorded a market share large enough to guarantee his minimum economic size requirements, may badly underestimate the level of demand that may be created under competitive conditions.

Therefore a possible outcome is that

a monopolistic or oligopolistic production structure will be created which will either shelter inefficient, high cost producers, or enable reasonably efficient ones to earn far higher profits at higher prices than would be permitted under a competitive market structure.[13]

Remedies[14]

In many situations efficiency in licencing systems can be increased substantially by simple administrative reforms. The broad outline of these reforms is perhaps clear from the previous discussion of weaknesses in prevailing systems. A single agency with power to enforce deadlines at each step in the review process should be established, if possible. The objectives of licencing policy should be clearly stated, and quantitative guidelines should be made explicit for the purpose of evaluating proposed investments. Progress of each application should be monitored as it moves through the licensing approval process. Any delay caused by missing information or lack of authority to act should be immediately stated. Where possible, sequential approval by concerned agencies should be replaced by simultaneous approval, a procedure that should greatly reduce the required time for processing an application.

Most importantly, perhaps, each proposed investment should be subjected to a social cost-benefit analysis,

incorporating as weights on the benefit side the objectives of the licencing system.

Subsidies policy

The contemporary interest in the provision of public incentives and subsidies has arisen as part of the growing attention given to the whole subject of public expenditure over the last three decades.

Moreover, with the growth of public involvement in economic life, the subsidisation of private projects has become a common practice[15]. Indeed, there appears to be consensus among observers, that worldwide, public subsidies to industry are growing, in terms both of scope and impact. These subsidies are sometimes general, such as in the case of investment incentives available to all industries, and at other times they are specific to a particular firm, industry, region or area of research and development. Their effects are to distort market conditions and to re-orient the pace and direction of adjustment of the industrial structure of each nation.[16]

In addition, subsidy practices have been recognised as an important tool for government intervention in national economies. The extent to which they are employed is a direct function of different economic philosophies being incorporated into national policy.[17]

However, Herald Malmgren[18] notes that economists have not given as much methodological attention to subsidies as non-economists might expect. He cites the following from a C.S. Shoup in a speech in the U.S. Congress:

> "Federal subsidies are the great fiscal unknown. The Federal budget presents no comprehensive summary of subsidies. Most public finance textbooks in the U.S. either do not even list the word "subsidy" in their indexes or give only a page or two of reference..."[19]

The subsidy idea is not a newly developed device or technique for economic problems. Historically, subsidies were taxes in aid granted to the kings of England. They were imposed upon persons in respect of their reputed estates. In 1398 a subsidy on wool and leather was granted to Richard II for life. These subsidies were discontinued after 1663, and a land tax substituted for them. Also known as subsidies were sums of money paid by one state to another under the terms of a treaty. They were used to purchase the service of auxiliary troops, or to acquire the aid of a foreign state in a war against an enemy.[20] As a result, the word "subsidy" has undergone various changes and adaptations throughout the years, resulting in a variety of meanings.[21]

Denton and O'Cleireacain[22] argue that the ultimate object of a subsidy need not be the particular firm receiving the initial direct benefit. However, it is reasonable to classify subsidies according to the initial object receiving

the subsidy. First, subsidies may be given directly to specific industries. For example, many countries subsidise their shipbuilding industries directly. Secondly, user industries receive assistance through subsidies to inputs of goods or services. For instance, electricity prices may be subsidised, either through general deficits in publicly-owned electricity enterprises or through electricity tariffs that favour certain industries. Thirdly, general subsidies may be given in the form of subsidies or tax reliefs to the employment of factors of production; for example, investment grants or tax allowances, and employment premiums. Fourthly, selected aspects of industrial activities which are regarded as worthy of promotion may be subsidised , for instance, grants for research and development, or training. Fifthly, many countries have programmes to help certain regions from high unemployment or low income levels, which provide a wide range of types of subsidies. Sixthly, consumers may be subsidised, where users are free in theory to apply their subsidies to any products as they wish.

A point to be noted is that subsidies are costly to government budgets, and when they become visible, excessively high subsidies tend to be politically unpalatable.(23)

Definition

The problem of defining subsidies is not as straightforward as at first it may seem to be, and it is often not clear what is meant by a subsidy. The difficulty of definition increases with the more diverse and obscure methods of assisting an industry.[24] As one economist notes, "they are hard to define but easy to identify." [25]

Many definitions of the term "subsidy" have been offered by economists, accountants and trade practitioners. Some of these which are found in the literature are too broad and others are too narrow. An example of a broad definition may be the following: "Subsidies include all kinds of measures whose effects on production and income distribution are similar to those resulting from direct subsidy payments".[26] This definition brings into consideration tax concessions, price supports, protection against competition and provision of goods and services below cost.

Professor Alan Prest of the London School of Economics, an authority in public finance, has confessed, "I was under the delusion that I knew what a subsidy was; now I am not so sure",[27] e.g. Prest cites a U.S. Department of Commerce estimate of 1969 U.S. subsidies as $4000 million and a U.S. Congress Joint Economic Committee estimate of $63,000 million in fiscal 1970-71.[28]

The definitional confusion hinges on the different

treatment accorded to cash outlays and imputed transfers. For instance, tax concessions or "tax expenditures" have economic effects similar to cash grants but are much more difficult to quantify.[29]

Alan Prest notes that "there is no neat and tidy single all-purpose definition"[30] and argues that "the least unsatisfactory one is: "payments which directly affect relative prices in the commercial sector, broadly defined".[31][32] He also notes that "it is not difficult to portray subsidies as associated with virtually any fiscal activity of government".[33] However, he argues that such a portrayal is unduly broad.

The United Nations has set forth a definition of subsidies to be used for national accounting purposes. We will scrutinise this definition in the hope of trying to highlight some of the difficulties involved. The UN definition is as follows:

> "Subsidies include all grants on current account which private industries receive from government. These are transfers which, in view of the basis on which they are made, represent additions to the income of the producers from current production. The grants may, for example, be based on the amount or value of the commodities produced, exported, or consumed, the labour or land employed in production, or the manner in which production is organized and carried on. Transfers by public authorities to private industries for investment purposes or to cover destruction damage and other losses in capital and working assets are classed as capital transfers rather than as subsidies...

> Subsidies also include all grants on current account which government makes to public corporations, for example, in compensation for operating losses (negative operating surpluses). In the case of government enterprises, transfers on current account should be treated as subsidy when it is clear that the transfers are the consequence of the policy of governments to maintain prices at a level at which the proceeds of the enterprise will not cover the current costs of production..."(34)

Alan Prest(35) points out three criticisms of this definition. The first is that it disregards the principle of public finance theory that the effect rather than the form of a transfer is what is important. On this definition, for example, a payment to the producers of a particular commodity - say house-building firms - ranks as a subsidy: while a payment to individuals destined for expenditure on house-building would not, although the resource allocation and other economic effects will be similar.(36) Secondly, the wording does not cover the many ways through which governments can provide assistance to producers. "Cover current costs of production", for instance, conceals many possibilities, such as differing measures of current costs for any particular type of output; or subsidies to one type more than offset by surpluses on another and thus hidden by aggregation. Finally, the distinction between payment on current and capital account is highly artificial, a topic on which there is much difference of view from both a theoretical and

practical point of view. For example, this artificial difference means that a regular annual payment to a public enterprise to cover losses is a subsidy, but to occasionally write-down a debt to government is a capital transfer and not a subsidy, although the present value of both of them may be equal.

Herald Malmgren considers that a subsidy might be:

> "Any government action which causes a firm's, or a particular industry's, total net private costs of production to be below the level of costs that would have been incurred in the course of producing that same level of output in the absence of government action".[37]

He criticizes this definition as being not fully satisfactory, because it comprehends government enforcement of contracts, anti-monopoly regulations and other general government services financed out of general revenues and deemed necessary to the functioning of the market economy. Furthermore, it demonstrates that the role of government is pervasive, and where subsidy begins and socially necessary legislative and administrative conditions and constraints end will never be entirely clear.[38]

An Organisation for Economic Development and Cooperation (OECD) report[39] noted that the purpose of a subsidy is to alter the conduct of economic activity to achieve an outcome different from that which would occur in the absence of the subsidy. A.P. Thirlwall[40] noted that the essence

of a subsidy to invest to to make profitable projects which were previously just below the margin of profitability. Furthermore, Brian Hindley[41] mentioned that it might plausibly be argued that an activity was subsidised if the effect of government actions was to expand its scale beyond the level it would attain in the absence of these policies.

The above mentioned OECD report[42] noted, correctly, that in some areas of government activity, the subsidy element may be implicit, such as in the regulation of economic activity, the granting of trade protection, or public procurement. In such areas, identification of any subsidy is problematic, because it is difficult to ascertain the price that would "normally" be paid.

G.E. Germane defined subsidies (for the purposes of his study) to cover various mechanisms of assistance as: "Any special assistance or advantage for a group, internationally provided or required by government".[43] Then he notes that this definition: (i) Relates to special assistance and advantage, and not to benefits which may be provided on a general basis. (ii) Restricts the benefit of a group, i.e. to a whole or a category of industries, not a single company or an individual. (iii) Specifies that the benefit is international. (iv) The words "provides or required" are used to cover both assistance given directly by the government (as in cash payments), and assistance through

market protection, or legal requirements. And (v) the restriction of aid to that provided by government, i.e. excluding mutual assistance pacts or other benefits by the independent action of private groups or persons.(44)

A point which is worth mentioning at this stage is that it is inadequate to think of subsidies as government aid to business firms only, because output can be stimulated by payments to consumers as well as to producers. For example, UK official National Accounts' definition of subsidies is rather narrow. It includes all grants on current account from the government to private industry and public corporations but it does not include grants to low interest loans for capital expenditure or subsidies to consumers to purchase output. The meaning of this is that British Leyland's equity and loans are not classified as subsidies but as "financial assistance". However, whether government money is received on current account for purchasing raw materials or on capital account to finance fixed investment, still enables a firm to sell its goods at lower prices than it could otherwise do without having to run into financial difficulties. Therefore, one may classify financial assistance for capital expenditure and to consumers to help them buy a particular product as a subsidy, because their effects are similar to subsidies on their current purchases.(45)

Laird and Rinehart[46] defined subsidies as "any financial concession rendered to a firm, without conditions of repayment, as an inducement for the enterprise to expand its operations". This is an interestingly broad definition at the receiving end but is confined to only "financial" assistance.

In addition to the definitional problems outlined above, there is also a wide range of problems in attempting to calculate the size and effects of a subsidy once it has been so categorised. Moreover, published national accounts, input-output, or budgetary data on government expenditures are inaccurate guides to the level of subsidies.[47]

In conclusion, there is no reason why the term "subsidy" must be attached to one category of government financial transactions rather than another. As Professor Prest[48] notes, different definitions may conceivably be needed for different purposes. It is open to anyone to extend or limit the definition as he thinks appropriate. One may argue that there is a subsidy element in any purchase or in any service obtained if it would cost more to obtain them in the private sector. However, in some areas of government activity, the subsidy element may be implicit, such as in the regulation of economic activity, the granting of trade protection, or public procurement. In such areas, identification of any subsidy may be problematic, because it is difficult to

ascertain the price that would "normally" be paid.

Subsidies in Kuwait may be broadly defined to include relief from taxes, special terms for the supply of materials and services, favoured treatment in the allocation of orders by public authorities, special provision of public infrastructure investment and other methods by which financial benefits, however indirect, can be conferred on firms by government departments and agencies. Provision of electricity and water at nominal rates (far below the actual incurred costs), tariff protection of some industries, conditional exemption from paying tariffs, low-interest loans and the provision of industrial sites at low nominal rates.

Arguments for subsidies

A comprehensive survey of the economics literature of the various arguments which have been put forward to justify government intervention in the market economy, and thus for offering subsidies to private enterprise was carried out. The main general arguments which underlie the provision of subsidies may be categorised as economic and non-economic arguments. Main emphasis, however, will be placed on the economics side of the discipline.

A - Economic arguments

The main economic arguments for subsidies are based on the market failure argument and are derived from the static

welfare economic model. These are generally intended to alter the allocation of resources from that determined by the operation of the market, and hopefully to improve economic welfare in the process. Therefore, the economic justification for subsidising is to eliminate distortions that may arise in the allocation of resources that are not self-correcting within the market system. Thus, the basic purpose of a subsidy would be to try to achieve desirable patterns of resource allocation which may not be achieved by the free operation of the market.

(1) Market failure arguments[49]

The basis of the market failure argument is that subsidies correct the bias of market forces in producing too little of the desired goods or in employing too few of a factor of production. In terms of the Pareto model of optimality, subsidies have a role in that they may be used as "market perfecting" devices. Some of the aspects of market failure that lead to subsidising products in the interest of industrial policy will now be discussed.

(i) Externalities

An externality may be defined as an "uncompensated"

by-product of some activity relevant to someone's welfare";[50] thus, the social costs or benefits of production would diverge from the private costs and benefits. An externality in production would arise when one firm either imposes additional cost upon another firm without compensation or bestows upon another firm benefits which are not charged for. The former are known as external diseconomies, the latter external economies. In the case of diseconomies, production is over expanded relative to what is socially desirable, therefore, the activity requires restriction. This may be achieved by imposing a tax on the output or by legal restriction on the harmful activity. In the case of the external economy which is more desired, the activity would require encouragment to produce the additional output. An appropriate policy response might be to subsidise the production of the goods or subsidise the price.

(ii) Indivisibility of factors

If the quantity of a factor to be employed is large relative to the level of demand, so that the firm is operating on the downward sloping part of its short run average cost curve, then the application of the marginal cost pricing rule will mean that the firm is operating at a loss. To achieve the socially desirable output, the firm would have to be compensated for its losses. An

appropriate policy response might be to subsidise the firm to produce the larger output and make better use of the fixed factor. Furthermore, if considerable economic benefits were to stem from an investment project whose scale is too vast to be undertaken by any individual firm, and if the capital market is imperfect, sufficient sums to fund the project may not be forthcoming from any market source. So again, an appropriate policy response would be government support of particular projects.

(iii) Immobility of factors

Securing the optimal allocation of resources through the price mechanism presupposes that factors of production move costlessly to the activity in which their marginal productivity is greatest. But where factors are geographically immobile, there will be unemployment of resources, and where there is a national payment structure, then the accounting costs of employing, for instance, labour are greater than the opportunity costs. If there are no alternative uses of the labour then it may be worthwhile subsidising the employment of larger numbers of workers than would otherwise be the case. An alternative strategy might be to subsidise factors to encourage their mobility, either by providing free information or by subsidising removal costs.

(iv) Information

There could exist a market imperfection which could prevent the operation of markets, that is, the limited amount of information available to participants, and the costliness of collecting additional information. Where ignorance leads to a misallocation of resources it may be worthwhile the state collecting and disseminating information to both producers and consumers.

(v) Uncertainty

Where an investment project has a high degree of risk attached to it but offers potential benefits to the community, the state may aid the finance of the project by spreading the risk over the entire population of taxpayers. If the government's attitude to risk differs from that of the private investor then it may wish to reflect its own attitude to risk in the choice of investment projects.

In practice, difficulties concerning all these cases of market failure are likely to arise. For example, if all other conditions for optimal allocation were fulfilled, and the market was perfect except for one distortion - say an external economy in a particular industry, then it might still be hard to determine the precise degree of subsidy required.

(2) Infant industry arguments

The infant industry case has in the past been the main growth related argument for government intervention, and tariff protection. It is nowadays one of the most widely accepted arguments for protection in the less developed countries as well as for new industries in the advanced countries and as it has in the past been used to justify protection in the United States, Germany, Canada and Australia.

An infant industry may be said to be any newly established type of activity for which the economy's existing endowments of skills and human capital does not provide immediate technical mastery. Also, it may be thought of as a hybrid of a number of arguments including imperfections in the capital market, scale economies, as well as externalities.

Therefore, the infant industry argument may be said to be mainly concerned with costs.(51) It is very difficult for the newly established firms to compete with foreign products due to the higher cost that they would incur as a result of the shortage of the skilled workers and managers as well as the lack of experience and it would take a long time to overcome this problem through training in order to bring down the cost to the international level. It is assumed that the internal economies, technological improvement and

increased investment generated would lead to a decrease in the costs of production enabling competition to be successfully faced, so that in the end, the increased benefits derived from an efficient and expanding industry would more than outweigh the losses (such as higher prices) incurred in the short-term by subsidising the firm.

Two distinctions must be stressed before analysing the infant industry argument. The first one is between economies of scale and economies of time - essentially static and dynamic concepts, respectively. The former result in falling costs as the scale of output at any point in time increases, while the latter result in falling costs as the length of time over which output has been produced increases learning effects. The second distinction is between internal and external economies, the question being whether these economies are internal or external to the firm.(52) The main element of the infant industry argument is concerned with dynamic features (time-related), and thus we will emphasise this aspect in our analysis.

(i) Internal dynamic economies

The average costs of a firm are assumed to fall as production is continued through the passage of time, because it is expected to learn from experience. When factors of production are engaged in producing output in a particular year two products in fact result, visible

current output, may be sold currently on the market; and the invisible accumulation of experience and knowledge, i.e. the creation of human capital.

The process of learning is a form of investment which is building up a stock of productive capital. The problem here is that investment in learning capital may be very long-term, and production may have to continue for many years before any significant fruits emerge. The potential infant may be unable to obtain finance to cover initial losses at a rate of interest which correctly indicates the social discount rate. In which case, there will be under-investment, or failure to invest at all, in the creation of long-term learning capital.

(ii) External dynamic economies

External economies of time exist when, invisible benefits from capital assets which result from the production process of one firm but go in later years to another one, for example, knowledge may diffuse from one firm to another. Although firms may try to keep new knowledge and ideas secret there is likely to still be some inevitable diffusion process. Hence there may be a case for subsidising or protecting by patents those firms or industries which are in a stage of experimentation and where techniques are changing or knowledge is advancing.

Another form of a dynamic external economy is the

creation of a general atmosphere that is conductive to, for instance, factory work or organised economic activity, or furthermore, to the development of mechanical or scientific interests. This atmosphere creating effect may well provide a strong basis for an "infant economy" argument for generalised protection of the manufacturing industry in countries inexperienced in manufacturing production.

B - Non-economic arguments

There may be three main arguments of justification for subsidies, as has already been mentioned: (i) subsidies may be used to correct for a discrepancy between private and social costs and benefits. (ii) They may be used to bring about a redistribution of income as decided through the appropriate political mechanisms, reflecting the broad interests of the public. And (iii) military and strategic reasons such as arms production and less reliance on oil-intensive energy sources, and arguments based on self-sufficiency cases. Our emphasis here will be confined to the social-private costs and benefits case, as the other two are generally outside the scope of this study.

Social-private costs and benefits

Public assistance to industry only makes sense in

relation to long-term assessments of social versus private values. That is, incentives and penalties (subsidies and taxes) applied today can bring about changes later, which on balance, are believed to be socially desirable. Because it is not possible to fully know the results in advance, as justification lays in future gains believed to be obtainable, there must be some kind of framework in which to assess policy or plan a long way ahead.

The social-private costs and benefits may be illustrated in the infant industry argument, discussed above, of which some of its other features will be re-examined here. The infant industry case may be seen as a problem of investment appraisal. Subsidising is valid if either the social rate of return in the industry exceeds the private rate or if, on account of some imperfection in capital markets, the return needed to attract private funds to the project is greater than the private and social rates of return elsewhere in the economy by a sufficiently wide margin as to make a socially profitable investment privately unprofitable.

The social rate of return on investment in an industry may exceed the private rate of return for a variety of reasons. Two reasons may be of particular relevance to the problems of underdeveloped countries. One relates to the fact that, once created, the product of investment in the

acquisition of knowledge can be enjoyed by additional users without additional cost of production. In other words, once knowledge of production techniques is acquired, it can be applied by other than those who have assumed the cost of acquiring it. Accordingly, the social benefit, at least potentially, exceeds the private benefit of investment in learning industrial production technique.

The other reason why the social benefit may exceed the private hinges on the facts that much of the technique of production is embodied in the skill of the labour force, and that the institution of the labour market gives the worker the property rights in the skills that he may acquire at the employer's expense. Thus, the private rate of return to the employer on the investment in on-the-job training may be lower than the social rate of return, because the trained labour may be hired away by another firm in the industry.

The private rate of return which might be necessary to induce investment in infant industries may also exceed the private and social rates of return on alternative investments for a variety of reasons. Entrepreneurs may be excessively pessimistic about the prospects of success, or unwilling to take chances; in this case the most appropriate policy, according to Johnson,[53] would involve publication of expert estimates of the prospects for the industries in question.

Alternatively, imperfections in the capital market may make the cost of finance for investment in new industries excessively high, especially if these industries require an initially large scale for commercial production by the firm; in this case, providing capital at a subsidised rate would be the appropriate policy.

Criteria for the granting of subsidies

It is necessary to establish some kind of criteria for deciding what are good and what are bad subsidies. In qualifying for subsidy benefits, industrial projects should meet certain criteria in the uses of subsidies. The following would be desirable features in any subsidy programme.(54)

First, it would be desirable to identify the group which is to benefit. This is more important when selecting subsidies thought to best accomplish a specific purpose.

Second, it is necessary to determine what is needed in order to be able to decide how much subsidy is appropriate, because over-subsidisation will waste resources needed, perhaps more urgently for other purposes, and under-subsidisation will not achieve the desired goals. It is not easy to measure the need accurately, but it is important to have the best available approximation to guide subsidy decisions.

Third, it is important to ensure that the subsidy does not hinder efficiency and that the receiving industrialist's motivation to improve his performance is not reduced.

Fourth, in order to deal with changing situations, it is desirable to arrange for the prompt and easy adjustment of the effective rate of subsidy if policy goals are to be reached with economy and efficiency.

Finally, it is important to have a mechanism to check the efficiency and effect of sub-programmes. One way is through the use of cost-benefit techniques. But the difficulty here would be as to what measures of costs and what measures of benefits to be used.

A wide range of economic criteria may be used to evaluate subsidies and may include the following: (i) the contribution of the project to national output as measured by the value added. (ii) The extent to which the project relies on the use of locally available raw materials rather than imported raw materials. (iii) The extent to which the project would yield significant savings or earnings of foreign exchange. (iv) The extent to which the project created employment opportunities. (v) The "linkage effects" of the project, that is,the extent to which it will stimulate other activities. (vi) The size of investment required. And (vii) the proportion of the industry owned by locals[55].

Some specific criteria may be said to include: (i) the estimated quantitative effect of the subsidy on the costs of firms. (ii) The estimated quantitative effect of the subsidy on the costs of firms compared with the effect on the costs of firms of any domestic distortion which the subsidy may be intended to correct. (iii) The significance of the effects of the subsidy on imports or exports. (iv) The regularity and predictability of the operation of the subsidy. (v) The effects of the subsidy in question as compared with those of other distortions affecting the same product, including tariffs. And (vi) how temporary and defensive is the subsidy designed to be.(56)

General versus specific types of subsidies

Subsidies may be distinguished as being broad-based, intermediate-based, and narrow-based. The first applies to the economy as a whole, the second to specific industries and regions, and the third one to individual firms and towns. As regards narrow-based subsidies, the preferred form is the provision of capital by government at favoured rates - whether by grant, loan, loan-guarantee, or equity participation - usually in return for acceptance of government conditions on some key issues.(57) Another distinction may be made between general and specific types of subsidies. General subsidies cover all goods and services uniformly,

whereas selective subsidies apply to only a part of the economy.

General subsidies

The philosophy behind general subsidies is that their availability and value are readily calculable by industrialists, who can therefore take them into account in planning their activities. Such schemes thus build a weighting into the operation of market forces in favour of, for example, capital investment in industrial plant and machinery, etc. They are an attempt to influence industry's decisions without detailed involvement in its affairs, although this is a matter of degree.

The objective of general subsidies is that they are thought to be relatively straightforward, quick, and inexpensive to operate. This uniformity means that no activity is discriminated against or favoured relative to any other, so that allocation remains unchanged and assistance can be considered in the same way as a uniform price increase or exchange rate devaluation.

Specific subsidies

Specific subsidy schemes provide a "tailor-made" subsidy to an individual region, industry, or firm for a particular purpose, such as the survival of a firm, the

re-structuring or re-equipment of an enterprise, etc. In contrast to macro-economic policy, they represent an attempt at "fine tuning" through state intervention at the extreme micro-level, ie. the firm. A selective, discriminating approach is used in which the amount of subsidy is negotiated for each case and, ideally, set at the minimum level required to influence decisions.

Alan Prest[58] suggests the following reasons for selective "narrow-based" subsidies that are aimed directly at firms: (i) it is necessary to operate at firm level rather than at industry - or economy-wide level in order to achieve maximum effect. (ii) A firm will more likely take notice of individualised subsidies. (iii) By concentrating the relief at a limited number of points, a more effective use can be made of any given subsidy. (iv) More specific propositions relate to the need to improve productivity by concentrating on particular firms.

Adopting a policy of selective rather than general subsidies meets with opposition on grounds of equity, efficiency, and business independence. In the first place, it is held to be inequitable for some firms to receive subsidies while their competitors do not. Secondly, it is said that selectivity has harmful effects on the use of resources, for example, when a subsidised firm inside an assisted area displaces the sales of a more efficient

competitor just outside the area. Finally, some of the more discriminatory and selective subsidies are punished as unwarranted intrusion by government into the business domain.[59]

T.F. Cripps[60] mentions that according to the theory of competition, selective taxes or subsidies which distort the workings of the market generally have harmful effects on efficiency and national welfare. He cites the case of selective labour subsidies that they would tend to reduce labour productivity below its optimum level in firms receiving subsidy. Examples include; causing the postponement of replacing obsolete plant, encouraging the choice of a low level of mechanisation in new plant and the encouraging of excessive use of overhead labour.

However, he argues that labour subsidies paid to manufacturing producers would reduce their production costs relative to foreign competitors and could thereby make possible a substantial increase in exports, total employment and national income. Furthermore, that labour subsidies could serve a useful function, at least in the short-run, as a means of delaying the closure of high-cost plants to secure the preservation of a margin of reserve capacity during recession. He also argues that in many industries, the long-run prospects of individual firms tend to improve or worsen with cumulative effects.[61]

Economic analyses of subsidies

A subsidy in economic terms does two things. First, it alters the pattern of relative prices by making one good or factor cheaper than it otherwise would be, thus generally leading to the substitution of the cheaper for the more expensive alternative, depending upon the elasticity of substitution. Secondly, there are potential income effects to be considered given that a lower price increases real spending power of a given sum of money income.(62)

The theories behind the subsidy structures can be investigated at various levels of economic analysis. At the microeconomic level, subsidies are treated as affecting (correcting or distorting) the factor and product markets. Subsidy measures such as preferential interest rates and the tariff exemptions on imported inputs influence the factor markets, while those such as price controls on selected industrial products and industrial licencing systems change the product market conditions. At the macroeconomic level, subsidy measures such as incentive credits and accelerated depreciation allowances are believed to affect a nation's capital formation, industrial production, employment, growth and distribution of income.(63)

The purpose of a subsidy is to alter the conduct of economic activity to achieve an outcome different from that which would occur in the absence of the subsidy. To the

economy as a whole, the real costs involved in subsidising any industry are the foregone benefits of alternative uses of the resources so committed. The government subsidy represents the loss either of some other state-financed projects or a reduction in aggregate private consumption or investment. The opportunity costs of the alternative projects can be measured in terms of their output, employment and balance of payment effects, just as for the effects of the financial assistance under consideration.

In general, the literature on the analysis of the benefits of subsidies distinguishes between these measures and their effectiveness. The former refers to the impact of a subsidy on market prices; the latter, to the final consequences for financial or economic activity. The final consequence of a subsidy may not depend significantly upon the measure. However, the measure would clearly affect the distribution of benefits. Irrespective of whether the buyer or seller is the party being directly subsidised, the benefits are relatively greater the relatively lower is the elasticity of supply or demand. That is, the side of the market with the lowest elasticity captures the relatively larger portion of the subsidy. However, the effectiveness of the subsidy on financial or economic activity is an increasing function of each of the elasticities.(64)

There are four considerations(65) as regards the above that are worth noting. First, the results of analyses are typically highly sensitive to estimates of the relevant

elasticities, and thus, it has been noted that "... the crucial task in the evaluation of subsidies is the quantitative estimation of the relevant price elasticities of demand and supply".(66) Sensitivity analysis should be employed, therefore, to try to give a reasonable range for the net welfare estimates.

Second, analysis should include not only the total net benefits but also the marginal net benefits where possible in order to determine, whether or not a subsidy should be increased or reduced in scope.(67)

Third, if the effectiveness of the subsidy is relatively large as a result of high elasticity of demand, then calculations of the net benefit to society must include the reductions in welfare from the reduced use of substitutes.(68)

Fourth, merely because a subsidy is very effective in the sense that it increases the desired activity, it does not necessarily follow that the associated desirable real sector effects will also increase significantly. Thus, the welfare effect may be much lower than was estimated in the absence of analysing the real and financial effects separately.(69)

Having identified a subsidy and developed a general framework for analysing its effects, a series of additional complications arise. In assessing the impact of a subsidy, it is important to be able to determine what proportion of a subsidised activity would have been undertaken even in the absence of the subsidy, that is, as mentioned earlier, how much the desired activity had actually been increased

by the subsidy. In very few cases, perhaps, will an activity being subsidised not occur at all in the absence of the subsidy. Thus, there is in every subsidy an element of windfall gains which is enjoyed by those who, even in the absence of the subsidy, would undertake the activity. Such windfalls, while perhaps of interest to policy-makers, do not qualify as additional benefits. Only activities actually resulting from the subsidy should be included in net benefit calculations, and these calculations are, in general, sensitive to elasticity estimates, as noted earlier. As George Break(70) puts it,

> "The hopeful dream of any government policy-maker.. is to find some private group that can be induced to undertake some socially desirable project by the offer of a relatively small amount of government assistance. On the other hand, this nightmare is likely to be one of granting substantial subsidies to private groups for doing what they would have done anyway". (71)

A complete analysis of the net effect of subsidies would have to include a general equilibrium analysis, which looks not only at the effect on the subsidised activity, but also at such factors as the effects on other sectors of the economy, the production of substitutes, and the idleness of available resources.(72)

Production subsidies

H. Malmgren defined production subsidies as: "... subsidies which are granted irrespective of the destination

of the output of a producing entity, whether domestic or foreign, and where volume of assistance is solely determined by volume of production"[73] (whether in unit costs or prices). From the viewpoint of governments, the concern is about the effects of subsidies on producers more than on consumers, because the benefits to consumers are of uncertain duration, and are diffused broadly, while the distortions faced by producers are specific in their effects and may force a change in the structure of industry and employment.[74]

Production subsidies could be used to meet certain domestic production objectives by altering the price faced by domestic producers, while leaving the price which domestic consumers face unchanged.

The provision of funds for working capital is an example of a production subsidy which has been widely applied in the United Kingdom. Unlike subsidies which are specific to particular factors, production subsidies do not encourage factor substitution through changes in relative effective factor prices. They are thus more likely to be provided in attempts to achieve the goals of a national industrial policy than to represent the goals of macroeconomic or regional policies.[75]

Production subsidies are invariably selective in their application. While government may maintain some control over the composition of discretionary factor-use subsidies,

this control is likely to be complete in the case of production subsidies. The result is a set of effects which are less diffuse than those produced by the expenditure of a comparable sum on factor-use subsidisation where the production, employment, and trade effects will be spread over a wider range of industries.(76)

For perfectly competitive industries, if the market demand curve is downward sloping and the supply curve is upward sloping, a subsidy will raise the quantity produced and will also lower the price paid by the purchaser, but by an amount less than the subsidy. However, if the supply curve is perfectly elastic, the quantity produced will increase and the effective price (i.e. the price paid by consumers) will decline by the amount of the subsidy. If the supply curve, on the other hand, is totally inelastic, the quantity produced will remain unchanged and the effective price will decline by the amount of any subsidy.(77)

Factor subsidies

According to neo-classical theory, subsidies can either lower the costs of factors of production or lower the price of output. The introduction of a capital subsidy has two distinct effects. The first is to encourage the substitution of capital for other factors of production: that is the capital subsidy will lower the price of

capital relative to the price of labour, thereby encouraging investment and more capital-intensive methods of production.[78] The subsidisation of capital stimulates investment both by reducing the cost of capital to the user and by shortening the economic life of assets which qualify for subsidy by reducing the payback period.[79] The second effect is to stimulate output, and therefore, to increase the derived demand for factors of production.[80] It can be argued that subsidies on fixed capital investment have a growth objective; but how effective they are in promoting capital investment and how effective more capital investment is in promoting growth is not known with any certainty.[81]

Hall and Jorgenson[82] show that an enterprise attempts to maintain an optimal level of capital stock, which occurs when the marginal product of capital equals its user cost. Investment grants reduce the user cost of capital in proportion to the rate of grant, since the effective price of capital goods is reduced by the same percentage. Subsidised loans may be expressed as grant equivalents by obtaining the discounted present value of the subsidy element in the loan, and thus have a similar effect on the user-cost of capital. The reduction in the user-cost of capital provided by both forms of aid leads, for a given interest

rate, to an increase in the optimal capital stock and therefore produces a higher level of net investment.[83]

A secondary stimulation of gross investment is the consequence of the shortening of economic life of subsidised assets. In most of the capital-subsidy programmes, the subsidy is not constant over the life of the asset but falls to zero at an early point in the asset's life span. In such circumstances, the effect of the subsidy will be to shorten the economic life of the subsidised capital stock, leading to a younger age profile of that stock.[84] Not only will the capital stock be increased as the optimal stock is raised, but the capital stock will also be depreciated faster than in the absence of the subsidy.[85]

C.S. Shoup[86] argues that a subsidy intended to increase factor rewards in a certain industry will be the more effective, the less the industry responds to the subsidy by increasing output. The achievement of this aim therefore requires supply conditions the opposite of those that help meet the aim of increasing consumption of a certain product. The required inelasticity of the supply curve need exist only for output in excess of the amount being produced before the subsidy was granted. But this condition is the more likely to be fulfilled, the more inelastic is the supply immediately below the initial output, since no <u>a priori</u>

reason exists for a sudden change in slope just at that point. The subsidy will therefore be most useful in an industry that employs specialised factors that can not be easily increased in number when demand rises owing to the subsidy. Even if such an industry were to employ certain kinds of factors that are in fairly elastic supply to the industry; they will not gain appreciably by the subsidy.

Moreover, if the industry's supply curve is very elastic in a free market, the subsidy can be made helpful for factors (and not helpful to consumers) by government control of output. The supply curve beyond the initial, no-subsidy equilibrium point can thus be made artificially inelastic. The above remarks, it is noted, hold true regardless of the demand conditions, but they are the more significant, the more elastic is the demand for amounts beyond the initial no-subsidy output.(87)

In an industry which is in a long-run equilibrium under perfect competition in both product and factor markets, the introduction of a subsidy on one of the factors of production will reduce average costs, so that firms will make positive profits. Such profits will encourage new firms to enter the industry or existing firms to expand. As aggregate output expands, the product price will fall: as the derived demand for factors of production increases, factor prices in general will rise, until firms no longer

make profits. At the new long-run equilibrium, the profit maximising level of output for each firm will again be where price equals average total cost and all firms will be fully adjusted in their choice of technique to the new factor prices.[88]

Capital subsidies

The usual reason for the adoption of capital (investment) subsidy policy instruments is the growth argument. But this in turn raises all the underlying questions about the rate of growth that is desirable or appropriate, not to mention the contribution that a higher level of investment can make towards it. On the basis of available evidence, it is very difficult to evaluate the role which incentives have played in promoting industrial development. Subsidies could not ensure by themselves that private investment would be forthcoming in sufficient volume and that investment will be directed towards priority industrial projects.[89] One cannot of course conclude that by increasing the value of investment incentives this will necessarily lead to any increase in investment spending. Not only does this overlook other determinants of investment expenditure which may be far more important, for example the degree of utilisation of existing capacity. It also presupposes a degree of rationality on the part of companies

which is not borne out by the empirical evidence.[90]

Quite apart from the incentives' psychological effect, it has been recognised that the incentive might <u>indirectly</u> influence investment decisions by way of their effect upon company liquidity. Whatever method of appraisal is employed, so long as a firm invests, depending on the nature of the subsidy and its effects on profits, incentives increase the flow of liquid funds available for further investment. In other words, the liquidity effect will be operative irrespective of whether or not a firm takes account of incentives in evaluating capital projects. Partly for this reason, it has been argued that the liquidity aspect of incentives is more important than their profitability aspect.[91]

Microeconomic/international trade theories of assistance to industry

The microeconomic analysis of assistance structures usually starts from an assumption that the domestic market (or domestic demand) facing the concerned industry is not large enough to permit production to be economically feasible or the costs of the domestic industry are too high to allow it to compete with imports. Government intervention using protection and/or subsidy measures is justified, particularly in the short-run, in that it allows the private rate of return (or profit) to equal the social rate of return.(92) Implicit in this reasoning is the notion that external economies are present in the activity in question. Examples of such externalities are technical dissemination to other industries and declining long-run average costs through learning-by- doing.

The infant industry argument for government protection or subsidy is essentially based on the above mentioned ideas. Whether the domestic demand for the concerned industry is small enough to necessitate government protection or subsidies is debatable on empirical grounds.

To apply the standard microeconomic theory of price and output determination to industrial assistance structure, the market structure and domestic demand and cost conditions need to be specified. The government's protection of an infant industry against internal and external

competition is usually accomplished by granting a monopoly or oligopoly position in the domestic market and by imposing tariff and non-tariff measures against foreign goods. The tariff or the tariff-equivalent non-tariff measures can basically be set in two ways: (i) At a prohibitive rate, in which case the price of an imported good, after the import control measures, is higher than the monopoly price at the profit maximising (or loss minimising) level of output. Or (ii) it can be set at a rate that will generate a non-negative rate of return to the monopolist. The production subsidies can similarly be applied to the concerned industry with or without protection measures.(93)

R. Pomfret warns that the tariff-cum-subsidy policy raises the danger of initiating types of protection completely out of line with a country's comparative advantage, while he acknowledges that the choice of a policy or an optimum mix of policies is dependent upon a social welfare function and its constraints:

> "... all incentives, whether they are monopoly profits from protective tariffs, export premia or general subsidies, can encourage the initiation of domestic production and hence exports. The only positive distinction between the various incentives is that the precise policy mix will determine the domestic price and the share of exports in total output. The policy mix is also relevant from a normative view-point in that it determines who bears the cost of subsidizing domestic production".(94)

The problem of the choice between protection and subsidy policies or of the optimal policy mix are discussed in a number of studies in the field of international trade policies. For example, in a simple partial equilibrium framework tariff measures would be preferable if the policy objective is to raise revenue, while the production subsidies are considered to be better choices if the policy objective is to increase domestic output or to stabilise domestic prices. Where domestic distortion is present in a factor or a commodity market, as exemplified by the monopolistic market structure, it has been argued by Ramaswami and Bhagwati that the production subsidy is superior to tariffs, in terms of a social welfare criterion.(95)

H.G. Johnson(96) argues that all traditional arguments for tariff protection, except the optimum tariff argument, are second-best arguments, in the sense that they recommend the introduction of a distortion in the competitive system to offset other distortions which are alleged or believed to exist (in the investment, commodity or factor markets). The implementation of such protectionist policies can not, therefore, lead to a first-best welfare maximum.

Hiemenz and Rabenau(97) argue that the impact of a tariff system on production activities is twofold: on the one hand, a tariff imposed on competing imports allowed for a similar increase (assuming an infinitely elastic supply

curve for imports and the competing import being a perfect substitute for the domestic commodity) in the price of the respective domestic commodity; but on the other hand, the prices of the inputs necessary to produce that commodity may also have risen as a result of tariffs. These two opposing effects must be balanced in order to estimate the real degree of protection which an industry obtains from tariffs.

Oulton[98] argues that in so far as an industry's output is protected by a tariff there is a subsidy to value added in that industry. But in so far as inputs into that industry are subject to tariffs, their prices will be raised, and the costs of the purchasing industry will be higher. Hence, tariffs on inputs constitute an implicit tax on value added in the industry in question. The effective rate of protection takes account of both these effects and hence measures the net subsidy to value added in a particular process.

While the growth of subsidisation has its origin in political choices, an economic rationale for some subsidisation has been provided by economic theorists contributing to the literature on the theory of distortions and welfare.[99] These contributions have shown that the first-best policy to correct a distortion is to attack it at source through the use of direct

subsidies which remove the distortion in relative prices.[100]

Brian Hindley[101] notes that if the objective of policy is to increase the scale of a domestic industry, the most efficient means of doing so, from a national point of view and so long as the optimum tariff level has been reached, is via subsidy rather than tariff. The reason for the reservation on the optimum tariff is that with an import-competing industry maintained at a certain size, the level of imports will be higher with a subsidy than with a tariff. Accordingly, a subsidy is a less efficient instrument than a tariff for turning the terms of trade in favour of the importing country.

Denton and O'Cleireacain[102] argue that subsidies may be more desirable than tariffs or other taxes, for various reasons. One such reason is that they are more transparent and, since they are a burden on, rather than a contribution to, state revenue, more subject to control.

Levacic argues that tariffs protect domestic industry from foreign competition in a manner similar to that of subsidies. Subsidies increase the international competitiveness of domestic firms by enabling them to lower their prices, whereas tariffs raise the prices of foreign goods in the domestic market to a level higher than they would otherwise be. The effects of both measures on domestic prices relative to foreign competitors' prices are

the same.[103]

Distinction should be made between three different types of tariffs according to their effects: (i) the ad valorem duty is stated as a fixed percentage of the imports value; (ii) while a specific tariff is quoted as a fixed sum of money per unit of the commodity; and (iii) compound tariffs which apply joint, specific and ad valorem duties to imports.[104]

General equilibrium effects of tariffs[105]

A fact which is relevant here is that protection means favouring some industries relative to others. When a particular industry is protected, while others are not, resources will be drawn into it out of other manufacturing industries, as well as out of other sectors of the economy, such as agriculture. If the manufacturing industry as a whole is protected, it will be at the expense of other sectors, perhaps agriculture. These effects on other industries will operate through various mechanisms. The protected industry may be prepared, for example to pay higher wages, and other industries will then find that they have to get rid of labour because of the higher wage level. In addition, the protected industry may compete more effectively for scarce capital, so that other industries find it harder to expand, and may actually contract, because of capital scarcity.

The exchange rate may also affect the position. Initially, protection of the concerned industry may improve the balance of payments, which means that with floating rates, the exchange rate will appreciate. This lowers the relative domestic currency prices of traded goods and thus reduces the profitability of export industries and of import-competing industries. They will be compelled to contract as a result.

In addition to the exchange rate effects, the general context of growth of the economy is likely to be altered as a result of protection. Regardless of changes as a result of a protection system, many sectors of the economy may grow. With protection, some sectors may grow faster than they would have otherwise and cause others to grow more slowly. Other industries may contract relative to where they would have been in the absence of protection, but not contract entirely.

Export subsidies

Export subsidies aim to promote exports by raising the prices received by exporters, while lowering them for overseas buyers. An export subsidy can be either directly tied to the amount of exports of a particular firm or applied more indirectly by aiding an industry that relies primarily on exports for its market.(106). For the

subsidising country there is an initial expansion of activity in the exporting industries, with multiplier ramifications in the rest of the economy[107].

An export subsidy shares many similarities with an ordinary subsidy placed on the production of an exportable good. Both tend to increase the production of the affected good, and to raise its volume of exports, but the former generally reduces domestic consumption (unless there are important scale economies), while the latter increases both exports and home consumption. Economists, therefore, argue that whenever a subsidy is used, a production subsidy is more efficient than an export subsidy[108].

Subsidies influence on investment decisions[109]

The following is a simplified account of the main mechanisms whereby general subsidies on capital outlay might prompt increased investment, with possible indirect benefit to the rest of the economy. A single form of subsidy on capital outlay could affect investment through all five mechanisms discussed below, though its influence on individual decisions to invest might vary from firm to firm. In each case, clearly, such a subsidy would have the basic consequence of reducing the capital costs of investment projects. These mechanisms are: (i) Raising

the profitability of investment projects that were previously judged to offer too low a reward by reducing the cost of capital outlay. (ii) Encouraging the choice of the more capital intensive of alternative techniques. (iii) Accelerating the shift to a replacement machine which embodies technical progress. Investment incentives may enhance productivity by encouraging modernisation, and may accelerate the process of scrapping machines currently in use to replace them with new ones which embody technical progress. (iv) Relaxing liquidity constraints on investments, and thus, enable a firm that would have been carrying out an investment programme, had it not been short of internal funds, to go ahead with its expansion plans. And (v) stimulating inert firms into activity, by enhancing the prospective profitability of investment projects that are already quite well worthwhile for a firm, or augmenting the benefit it could already gain by replacing its obsolete machines.

How much stimulation of the level of investment is there likely to be is an unresolved issue. In some instances, the level of subsidy could be too low to tip the balance in favour of a particular item of investment spending; on the other hand, to induce an additional investment project, a fairly "low" level of subsidy may be required. Once more, by no means all capital outlay qualifying for subsidy payments is "additional", for

presumably some investment would have been undertaken even in the absence of the subsidy. Therefore, it is important to know how effective a means of inducing investment a subsidy scheme can be expected to be. Also, how much extra investment is likely to be associated with a particular level of aid?

Balance of payments effects of subsidies

The literature on the effects of subsidies on the balance of payments relate to the standard notion that subsidies on domestic production necessarily improve welfare through an improvement in the balance of payments. First, with floating exchange rates, exchange rate movements would, ceteris paribus, be expected to offset any such subsidies. Second, assume that for a small country the terms of trade are fixed, and the effects of such subsidies on the balance of payments is zero. And, third, even if there is a remaining effect that improves the balance of payments, this is not a necessarily a balance of payments benefit. It could, for example, merely be a contributing factor to the postponement of a needed exchange rate adjustment, with the resulting long-run misallocation of resources being welfare-reducing rather than welfare increasing(110). The full effect of a subsidy on the balance of payments in a large country are complex, and

these remarks only serve to note that the effects can not necessarily be assumed by the analyst to be positive.[111]

General policy measures

Regulation and policy measures have effects beyond the point or problem at which they are directed. An obvious example is the effect of minimum-wage legislation. The primary purpose of such a measure is to raise the income level of unskilled workers. However, a major indirect effect is to reduce the competitiveness of industries that are major employers of unskilled workers, thus reducing the employment prospects of workers and, through possible effects on the balance of trade, altering the profitability of a wide range of industries. Another example is the impact of protection measures; import quotas on steel would benefit domestic steel producers; however, domestic industries using steel as an input (for instance, car manufacturers) would face higher costs and hence, reduced competitiveness.[112]

Moreover, regulatory agencies in many countries (especially Canada and the United States) convey financial subsidies to enterprises and economic activities in many ways.[113] The regulation of entry into an industry (licencing systems in the developing countries) grants a subsidy in the sense that monopoly power is conferred to those firms that are allowed to enter. In addition, some regulated prices

include a certain amount of "cross-subsidisation". That is, some users or buyers pay prices that are higher than costs so that others can pay low, subsidised, prices (e.g. prices on shorter versus longer airline routes). The costs of such subsidies do not include any expenditures or foregone tax revenues, and the gross economic costs and benefits are often difficult to separate out from the overall effects of regulation in the relevant industry. Both the costs and benefits of this type of subsidy can be vague and imprecise, and thus not readily quantifiable to analysis and thus decision-makers. The existence of the subsidy may even be unknown to the public.(114)

Difficulties associated with subsidisation

Traditional microeconomic theory suggests that, if an economy initially fulfils all the conditions for efficient resource allocation, government intervention with subsidies to particular firms or industries will interfere with the optimal allocation of resouces by introducing distortions and hampering the price mechanism, which send the "right" signals to producers.

Some subsidies merely involved a choice between direct government action and providing incentives by which others will be induced to get things done. Constructively applied, they can be helpful in promoting economic development or

realising social improvements. However, many subsidies involve heavy costs, not only in use of government resources but in various kinds of economic inefficiencies and inequities, misallocation of resources, lower real incomes, and international friction heightened by retaliatory policies abroad. There is a general presumption, therefore, in favour of avoiding subsidies except where their jurisdiction is clear.

There are many difficulties that are coupled with the granting of subsidies. One such difficulty is the fact that other parts of the economy may be adversely affected by assistance which may be provided to a particular firm or industry. These adverse effects are often rarely considered by governments, and since the effects are diffused, the political adverse reactions are usually minimal and therefore, perhaps no real pressures on government are exercised.(115) Another opposition is that they benefit firms whether or not they make profits, and therefore result in uneconomic investment and waste of resources.(116)

A third opposition is the extent to which they conflict with one another; in so far as there is a tendency to subsidise many sectors of the economy, the exercise becomes pointless, particularly if the concession (e.g. on investment) applied to imports as well as to domestically-produced goods.(117)

However, the main problem is that experience teaches that once subsidy schemes are established, they long outlast

the emergency or other need that was the occasion for their adoption. It is also extremely difficult to prevent a precedent being extended to other activities that require no subsidy. Obviously, it seems unrealistic to believe that the various subsidy mechanisms, selected for the different reasons many years ago, are still the ideal devices even assuming that they were ideal in the first place. After thirty years, for example, a subsidy programme should have accomplished its goals and have been phased out, or the previous subsidy mechanisms should have been replaced by more effective systems.(118)

The above is often true, even when it can be shown that the subsidy generally works against the interests of the supposed beneficiaries. The set of "adjusted" prices are thus often perpetuated beyond the period for which they were either intended or appropriate and the subsidy may simply become a source of distortion in its own right.(119)

Often, vested interests quickly develop and actively fight proposals that would adversely affect them. Such interests tend to develop inside the government as well as out, so that a mutually supporting bureaucracy and industrial establishment may command a great deal of political power. Moreover, the conferred benefits tend to be capitalised.

Finally, the persistent use of protective devices and technology advances in various parts of the world in excess capacity, making it difficult for an industry group to face unrestricted competition.(120)

Notes

Chapter One

Literature survey: Industrial and subsidies policies

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CHAPTER TWO

THE MANUFACTURING INDUSTRY AND THE ADMINISTRATIVE FRAMEWORK

Introduction

While the previous chapter was a literature survey, the current one will be confined to issues related to the overall setting of Kuwaiti manufacturing industry together with the state administrative agencies which supervise the manufacturing activities.

The position of the manufacturing sector within the overall economic setting will be analysed. Also, Gross Domestic Product contributions of other different economic sectors will be compared with manufacturing industry. Next, the ownership pattern will be examined and divided into three components; namely public, mixed and private sectors. The industrial strategy which is assumed to be pursued in Kuwait will also be examined.

Some manufacturing indices will be examined in order to see the economic setting of the sector. The GDP sub-sector contributions will be taken first. Manufacturing value added (MVA) will be examined, followed by the gross output in the manufacturing sector. The interdependence within the manufacturing sector is also to be studied in order to see

the degree of inter-sectoral linkages. This is to be followed by a review of the export components of the domestic manufacturing products. Finally, as regards the first part of this chapter, the industrial problems and constraints facing the establishment of a sound and growing manufacturing industry are to be discussed.

The remaining part of this chapter will study state administrative agencies which are responsible for the overall supervision of manufacturing activities. At first, a review will be made of the industrial licencing system as applied in Kuwait and an evaluation will be made regarding its effectiveness and success in achieving its goals. This is to be followed by a detailed examination of the three Ministry of Commerce and Industry agencies which are responsible for the industrial sector.

An overview of the Kuwaiti economy

The single most important resource in Kuwait is oil, which was first exploited commercially in 1946. Since then, oil revenues have been the main growth indicator and these have risen markedly, reaching $18.0 billion in 1980, compared to less than $1 million in 1946. Within this short time span, oil has transformed the Kuwaiti economy from a simple network of pearling, fishing and seafaring activities with very low per capita income into an economy whose per capita gross national product (GNP) is one of the highest in the world. With a per capita GNP of $19,610 in 1982, Kuwait ranked second, after the United Arab Emirates, with a per capita GNP of $24,080[1]. Oil production in Kuwait remains the largest single contributor to Gross Domestic Products (GDP). In 1980, the share of the oil sector in GDP was 70 per cent, as shown in Table 2.1. However, this figure dropped to 50 per cent of GDP in 1983, mainly due to drastic falls in the prices of crude oil and a tight international market for crude oil.

GDP and the level of economic activity

The various non-oil GDP components at constant prices grew at different rates between 1972 and 1980 as shown in Table 2.2. Electricity, gas and water and construction contributions more than tripled , growing at an annual

Table 2.1 GDP at current prices and sector shares, 1972-83 (KD Million)(1),(2)

Type of activity	1972		1973		1974		1975		1976		1977		1978		1979(3)		1980(3)		1981(3)		1982(4)		1983(4)	
	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%	KDM	%
Oil sector (A)	914	62.5	997	62.2	3023	79.5	2459	71.0	2524	66.3	2483	61.9	2533	60.0	4421	66.3	5062	68.6	4123	61.8	2767	49.0	3094	50.4
Total Non-oil sector (B)	550	37.5	608	37.8	778	20.5	1005	29.0	1283	33.7	1526	38.1	1686	40.0	2250	33.7	2320	31.4	2544	38.2	2878	51.0	3049	49.6
- Agriculture & fishing	4	0.3	5	0.3	6	0.2	9	0.3	10	0.3	13	0.3	14	0.3	17	0.2	17	0.2	28	0.4	31	0.6	34	0.6
- Manufacturing	65	4.4	78	4.9	169	4.4	195	5.6	230	6.0	241	6.0	278	6.6	566	8.5	436	5.9	337	5.1	373	6.6	401	6.5
- Electricity gas & water	11	0.7	12	0.7	13	0.3	13	0.4	19	0.5	21	0.5	24	0.6	27	0.4	25	0.3	28	0.4	30	0.5	34	0.6
- Construction	38	2.6	44	2.7	63	1.7	74	2.1	123	3.2	158	4.0	176	4.2	195	2.9	220	3.0	263	4.0	283	5.0	289	4.7
- Services, trade & transport	431	29.5	469	29.2	527	13.9	714	20.6	901	23.7	1093	27.3	1194	28.3	1450	21.7	1622	22.0	1888	28.3	2161	38.3	2291	37.2
Total GDP (A + B)	1464	100	1604	100	3801	100	3464	100	3807	100	4009	100	4219	100	6671	100	7382	100	6667	100	5645	100	6143	100

Source: Ministry of Planning, Central Statistical Office, "Annual Abstract 1981" and "Annual Abstract 1984".

(1) Figures have been rounded.

(2) Percentages have been calculated.

(3) Likely to be revised.

(4) Provisional data.

Table 2.2 GDP by type of economic activity at constant (1972) prices, 1972-82 (KD Million)(1)

Type of activity	1972	1973	1974	1975	1976	1977	1978	1979(2)	1980(2)	1981(2)	1982(3)
Oil sector (A)	914	840	708	580	600	549	594	696	463	315	231
Total (B) Non-oil sector	550	584	609	709	837	924	977	1024	1080	1144	1203
- Agriculture & fishing	4	4	4	5	6	6	6	7	7	10	10
- Manufacturing	65	78	85	104	104	106	119	124	127	119	130
- Electricity, gas & water	11	12	13	15	18	21	25	29	29	32	36
- Construction	38	41	51	55	87	103	106	109	116	129	128
- Services, trade & transport	431	448	456	530	622	688	721	755	801	854	899
Total GDP (A + B)	1464	1424	1317	1284	1437	1473	1571	1720	1543	1459	1434

Source: Ministry of Planning, Central Statistical Office, "Annual Abstract 1981" and"Annual Abstract 1984"

(1) All figures have been rounded.
(2) Likely to be revised.
(3) Provisional data.

average rate of 14.4 per cent and 12.7 per cent, respectively. Manufacturing and services, trade and transport doubled with an annual rate of 9.5 per cent and 9.0 per cent, respectively. Agriculture showed the slowest real growth with an average rate of 6.2 per cent.

It may be an understatement to say that the Kuwaiti economy is dominated by the oil sector, and that developments in this sector generally set the pace for overall economic and financial activity. As seen in Table 2.1, the share of the oil sector in GDP has varied slightly in the 1970s, as oil prices and output changed from year to year. The first significant increase in the oil share occurred in 1971 as a result of the combined effects of higher production and prices, and reached its highest value of 79.3 per cent in 1974. Between 1974 and 1978 the oil share in GDP declined due to cutbacks in oil production and the slackening of oil prices. In 1979 and 1980 the increase in oil prices again dramatically raised the contribution of the oil sector to GDP, where it reached 68.9 per cent and 69.9 respectively.

The share of manufacturing in GDP has remained modest during the 1970s, and ranging only from 4 to 7 per cent, as seen from Table 2.2. Agriculture,which often contributes the largest share of GDP in developing countries, shows the lowest share in Kuwait. In fact, within the whole 1972-83 period, its share was never above one per cent of GDP.

Services, trade and transportation sector constitute by far the highest share of GDP within the non-oil sector. Its Share in 1983 was 38 per cent.

Ownership structure

The Kuwaiti government is reluctant to get directly involved in industrial development, preferring to leave it to the private sector; but it accepts that it has to "consolidate fragmented industries into stronger ones". The main emphasis is on petrochemicals and the refining of crude oil[2]. The sectors of the Kuwaiti economy in terms of ownership are: public, mixed and private sectors. These classifications of the economy are adopted in order to be able to indicate who controls these sectors, the form of that control, and the rationale according to which it is exercised.

The public sector

This sector includes mainly government administration agencies, such as ministries and government owned companies and institutions in the country. The public sector is the main and dominant sector of the economy. Indeed, it is the government budget which activates the different sectors of the economy and changes its components through the state expenditure impact on the economy. The efficiency in

allocating economic resources depends largely on the efficiency of the government bureaucracy.

In setting-up of public enterprises in Kuwait, government participation has been intended to stimulate private enterprises, not to replace or discourage it. Whenever the government felt the need for creating an enterprise in which private interest was absent and insufficient, government has stepped in to fill the gap(3).

Moreover, the government, through public enterprise, has attempted to guide the commercially dominated private enterprise to participate in the diversification efforts and to engage in relatively large-scale industrial entrepreneurial activities.

The mixed sector

The government has entered into certain business activities which it shares to different degrees with private enterprises mainly to enhance diversification of the economy by entering new areas of economic activities. Lack of short-run profit in industry has discouraged the private sector from entering this type of activity. Public participation in large-scale industries has been the principle factor in attracting private investment into the sector(4). Government participation reduces the risk of

the private entrepreneur as well as indicating the government's commitment to the industry which is the recipient of the investment[5].

Moreover, whenever the private sector initiated an enterprise (large-scale) and failed to develop enough private interest in it, government responded and participated in the enterprise upon the request of the founding private owners. Also, where private enterprise faced difficulties and where losses threatened its viability, government also has stepped-in and bailed it out of its difficulties[6].

However, it should be noted that the extent of the government's participation is restricted by its own economic philosophy which believes that the public sector must not be a potential competitor in the market place[7]. That is, its role is strictly to complement the private sector, not replace it. The exception to this rule has been the government's total ownership of oil production and shipping services.

The private sector

This generally refers to private companies owned completely by individuals. It should be noted that Kuwaiti citizens must own at least 51 per cent of the capital of any private company in the country, while non-Kuwaitis are

permitted to own not more than 49 per cent of the shares. Private Kuwaiti entrepreneurs have responded to increased aggregate demand by expanding the traditional trade, construction and real estate sectors, all of which have brought about high immediate returns and required little sophistication in business and finance practices. This aspect is compared with the sophisticated management of manufacturing enterprises. Indeed, instead of committing themselves to factories, investors generally prefer to keep their funds liquid, and to be able to transfer them quickly from one short-term investment to another.

Industrial strategy

There are in Kuwait extensive arguments and counter-arguments about the significance of industrialisation as a potential source of national income. This has emanated from a conflict of interest and differences of opinion between two traditional groups of interests: merchants and industrialists. The merchant community, more traditional in the social family structure, is more influential and powerful than the industrialists' group. The influence of merchants stems from historical, economic, and political factors. Because their interest conflicts with the promotion of import-substitution industry, they are not so enthusiastic in the promotion of industry or for an industrial

option as a basic source of income in the post oil era. On the other hand, the scope of interest of the private industrial entrepreneurs in Kuwait as well as their number, is too limited to be an effective factor in the national decision-making process.

A widely held opinion of most Kuwaitis who are directly involved, both in the public and private sectors, is that there is no clearly defined industrial policy, and there is no consensus that one is needed. Indeed, Kuwait lacks a long-term industrial strategy, plans, policies and objectives of industrialisation. This can be attributed to various factors, e.g. the lack of adequate planning machinery, non-existence of serious financial constraints, a traditional anti-planning attitude, the previously mentioned merchants' influence, etc. However, the main reason for the absence of an industrial plan is because of the unwillingness of those taking political decisions to make them because they are not clear as to what the future will look like, nor are they sure that a progressive and developed industrial sector is desirable, from both the imported labour point of view and the financial burden which will follow because of subsidies, especially the costs of preparing the needed infrastructure(8).

The author has not found any official posted definite documents that adequately defined the aims of industrialisation in Kuwait. Such documents are needed to help an economist

discuss the aims of industrial policy and decide how far they have been accomplished. The Amir of Kuwait, commenting on the Industrial Law in the National Assembly (Parliament) on 26 October 1965, said: "..... it is hoped that this Law will encourage the capital holders to invest their capital in industry, so that our country, in a reasonable length of time, will be self-sufficient in local products and export the surplus"(9). The Industrial Law No. 6 for 1965 states some general aims of industrialisation. Article 10 reads as follows:

> "In granting industrial licences, the following considerations must be taken into account:
> 1. The economic requirements of the country and the possibilities of local consumption and exports.
> 2. The requirements of the country's social and economic plan.
> 3. The purpose of the firm not to be consistent with the public order or public interest".

In the absence of a social and economic plan, opinions differ in the interpretation of this Article. However, this does not mean that no formal or informal studies, researches or attempts to investigate the future of industrialisation in Kuwait have not been carried out. On the contrary, there are many of them, but none has been officially adopted.

The success of industrial policy depends, perhaps above all, on the existence of adequate contacts between government and industry. Policies in this field cannot be formulated without a mutual understanding by the parties concerned of

one another's aims and problems or without the factual information which each can communicate to the other. Nor can such policies be implemented without the active cooperation of industry, based on its acceptance of the general objectives set forth by government.

The Manufacturing industry

Manufacturing activity in Kuwait is a fairly recent phenomenon. The traditional economic activities were, for the most part, non-manufacturing in nature involving mainly fishing, pearling, and seafaring. Shipbuilding was perhaps the only activity that could be classified as manufacturing. There were, indeed, a large number of independent shop-keepers and some metalsmiths, carpenters and peddlers, but they catered for small numbers of regular customers.

Large-scale manufacturing did not emerge until the 1950s and even then only as part of the oil industry. The limited available capital was generally allocated to foreign trade activities.

The movement towards industrialisation in Kuwait was late and slow to develop, particularly when compared to trade and commercial activities which flourished relatively earlier. Starting in the early sixties, the industrial sector grew somewhat haphazardly. It was, for a large part, composed of small-scale establishments which operated on the

borderline between manufacturing and workshop activities. Shortages, as will be shown later, in the availability of qualified human resources, the small size of the domestic market and the scarcity of most raw materials greatly hindered growth at that stage. However, the availability of cheap energy and natural gas, and the high transport costs for imports spurred the growth of a few large-scale ventures, mostly with the support and participation of the government, in such areas as fertilizers, building materials, metals and asbestos pipes, and flour milling.

The circumstances surrounding the economic development of Kuwait account to a large extent, for the present structure of the industrial sector. Most specifically, the availability of one resource and the lack of most others, the relatively recent flow of wealth and the priority given by the government to such areas as education, health, and infrastructure, had kept the issue of creating an industrial base on the sidelines.

Industrial development in Kuwait does not follow any classical pattern. The course of industrialisation in Kuwait has been influenced by patterns of demand and supply conditions in the domestic market and abroad, and can be outlined as: (i) import-substitution for a range of consumer goods, produced mainly by small-scale industrial

plants, predominantly within the private sector, whose inputs are import-based, and are protected by, among other reasons, high transportation costs. And (ii) export-oriented petroleum- and gas-based range of intermediate goods, produced mostly by medium- and large-scale industrial plants, predominantly government-owned, or with government participation.

Growth of the manufacturing sector

High growth performance and important structural changes have been the most prominent features of the manufacturing sector's development in recent years. Indeed, as shown in Table 2.3, during the 1974-83 period, the manufacturing sector recorded a sustained rate of growth and saw important structural changes. The sector's contribution to GDP increased from KD 76.6 million in 1974 to KD 221 million in 1983, thus achieving an annual compound growth rate of 12.5 per cent. However, even in real terms, the manufacturing sector's growth rate remains quite high, averaging 6.4 per cent during 1974-82, at 1972 constant prices(10).

Notwithstanding the fast growth rate in the manufacturing sector, it still plays a limited role in the national economy, accounting in 1983, for approximately 3.6 per cent of GDP and 7 per cent of non-oil GDP. The inclusion of

Table 2.3 Share of manufacturing industry in total GDP at current prices, 1974-83 (KD Million).

Kind of manufacturing activity	1974		1975	1976	1977	1978	1979 (1)	1980 (1)	1981 (1)	1982 (2)	1983 (1)		Annual rate of growth (%) 1974-83
	KDM	%									KDM	%	
Food & beverages	6.7	8.7	13.4	15.3	15.6	17.6	21.2	25.2	27.7	29.0	30.5	13.8	18.3
Textiles	6.9	9.0	8.9	11.4	11.9	14.5	16.5	22.4	23.3	25.3	26.8	12.1	16.3
Wood products	4.8	6.3	8.8	16.1	15.5	17.8	14.1	18.9	16.4	17.1	18.0	8.2	15.8
Paper & printing	1.8	2.3	4.0	6.0	9.6	8.4	9.3	11.7	12.6	14.3	15.1	6.8	26.7
Chemicals (including refineries)	36.6	47.8	50.4	22.0	27.5	31.2	38.3	28.2	36.8	31.3	33.0	14.9	-0.9
Non-metallic minerals	7.7	10.1	14.6	20.8	24.6	30.8	30.4	36.8	35.0	37.0	39.8	18.0	20.0
Metal products	11.4	14.9	18.6	26.9	26.4	29.5	31.5	42.4	47.3	52.1	56.3	25.5	19.4
Others	0.7	0.9	1.1	1.5	1.4	2.4	1.5	1.8	1.2	1.3	1.5	0.7	8.8
Total	76.6	100	119.8	120.0	132.5	152.2	162.8	187.4	200.3	207.4	221.0	100.0	12.5

Source: Ministry of Planning, Central Statistical Office, "Annual statistical abstract, 1984".

(1) Likely to be revised.

(2) Provisional data.

petroleum refining in the manufacturing sector would increase these percentages to 6.5 per cent and 12.8 per cent, respectively[11].

The manufacturing sector's structure, as mentioned earlier, experienced major changes due to wide differences between the growth rates of its various sub-sectors.

In 1983, the highest GDP share was achieved by the metal products sub-sector at 26 per cent, followed by the non-metallic minerals at 18 per cent, the chemicals sector (excluding oil refineries) at 15 per cent, food and beverages at 14 per cent, and finally textiles at 12 per cent. Paper and printing sub-sector had a low share of 7 per cent, as it has had throughout the period the second lowest share.

In 1974, the structure of the manufacturing sector looked quite different. The chemicals sub-sector had by far the highest GDP share of 48 per cent. Next was the metal products sub-sector at 15 per cent, non-metallic minerals at 10 per cent, textiles at 9 per cent, and food and beverages at 9 per cent. Paper and printing had the lowest share of 2 per cent, and wood products was second lowest at 6 per cent. Over the whole period, the non-metallic minerals sub-sector have experienced the highest rate of growth, followed by the metal products sub-sector.

The output of the chemical sub-sector which comprises mainly fertilizers and other oil-based industries has

declined due to terminating the production of ammonium sulphate and sulphuric acid during the previous eight years owing to a sharp fall in their prices in international markets. Added to this is the decline in oil production and hence, associated gas in recent years.

The contraction of the chemical sub-sector combined with the fast growth achieved by other sub-sectors led to the above noted substantial structural shifts.

It is noted, from the above discussion, that the fastest developing sectors have been those directed towards the satisfaction of basic consumer needs, such as the food and textile industries, and supplying the construction industries. These have relied mainly on the processing of local raw materials and have been easier to develop, as they have not required a high level of technology.

Total Value added in manufacturing

Total value added in manufacturing, an indicator of the performance of this sector, has increased at current prices from as little as KD 42.78 million in 1970 to KD 439.6 million by 1980, and at constant prices more than doubled during the same period, showing an average annual compound growth rate of 9.5 per cent (see Table 2.4). This is significantly higher than that of GDP of 2.1 per cent during the same period. This explains the increase in the share

Table 2.4 Some selected economic indicators, 1970-80 (KD Million)

Indicators	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Value added in manufacturing at constant prices	55.0	61.2	65.4	78.0	84.3	100.4	101.3	98.3	107.8	127.6	136.5
Annual rate of growth	-	11.3	6.9	19.1	8.2	19.2	0.9	-2.3	8.9	18.4	7.0
Annual average compound rate of growth	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Value added in manufacturing at current prices	42.8	54.2	65.4	77.8	168.6	195.1	229.8	239.5	256.6	366.3	439.6
Non-oil sector at current prices	407.5	474.0	549.5	607.6	790.3	1026.0	1315.6	1570.2	1674.4	2005.4	2216.9
GDP at current prices	1026.3	1381.8	1464.0	1604.1	3813.0	3485.0	3839.6	4053.2	4194.5	6439.2	7373.7
Ratio of MVA to non-oil GDP	10.5	11.4	11.9	12.8	21.3	19.0	17.5	15.2	15.3	18.3	19.8
Ratio of MVA to GDP	4.2	-	4.5	4.9	4.4	5.6	6.0	5.9	6.1	5.7	6.0

Source: Sharif, I.; "Industrial development and prospects in Kuwait",(Washington, D.C.: UNIDO, 1983), p.95.

of manufacturing in total GDP, from as low as 4.2 per cent in 1970, to 6 per cent in 1980. The rate of growth of manufacturing value added (MVA) and its low share in total GDP are the result of low initial values of manufacturing value added in the 1960s and the dominant share of the oil GDP.

For Kuwait, the share of manufacturing value added in total GDP is one of the lowest in the world. It is obvious that the oil sector has mainly been responsible for such a low share. Therefore, things are different when the share of manufacturing is compared to non-oil GDP (i.e. excluding GDP originating in mining). In 1980, the share of MVA (Manufacturing value added) in non-oil GDP was about 20 per cent as seen from Table 2.5.

Kuwait's non-oil MVA (i.e. excluding GDP originating in refineries) has grown from KD 119.8 million in 1975 to KD 161.8 million in 1979, showing an average compound growth rate of 7.8 per cent, which is considerably lower than that of refineries of 28.2 per cent during the same period. This explains the decline in the share of non-oil value added in total MVA from 61.4 per cent in 1975 to 44.2 per cent in 1979 as shown in Table 2.5.

It should be noted that non-oil MVA would be considerably smaller if all oil-based manufacturing industries were excluded (i.e. petrochemicals, fertilizers and plastic

Table 2.5 Non-oil MVA and its ratio to total MVA (KD Million)

Year	MVA	VA in refineries	non-oil MVA	The ratio of non-oil MVA to total MVA
1975	191.1	75.3	119.8	61.4
1976	229.8	109.8	120.0	52.2
1977	239.5	111.7	127.8	53.4
1978	256.6	118.3	138.3	53.9
1979	366.3	204.5	161.8	44.2

Source: Ministry of Planning, Central Statistical Office, "Annual statistical abstract, 1981"

Table 2.6 The percentage share of all non-oil based MVA to total MVA

Year	Share of all oil-based industries in total MVA(%)	Share of the residual manufacturing industries in total MVA(%)
1975	65.4	34.6
1976	57.3	42.7
1977	57.8	42.2
1978	57.1	42.9
1979	64.3	35.7

Source: Based on calculations made on data represented in Ministry of Planning, Central Statistical Office, "Annual statistical abstract, 1981".

products, as well as refineries). If all these industries were excluded, the share of the residual manufacturing value added in total MVA would be 35.7 per cent for 1979 as seen in Table 2.6.

The dominance of refined petroleum products production in the manufacturing sector of Kuwait, is not primarily significant as an indication of industrialisation itself, but as a basic prerequisite for further development of the industrialisation process, both to provide necessary inputs for the next stages of manufacturing industries and as feedstock for the energy sector.

Gross output in manufacturing

The value of gross output of a given sector is an indication of the size of the sector and when coupled with input data can be used to construct a measure of productivity. The value of gross output in Kuwait increased from KD 93.2 million in 1966 to more than KD 809 million in 1978, as seen from Table 2.7.
Indeed, some of the change is attributable to price changes, but the major part of the change is a result of difference in volume of production.

The largest manufacturing gross output in Kuwait is associated with the chemicals sector. As a matter of fact more than 70 per cent of the total gross output of

Table 2.7 Gross output in producers' value by economic activity, KD Million

Industrial activity	1966		1971		1974		1978	
	value	%	value	%	value	%	value	%
Food & beverages	8.9	9.5	15.5	9.4	26.9	5.7	47.4	5.9
Textiles	2.7	3.0	5.0	3.0	19.3	4.1	20.3	2.5
Wood pdts.	5.1	5.5	11.5	7.0	12.4	2.6	34.4	4.3
Paper & printing	0.9	0.9	2.6	1.6	5.0	1.1	13.3	1.6
Chemicals	65.0	69.8	113.8	69.1	358.2	76.7	588.9	72.8
Non-metallic minerals	6.5	7.0	8.7	5.3	18.1	3.9	59.2	7.3
Basic metals	0.3	0.3	1.2	0.8	5.0	1.1	4.9	0.6
Metal products	2.9	3.1	6.0	3.6	19.8	4.2	35.9	4.4
Others	0.9	0.9	0.4	0.2	2.6	0.6	5.1	0.6
Total	93.2	100.0	164.7	100.0	467.2	100.0	809.4	100.0

Source: Ministry of Planning, Central Statistical Office, "Industrial statistics", and "Industrial survey, 1978", 1983.

manufacturing is produced within this sector. The highest percentage share was recorded in 1974 when it reached 76.7 per cent of total manufacturing gross output as seen in Table 2.7. The major component of this sector's output is petroleum refining. In value terms, the gross output of this sector increased from as little as KD 65 million in 1966 to KD 588.9 million in 1978. This increase represents an average annual rate of increase of 22 per cent.

Gross output in food and beverages increased from 8.9 million in 1966 to KD 47.4 million in 1978. However, due to the rapid increase in the chemicals sector's output, the percentage share of this sector declined from 9.5 per cent in 1966 to 5.9 per cent in 1978. The gross output of all sectors has increased in absolute terms but most have experienced declines in their relative shares between 1966 and 1978. Textiles, which increased its share from 3 per cent in 1966 to 4.1 per cent in 1974, ended up with 2.5 per cent in 1978. Wood products had a share of 5.5 per cent in 1966, but declined to 4.3 per cent in 1978.

Finally, the non-metallic mineral products share in gross output declined from 7 per cent in 1966 to 5.3 per cent in 1971, and even further in 1974 to 3.9 per cent, but later increased and reached 7.3 per cent in 1978. On the other hand, the paper and printing sector increased its share from 0.9 per cent in 1966 to 1.6 per cent in 1978; the

basic metal industry's share has also increased from 0.3 per cent in 1966 to 1.1 per cent in 1974, but later declined to 0.6 per cent in 1978, although it did not change significantly in value terms in the last two years cited. That of fabricated metal products, machines and equipment has increased from 3.1 per cent to 4.4 per cent during the same 1966 and 1978 period.

Employment in manufacturing

The structure of employment is another indicator of the nature and structure of the manufacturing sector in Kuwait. Employment in manufacturing registered 10,365 in 1966, but increased to 37,444 workers by 1978. Employment in food and beverages increased from 3,375 workers in 1966 to 6,587 in 1978. In textiles sector, the increase in employment was even more apparent. It increased from 527 workers in 1966 to 5,969 workers by 1978. In the paper and printing sector, employment increased by about five-fold between 1966 and 1978, from 431 workers to 1,923 workers, respectively. One of the largest increases in employment between 1966 and 1978 took place in the chemicals sector, which also registered the highest number of employees within the manufacturing sector. In 1966, it employed only 810 workers, by 1978 it reached 6,790 workers, see Table 2.8.

Table 2.8 Number of employees by economic activity

Industrial activity	1966		1971		1974		1978	
	No	%	No	%	No	%	No	%
Food & beverages	3,375	32.6	4,037	15.7	4,422	16.8	6,587	17.6
Textiles	527	5.1	977	3.8	4,287	16.3	5,969	15.9
Wood pdts.	2,300	22.2	4,254	16.5	2,879	10.9	4,131	11.0
Paper & Printing	431	4.2	970	3.8	1,268	4.8	1,923	5.1
Chemicals	810	7.8	2,558	9.9	5,013	19.1	6,790	18.1
Non-metallic minerals	2,629	25.4	3,180	12.3	3,173	12.1	5,553	14.8
Basic metals	n.a.	n.a.	2,214	8.6	538	2.0	1,544	4.1
Metals	n.a.	n.a.	7,280	28.2	4,490	17.1	4,386	11.7
Others	293	2.8	307	1.2	250	1.0	561	1.5
Total	10,365	100.1	25,777	100.0	26,320	100.1	37,444	99.8

Source: Ministry of Planning, Central Statistical Office, "Industrial statistics", for 1978 figures: "Industrial survey, 1978", 1983.

Employment behaved erractically between 1966 and 1978 in the wood products sector, rising first from 2,300 workers in 1966 to 4,254 workers in 1971 and then declined to 2,879 workers in 1974 ending with 4,131 workers in 1978. The same appears to be true about employment in the basic metal industries. Although only incomplete information is available on this sector, the level of employment declined from 2,214 workers in 1971 to 538 workers in 1974, and then increased to 1,544 workers in 1978, i.e. still lower than the 1971 level. Employment in fabricated metals declined from the height of 7,280 workers in 1971 to 4,490 workers in 1974 ending to 4,386 workers in 1978.

In percentage terms, the fabricated metal products sector had the highest share of total manufacturing employment in 1971, followed by wood products sector, food and beverages, and chemicals sector. By 1978, the structure of employment had changed considerably. Chemicals sector showed the largest share of total manufacturing employment followed by food and beverages, textiles, non-metallic minerals, fabricated metals, and wood products sector. The rest of the sectors showed low shares of total manufacturing employment.

Industrial interdependence[12]

An important aspect of the impact of a sector on an economy is the extent to which it absorbs inputs from other sectors, and also creates outputs for use in other sectors. This absorption of inputs and the creation of outputs indicates the degree of interaction and linkage between the particular sector and the other parts of the economy, or within the sector itself, the interaction being amongst the various sub-sectors.

In Kuwait, it seems that the interaction of the manufacturing sector shows that it operates in an isolated manner, with very few linkages between them. Even the oil sector has few physical linkages with the rest of the economy, relying heavily as it does on imported plant and equipment and on exporting output.

In principle, any enterprise needs to rely on others to a greater or lesser extent for raw materials, and bought-in foods and services, such as semi-processed materials. In addition, the output it produces may be absorbed by other enterprises (intermediate demands) or go straight to final demands such as private or public consumption, or exports. In an open economy, inputs can of course be imported, so there will be leakages from the flow of internal intermediate and final demand in the form of imports and exports.

A consideration of the operations of the manufacturing sector in Kuwait shows that the linkages of the sector to the rest of the internal economy are minimal. Given the nature of the Kuwaiti enterprises, the value of the locally bought-in services and semi-finished goods is negligible in most cases. The sector from within absorbs few inputs from each other, and creates few outputs for each other. This reflects the fact that Kuwait has few natural resources and that it does not have an integrated industrial structure.

As can be expected, the manufacturing sector is still very much concentrated on the final stages of manufacturing and shows little vertical integration. There is little activity in the area of primary and intermediate goods. There is little vertical and/or horizontal integration between raw materials available versus what are consumed by industries in Kuwait. The resources most abundantly available in Kuwait (i.e. crude oil and gas) are primarily exported either in "raw" form, or "intermediate" form, but are not much coordinated with any large-scale downstream processing industries. Although there are over 500 different manufacturing establishments in the country, most of them are based on imported raw materials, and produce final products that are primarily needed for the domestic market.

It should be noted that most of the manufacturing that is carried out in Kuwait, other than oil and gas operations,

are based on simple processing and largely depend on imports of primary capital, materials, and intermediate goods. For example, the paint industry wholly imports its raw materials and what is done in Kuwait is essentially a mixing operation. All kinds of metals are imported and then cut and welded to specific designs in Kuwait. The same applies to food and beverages, the main ingredients are imported and are mixed domestically. Almost all the materials involved in the building industry are imported, with the exception of sand and a small volume of aggregates.

Moreover, a large volume of domestic furniture is being produced in Kuwait, but again, often and almost everything is imported, including the labour, experience, and know how. The Kuwaiti value added lies in the cutting, nailing, and polishing. Yet, because of the high income level in Kuwait, and the expensive locally produced furniture, most of the Kuwaiti demand tends to favour fully imported furniture, which is priced relatively lower than the partially imported furniture, and is often of better quality and design.

Exports of domestic manufactures

Kuwait has traditionally been a very open economy and in spite of some tariffs to protect domestic industry, access to market remains free and straightforward in most

respects. There are few restrictions on imports and no exchange controls whatsoever. Import duties are assessed ad valorem, based on the cif value of the goods. Most goods are subject to a four per cent customs duty.

The Kuwaiti origin non-oil exports consist mainly of different food and beverages products, chemicals, transport equipments and miscellaneous non-classified[13] products as shown in Table 2.9. The chemicals component consists mainly of fertilizers which is the cause of the variation in this sub-sectors' contribution to GDP.The food and beverages contribution increased from KD 1.69 million to KD 11.97 million between 1976 and 1982. Machinery and transports' contribution increased from KD 3.49 million in 1976 to KD 10.83 million in 1982. Classified goods increased from KD 16.34 million in 1976 to KD 73.48 million in 1982. The structure of the exports also changed in the period, although not to a large extent.

Classified goods ranked second after chemicals in 1976, but first in 1982. Food and beverages kept its position as third in rank in 1981 as it did in 1976, but jumped to the second in 1982. Likewise, the machinery and transport equipment, remained in the fourth place during the 1976-81 period, but jumped to third in 1982. While the miscellaneous section held its lowest position of 4 per cent and 8 per cent in 1976 and 1982, respectively.

Table 2.9 Non-oil exports of Kuwaiti origin, 1976-82 (KD Million)

Industrial sector	1976		1977		1978		1979		1980		1981		1982	
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%
Food & beverages	1.69	3.0	2.59	4.4	2.26	3.3	2.60	3.0	5.58	5.3	10.06	7.1	11.97	10.1
Raw mtls. inedible except fuels	2.14	3.7	1.77	3.0	2.82	4.1	7.02	8.1	4.64	4.4	4.77	3.4	4.56	3.8
Chemicals	31.20	54.8	30.95	53.3	38.68	56.5	34.00	39.2	37.08	35.2	29.19	20.6	9.08	7.6
Goods classified by material	16.34	28.7	15.54	26.7	19.18	28.0	33.31	38.5	49.07	46.6	79.67	56.2	73.48	61.7
Machinery & transport equipts.	3.49	6.1	4.22	7.3	2.33	3.4	4.17	4.8	4.52	4.3	10.84	7.6	10.83	9.1
Miscellaneous	2.09	3.7	3.06	5.3	3.18	4.7	5.52	6.4	4.44	4.2	7.21	5.1	9.15	7.7
Total	56.96	100.0	58.11	100.0	68.46	100.0	86.63	100.0	105.32	100.0	141.74	100.0	119.07	100.0

Source: Derived from Central Bank of Kuwait, Quarterly Statistical Bulletin, Oct-Dec. 1984.

Kuwaiti exports are mainly marketed in the Gulf area (including Saudi Arabia) and other Arab countries. Expansion of these markets is becoming increasingly difficult. The Gulf markets, like Kuwait, are small and are developing similar domestic industries of their own (e.g. paints, construction materials, and metal products). Expansion of exports to the large and promising Saudi market is hindered by high tariffs which are making Kuwaiti products increasingly non-competitive (although the tariff structure is supposed to change by the end of 1986 as a result of Gulf Cooperation Council agreements, as will be discussed in later parts of the study).

The Arab and neighbouring markets with the best potential for expansion are those with the greatest economic problems, for instance, Sudan, Egypt and Turkey. The economic risks and the requirements for deferred payment terms may be amongst the principal problems for future expansion of exports to these markets.

Industrial problems and constraints

In most developing countries, the limited availability of both capital and foreign exchange has long been considered the major obstacle to economic growth and industrialisation. However, in several OPEC countries, the main critical upper bound on growth and development is

believed to be that of limited absorptive capacity[14]. In Kuwait, it is clear that the limited size of the country, the inclination of Kuwaitis to work in non-productive activities, and the lack of domestic industrial raw materials seriously place the most stringent constraints on the performance and ability of the economy to industrialise. What follows is a detailed account of these main constraints to industrialisation in Kuwait.

Market size

Perhaps the greatest obstacle to rapid industrialisation in Kuwait is the narrowness of the domestic market, which prohibits establishments exploiting economies of scale that many manufacturing industries require to be efficient. Another problem is the Kuwaiti government's liberal trade policy which has limited the Kuwaiti market for domestic products. Actually, tariffs in Kuwait are set low on all import items except for a very few which have been specifically levied by the Council of Ministers for the purpose of protecting local manufacturing, as will be discussed later. Low tariffs, coupled with a general preference for foreign products and an over-valued exchange rate (trade-wise) implies a further reduction in the economic size of the domestic market.

Shortage of skilled labour and entrepreneurship

There is a serious gap between the supply and demand for labour in the Kuwaiti labour market and paradoxically there is also a severe problem of disguised underemployment in some sectors, particularly in the civil services sector. The gap is not only in terms of the quantity of labour, but also and more critically, in terms of labour quality. The national Kuwaiti labour force is inadequate even for the current needs of its manufacturing industry. Foreign labour has been recruited in Kuwait to offset deficiencies in local supplies, and since manpower development is a time-consuming process, and dependence on foreign labour is likely to remain a basic feature of the Kuwaiti labour market for some time to come. However, the country cannot afford to go on employing expensive expatriate labour for ever, nor does the government want to accept the political risk of a huge, semi-permanent immigrant population. So an entire generation of natives will have to be educated for the labour force.

Another constraint to industrial development include psychological impediments. Kuwaiti businessmen are experienced as merchants and financial investors, and thus, conversion to the mentality of an industrialist only comes about gradually. An obvious example is the difference between the way a merchant and an industrialist gear their

profit expectations; a merchant assumes he will take his profits in a year, whereas an industrialist is ready to forego profits or even endures losses during the first few years of operations and during hard times. Another psychological constraint to industrial development which is also a key for the future of Kuwait is; how to create incentives for hard work in a society which is already enjoying great affluence?

Raw materials

The one most frequently cited obstacle to industrialisation in Kuwait is the almost complete lack of industrial raw materials, other than oil and natural gas. Minerals have not been discovered in commercial quantities in Kuwait. There are limited quantities of limestone and clay and other similar materials which have been used in the development of cement and other construction materials.

The heavy dependence of manufacturing in Kuwait on imported raw materials should not be overestimated. The lack of domestic raw materials is not by itself a decisive consideration. No country in the world is self-sufficient in raw materials. However, raw materials, in Kuwait, represent a large input in the direct costs of production. The percentage varies depending on the mix of raw materials used, quality, quantity, and their origin of supply.

Imported materials have a highly unstable cost function which is subject to many variables, namely prices, transport costs, tax structures, weight and quality of materials, etc. The upward trend of raw material prices motivated by the inflationary forces and the current conditions of increasing world industrialisation and consequently demand for raw materials is very much expected to continue.

Administration

In many developing countries there is a need to review the scope and forms of the administrative machinery or organisations used to implement the pursued industrial objectives and policy. Kuwait is no exception. The importance of this review is the important role administrative agencies play in the industrial development of these countries.

Given the haphazard and piecemeal fashion in which the state has accrued economic functions it is hardly surprising that they should be exercised today by many different bodies: ministerial departments, a variety of independent public boards, commissions and corporations, and even private bodies that have been specifically endowed with public powers. There is, generally speaking, little logic in the way functions have been distributed between one type of authority and another. This is characteristic of

the Kuwait public administration as a whole.

There are many institutions, primarily public, that are concerned directly or indirectly with the promotion of industrialisation in Kuwait. These institutions are responsible for setting, coordinating, and controlling the nature, pace and pattern of industrial development policy. Ironically, there appears to be a multiplicity of institutions overseeing the industrial sector that are loosely connected and with limited coordination. The institutional framework is characterised by fragmentation, duplication, and conflicting interests among the various organisations involved. For example, a decision taken by one agency will almost certainly be faced with difficulties, as a result of the various factors which affect the decisions of other agencies. This organisational multiplicity might lead to difficulties in obtaining and exchanging the required data; differences in the concepts of the aims for requiring the data and the way in which they are to be prepared; repeating requests for the same data by different agencies; and weak coordination(15).

The administrative organisations may be divided according to the following: First, organisations directly contacted by industrial entrepreneurs to conduct procedures related to the establishment of their industrial projects. And secondly, organisations relevant to the

industrial sector in some manner. A detailed examination of the agencies most directly related to the industrial sector will be carried out. But before doing so, the industrial licencing system in Kuwait will be scrutinised.

Industrial licencing within an administrative framework

The Industrial Law of 1965 aimed mainly at organising the private industrial sector. The main policy instrument which was initiated by this Law was industrial licencing. This was stated in Article 7:

> "No new industrial firms may be set up or any alteration, whether in their capacity, size, location, or industrial purpose may be introduced, unless a permit to this effect has been obtained in advance from the Minister of Commerce and Industry".

The usual procedure is that an entrepreneur would apply to the Ministry of Commerce and Industry (MCI), and provide a technical and viability study of the concerned project. He would also submit catalogues of the necessary equipments, spare parts, raw and semi-processed materials as well as packaging materials.

During the time of application processing, a host of public administrative institutions are to be referred to by the entrepreneur concerning different parts of the establishment of his industrial project. In addition, different licences are required for different purposes,

e.g. expansion of the plant or the changing of obsolete equipments

A major difficulty resulting from the licencing system in Kuwait is the long time lag between the time the entrepreneur first visits the MCI enquiring about the establishment of an industrial project and his actual submission of an application form on the one hand, and the time he is actually told to go ahead with his project. According to one study this may take over one or even one and a half years(16). If adding to the industrial licence, the allocation of industrial land, and a loan from the Industrial Bank of Kuwait, the delays may become over two years(17). These delays are almost bound to have their effects on the economics of the project because the date and costs of the establishment and purchase of the plant will become out of date and are most likely to increase as a result of world inflation.

Moreover, there is the possibility that during these time delays similar projects may be established in neighbouring countries with the aim of exporting to the Kuwaiti market, while the Kuwaiti project may have considered exporting to these neighbouring markets. A definite result here will be fierce competition for markets which are originally small in their economic size.

The licencing system has pursued too many objectives, too broad, and sometimes contradictory without specific

criteria. Therefore, the evaluation of projects is more or less arbitrary. Decisions are often made on an ad hoc basis in response to particular short-term developments, and without reference to any clearly defined wider criteria.

The licencing system has not in effect prevented the establishment of many projects which later proved to be unviable. In the meantime whenever there has been very "high" profits a lot of unlicensed firms have been established illegally and taken advantage of the temporarily available "high" profits as a result of temporary boom periods. To cite one example from the construction industry, the Industrial Development Committee (IDC) stopped granting new licences at a time when the building industry was booming and suddenly there was a very high demand for construction materials which domestic production could not meet. About 50 unlicenced firms were established and the IDC could not prevent them from producing because of shortages that would have resulted from their closure (18).

Moreover, refusal to licence a project because of a desire to protect existing industry is in effect undesirable, because it will remove any incentive for those industries to improve quality, reduce prices, and improve services to the consumer. A World Bank mission which came to Kuwait in 1965 when the Industrial Law was still a proposed Law noted the following:

> "We know of no instances where a compulsory licencing arrangement, as proposed in this Law, has worked well in a free economy; and with Kuwait's abundance of funds, the usual argument that licencing is needed to conserve capital does not apply. We recommend therefore that licencing should be deleted from the proposed law and that only compulsory registration be provided".(19)

Indeed, the extensive licencing system applied in Kuwait is certainly contradictory to the free economic system the government says it pursues in Kuwait. Obviously this liberal attitude is reflected in the trade sector where a general type of licence may be granted under which a merchant can import virtually anything he wishes to import - unless if items are prohibited directly by law such as alcohol - whether consumer goods or industrial plant and equipment without any need for obtaining detailed licences as is the case for the industrial sector of the economy.

Industrial Development Committee (IDC)

This Committee was established by the Industrial Law No. 6 of 1965. It is chaired by the Minister of Commerce and Industry, or his representative, and its members are representatives of public and semi-public agencies as well as three members of the private sector to be nominated by the Kuwait Chamber of Commerce and Industry. Its principal functions are to study the necessary proposals

for industrial development, to consider and adopt measures promoting the manufacturing industry, to study and approve applications for industrial licences, and for recommending measures to maintain qualitative standards (the petroleum industry is totally excluded from IDC authority).

Besides some economic indicators which are used as criteria for granting licences (such as the expected value added, employment, etc., of the concerned project), other elements are also at work. These include the personal experience of each member of the Committee, his knowledge and experience of the local market, and his personal practical background of industrial affairs. Also an effective element is the objectives and interests of the agencies which are represented by members, which are not necessarily always similar, while the State interests are guaranteed by the presence of the Minister, who would be aware of the Government's general strategy. However, the continuous change of members, their administrative positions within their own agencies and their actual authority to take decisions or degree of power to give opinion, and their actual knowledge about industrial development and the variables which affect it, all of which have together contributed to the low level of performance of the

Committee, limiting its activities to mainly granting or rejecting applications for industrial licences, trade protection, customs duty exemption and industrial land.[20]

Article No. 5 of the Industrial Law of 1965, cited above, entrusted IDC with the "study of the methods and considerations of the proposals pertaining to the development of national industries...." giving it large roles to play in the industrial sector. However, it seems that it has not played but a very small part of it. For example, "the development of national industries" may be interpreted to mean the following: (i) plan an industrial strategy and policy. (ii) Suggest methods for the development of the manufacturing sector. (iii) Study industrial project priorities suitable for Kuwait. (iv) Study the necessary ways for the application of the suggested plans and policies. (v) Follow-up the established industrial projects attending to the problems facing them and trying to find solutions to these problems. And (vi) getting to know the industrial sector situation and issue (annual) reports concerning them.

The personal interviews which were carried out by the researcher showed many areas of failure of the IDC even to perform the few and very limited activities which it carries out. The following are a few examples of such failures, though one of these cases is cited from another study.

The detailed licence requirements have imposed extra difficulties on the management of the establishments. For instance, firms simply cannot add new machinery which might lead to better performance without having approval in advance. Also, to add a new line of products to improve the economies of the project cannot be done without the prior approval of IDC. Thus, initiatives by entrepreneurs are hampered, and many decisions that can lead to an improvement in the economies of a project are simply not left to the discretion of the establishment's management. A metal office furniture producer said that the Kuwaiti market for his range of products faces fierce competition, mainly from imports. A new and successful product design reached the Kuwaiti market, it was an office desk with a wooden top.

They wanted to improve their line of products in this manner, however, IDC rejected this on the grounds that this firm was a metal office furniture producer and that it should not be allowed to use wood which is another and different industrial sector. Moreover, the market for metal office furniture was depressed, and management thought to establish a small carpentry workshop as part of the plant to produce small pieces of wood furniture in order to assist the firm through its difficulties. They were rejected a licence and were not allowed to do so on the same grounds as above[21].

The Melamine project may prove another example of the difficulties that face the manufacturing sector as a result of the detailed interference which is exercised by IDC. The viability study of the project estimated an investment capital of KD 8 million, and an industrial site with an area of 20,000 square metres. IDC licenced the project and stipulated that its capital may not be more than KD 4 million, and granted it an industrial site with an area of 15,000 square metres. The final project cost was KD 12 million, the firm had to raise its capital share to KD 6 million, borrowed KD 3.5 million from the Industrial Bank of Kuwait and met the rest with loans from commercial sources. The site which was finally used by the project became 32,500 square metres. It took the establishment eight extra months of new discussions and negotiations in order that the extra land was granted. Construction of the land and buildings during this period was halted and the firm had to pay delay penalties to the contractors(22). The firm belongs to the mixed (private-public sector)with a 60-40 joint ownership, respectively.

A licence was granted by the IDC for the manufacturing of vehicle tyres in Kuwait many years ago. The project was not established, although it was licenced, because it was found unviable. It was assumed that at the time of granting the licence that the firm would obtain free petroleum

products, 100 per cent import-duty protection, and that it would gain a 100 per cent market-share after three years of the commencement of production. The firm today does exist legally, its shares are traded on the official stock market, but it does not own any plants and was never established. One logical point to note here is that how could one firm (and that is a newly established firm) serve such a complex market, i.e. the tyres market, and especially in the case of Kuwait where there are a few vehicles of an immense range of cars, trucks, special type vehicles from many firms in many different countries? Moreover, this market to be wholly gained in just three years! It must be a magic world.

The National Industries Company has been granted a total monopoly of the manufacture and import of asbestos pipes and sheets. IDC has prevented the establishment of plants which may produce alternative pipes to compete with these products. The company already had a large plant producing asbestos when it was licenced for the establishment of another, and even larger, and more modern project at Mina Abdulla to meet the growing and wholly guaranteed domestic market need. The project was controlled at the cost of KD 9 million. However, scientific research showed the health effects and dangers of asbestos, and therefore, market prospects vanished, and the expensive

project turned out as a failure. The Ministry of Electricity and Water was granted a licence from the Council of Ministers to import the PVC pipe which was valued at KD 32 million. Moreover,IDC was forced to licence the establishment of projectst produce PVC pipes, and indeed, many private local industries for the production of PVC were established. The results of the IDC policy in this case were as follows: (i) As a result of the monopoly situation with which the company was granted, the firm was in an easy position and did not have to follow market developments, where it could have decided to produce the much more advanced and efficient PVC pipes instead of asbestos. (ii) PVC has much lower prices than asbestos, thus, consumers had to buy the more expensive lower quality asbestos pipes instead of the superior PVC pipes. And (iii) the NIC project was harmed as well as the parent company at the end because the IDC had to change policy[23].

Finally, there is the example of the steel project where the establishment of an industry was licenced by IDC with a 25 per cent government participation. A site was allocated and tenders were about to be invited to bid for the import of equipment at an approximate cost of KD 30-40 million when the whole deal was cancelled. The reason for cancellation was a mere chance rather than anything else. It was because of the interference by the Planning

Council on the grounds that the project was very large and that it would affect the Kuwaiti economy at large. After reviewing the viability studies of the project, it was decided to be unviable because the assumption upon which the studies were based were incorrect, for example, energy prices (electricity and gas) and competitive potentialities. Therefore, it was proved that the project was unviable and was cancelled. Today, it is clear that it would have been unviable if established, and a similar project which had been established in Qatar (in the Gulf) has been losing money and unable to compete with the prices of Japanese products in spite of low natural gas prices. IDC granted a licence to the project because of high pressures from influential figures, and also, because of the multitude number of studies that were submitted to the Committee which was seen as a sign of the viability of the project and "overpowered" IDC's abilities to carefully evaluate the studies[24].

Department of Industrial Affairs (DIA)

In 1966, DIA was incorporated into the Ministry of Commerce and Industry, and was given a sweeping mandate to assume charge of all matters connected with industrial development.

In addition, the Department serves the Industrial Development Committee which reviews all applications for

industrial permits or requests for protection by the professional staff of the DIA before being submitted to the Committee for decision. DIA's vague terms of reference have meant that the personnel who operate it are crucial in determining its shape.

For various reasons DIA has been handicapped in trying to carry out fully its main responsibilities. Although another ministerial decision was issued in 1973 confirming all the above mentioned authorities, clarifying even more the Department's responsibilities in supervising and developing the industrial sector, and preparing the plans necessary to that end, however, the administrative structure of DIA has prevented it from carrying out its responsibilities in planning an industrial policy, suggesting a particular plan, or to follow-up the established industries. All of this has been a result of deficiencies in staff recruitment, and the lack of necessary professional skills. For example, there is no specialised team to carry out a full survey of the established industries and their situations, and to continue to know the changes which are taking place in the industrial sector. Also, the Department does not visit the industrial establishments to see the difficulties that are facing them, or to follow-up the licensed and established industrial projects to check whether they are actually undertaking activities that they

are licensed to do[25].

Furthermore, the Department needs to re-organise its divisions according to the needs of the different responsibilities and to establush new divisions to cover all the objectives which it is to carry out. Also, DIA would need to have an independent budget which may help it to recruit the technical, professional and administrative staff it needs, and which may allow it to offer the financial incentives that it wants to grant[26]. The low wages, which DIA can offer because it is part of the administrative machinery of government means that it can not recruit the expertise which it needs in order to carry out its very wide responsibilities[27].

Industrial Consultancy and Development Office (ICDO)

ICDO was established in 1973 as an outcome of an agreement with the United Nations Industrial Development Organisation to supply a team of industrial experts to review and pre-appraise new projects. Its responsibilities were defined to include offering technical help and advice to the IDC; finding investment opportunities in the manufacturing sector; and training Kuwaiti personnel to carry out these responsibilities[28].

In order to be able to differentiate between the work

load of ICDO and its staff and personnel capabilities, the following extractions from the 1979 Ministry of Commerce and Industry report[29] is cited:

> "The Industrial Consultancy and Development Office evaluated during 1979 a large number of economic viability studies and the submitted requests for the grant of licences for the establishment of industrial projects, the Office also prepared a number of technical and economic researches and studies concerning the industrial sector and its subsidisation and development".

The Ministry's 1981 report[30] noted the following: "The Industrial Consultancy and Development Office in 1981 studied and evaluated 80 projects in addition to eleven general studies concerning manufacturing from different aspects". The 1982 Report[31] mentioned "the study and evaluation of 71 industrial projects in all different sectors". Keeping in mind that the Office has 15 employees, out of which four are experts in chemistry, mechanics, construction materials, and economics[32], and that an industrial project sometimes stays about one year in ICDO[33], it is not exactly clear how such a large number of studies are conducted in the Office in each of the cited years.

ICDO simply cannot prepare quality studies in all fields and all types of industries that are submitted to it. To cite one example, we consider the following case: An application for the licence for production of "switch gear"

was seen unviable by ICDO on the grounds that there is no domestic market for it. Thus, the Industrial Development Committee could have rejected the application on the basis of that opinion, if it was not for the Ministry of Electricity and Water representative who said that the country is in great need of this type of product to the effect that his Ministry is prepared to buy all the products of the plant, and that the British company (the proposed local project's partner) have been supplying the Ministry with this product for many years, and that the product is designed exactly to the specific standards of the Ministry. When the matter was investigated, it was found that the person who prepared the study and evaluation was a mechanical engineer and did not have any knowledge of electrical engineering(34). This case was discovered by mere luck, how many good chances have been lost because of wrong opinion and evaluations?

Concluding Remarks

The difficulties which face the entrepreneur in his "negotiations" with government agencies in his attempt to establish an industrial project are so immense that they may be considered one of the major, if not the major, difficulties that face the establishment and development of an efficient industrial sector in Kuwait. As an Industrial

Bank of Kuwait report[35] notes "The difficulties which face an industrial project with government agencies.. are so immense and complex that they have become the rule rather than the exception".

Supreme Industrial Council (SIC)

Many studies conducted by the Ministry of Commerce and Industry, committees established to review the condition of the industrial sector in Kuwait, and industrialists believe that the establishment of a government central and independent agency would greatly solve the administrative constraints imposed on industry. The latest suggestions came in the form of the main resolution adopted by an industrial symposium held in Kuwait in December 1983. The resolution called for: "The establishment of a public agency for industry to take care of all matters regarding industry and industrialisation including the oil industry"[36].

It is often suggested that this agency should be independent of government bureaucracy both from financial and administrative aspects. It would be entrusted with the supervision of the industrial sector, to lay out an industrial strategy, as well as drawing detailed policies, plans, and programmes for the industrial sector.

A report[37] which was carried out by a multi-organisational committee suggested that the central

industrial agency to consist of the following departments: an executive body, a general industrial affairs department, an industrial areas department, a public consultancy and research department, an industrial establishment follow-up department, and a general policies and planning departmnet. The responsibilities of the central agency are to be defined in accordance with the needs of the industrial sector and the promotion of industrialisation in the framework of the laws and regulations concerned with industry in Kuwait. The agency should have a board of directors which is to be chaired by the Minister of Commerce and Industry, and its members should be representatives of all ministries that are concerned about the industrial sector.

Notes

Chapter Two

The manufacturing industry and the administrative framework

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(2) Middle East Economic Digest, Special report, "Kuwait", February 1980.

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(9) Al-Awadi, A.R.; "Industrial development in Kuwait", (Kuwait: Kuwait Institute of Economic and Social Planning in the Middle East, June 1969), p. 13.

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(11) Ministry of Planning, Central Statistical Office, "Annual Statistical Abstract 1984".

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(13) These include tanned hides, rubber, wood and cork manufacturers, excluding furniture, paper and cardboard, yarn, textiles, cast iron, steel and non-metallic manufacturers.

(14) Sharif, op.cit., p. 127.

(15) Al-Noori, Abdul-Baqi; "Structure of governmental and non-governmental industrial agencies and organisations and their effectiveness in the State of Kuwait", (Kuwait: First industry symposium in Kuwait, 30 Oct. - 1 Nov, 1976 - Arabic), pp. 27-28.

(16) Industrial Consultancy Office; "The industrial project in the State of Kuwait: study of industrial licence circulation, customs protection, government subsidy", (Kuwait: study prepared for the Industrial Bank of Kuwait, January 1982 - Arabic), p. 10.

(17) Al-Noori, M. Abdul-Khaliq; "The Kuwait Company for the manufacture of insulation materials", (Kuwait: Conference on the industrial strategies and policies in Kuwait, Kuwait Chamber of Commerce and Industry, 24-26 March 1980 - Arabic), p. 195.

(18) Interviews.

(19) International Bank for Reconstruction and Development; "The economic development of Kuwait", (Baltimore: John Hopkins Press, 1965), p. 122.

(20) Al-Rasheed, M.A.; "Administration of industrial development in the State of Kuwait", (Kuwait: conference on industrial strategies and policies in Kuwait, 24-26 March 1980 - Arabic), pp. 141-2.

(21) Interviews.

(22) Industrial Consultancy Office; January 1982, op.cit., pp. 46-47.

(23) Interviews.

(24) Interviews.

(25) Al-Noori, 1976; op cit., pp. 36-37.

(26) Ministry of Commerce and Industry; "Report on the future of industry in Kuwait and its promotion and subsidisation", (Kuwait: Committee for the study of the future of industry, May 1979 - Arabic), p. 96.

(27) Al-Rasheed, op.cit., pp. 141-2.

(28) Al-Noori, op.cit., pp. 6-7.

(29) Ministry of Commerce and Industry; op.cit., p. 27.

(30) Ministry of Commerce and Industry; "Industry in Kuwait: its aims, types, criteria for the establishment of its projects - methods for its subsidisation and encouragement", (Kuwait: Industrial Development Committee, Dec. 1981).

(31) Ministry of Commerce and Industry; "1982 Annual Report" (Arabic).

(32) Askar, K; "The establishment and development environment of industrial projects in Kuwait", (Kuwait: Arab Planning Institute, 1982 - Arabic), pp. 39-40.

(33) Industrial Bank of Kuwait; "Industry problems in Kuwait", (Kuwait, 1984 - Arabic), p. 62.

(34) Interviews.

(35) Industrial Bank of Kuwait, 1984, op.cit., p.88.

(36) Kuwait Institute for Scientific Progress; "Papers of the Kuwait Industry Symposium", (Kuwait, 1984 - Arabic), p. 357.

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CHAPTER THREE

THE KUWAITI GOVERNMENT SUBSIDIES POLICY

Introduction

This chapter presents basic information about the ways in which the Kuwaiti government have opted to assist and protect its manufacturing industry.

The role of the Kuwaiti government in promoting industrial development has taken several forms. First, the subsidy of infrastructure and the setting-up of industrial zones and sites, and the provision of utilities. Second, the setting-up of institutional and consultative organisations for development and screening of projects. Third, provision of easy loans, tax-holidays, customs-free entry of inputs and infant-industry protection in the shape of taxing competitive imports and up-to-a-point preferential treatment in government purchases. Fourth, participation with the private sector in financing and setting-up of industrial projects. Finally, playing an active role in the formation of intra-Gulf and inter-Arab joint ventures and taking an interest in regional coordination.

The Industrial Law No. 6 of 1965 was issued to provide a framework for government subsidies to industrial establishments to encourage them and ensure their continuity. The following is a summarised list of the incentives and subsidies

which are available to industrial firms in Kuwait.

1. Exempting industrial establishments from income tax and all kinds of taxes.
2. Provision of electricity and water at subsidised prices.
3. Provision of finance at subsidised rates.
4. Allocation of industrial sites at nominal rates.
5. Preference in government purchases to locally produced goods.
6. Raising customs duties on goods similar to domestic products and imposing limitations on imports.
7. Exempting the imports of manufacturing establishments from the payments of customs duties.

These subsidies will be described and analysed in this chapter which will provide a background to the subsequent chapters when we will analyse and evaluate these subsidies from the point of view of the receipient firms.

Electricity, water and fuel subsidies policy

Electricity, water, and fuel are supplied to the manufacturing sector and the rest of the economy as a whole at heavily subsidised prices. The term "subsidy" is used here to mean that either prices in comsumption are

lower than the cost of production, or that certain products are provided to domestic consumers at lower than their shadow prices.

The subsidy element may be measured by either of the following concepts: (i) the cost of these services (electricity, water and fuels) as a claim on budgetary resources, i.e. total expenditure minus total revenues. And (ii) the opportunity cost which represents the prices that could be obtained otherwise if these goods were sold to other customers, i.e. export prices minus subsidised prices.

The last concept is more significant in the case of petroleum and natural gas rather than electricity and water. The first one on the other hand, is considered to be more significant in the case of electricity and water. For reasons of space limits and in an attempt to be more selective, we will limit our discussion to the first method where our main concern at this stage lies.

Electricity

Electricity is supplied to all users in Kuwait at a subsidised rate. The degree of this subsidy has changed from year to year with changes in average costs of production and with revisions in tariffs. Before 1961, electricity was charged at 13 fils/Kwh for both domestic and industrial uses, which was lowered from the 1953 equivalent price

of 27 fils/Kwh[1].

However, since 1962, the charges became 1 fils/Kwh for industries located in the Shuaiba area, and 2 fils/Kwh for residential consumers as well as the rest of the industrial sector. It is worth mentioning that industries located in Shuaiba are mostly petroleum- and natural gas-related, export-oriented, government-owned, heavy users of electricity. Therefore, most of the electricity subsidy in this area is more directed towards the public rather than the private sector.

Table 3.1 illustrates the estimated electricity subsidy to the industrial sector. It is seen from the Table that total electricity subsidies have increased from KD 6 million in 1976 to KD 50 million in 1982, i.e. a more than eight-fold increase in a seven years period. This has been mainly due to the 450 per cent increase in the cost of electricity production and distribution. Costs of production have increased drastically because the Ministry of Electricity and Water have since 1981, began to pay the world export price for the domestic natural gas which it uses, whereas it used to obtain it previously free of charge from the Government. The Ministry paid in 1983 KD 350 million for its fuel purchases[2].

Table 3.1 Estimated electricity subsidy to industry, 1976 and 1981

	1976	1982
Electricity used by industry (million Kwh)	1,180	1,675
Cost of production and distribution (fils/Kwh)	7.14	32.18
Cost of electricity used by industry (KD '000)	8,425.2	53,901.5
Price paid by industry (KD '000)	2,360.0	3,350.0
Subsidy (KD '000)	6,065.2	50,055.5
Subsidy as % of total cost of electricity used by industry	72.0	93.8

Sources: (1) 1982 cost of production and distribution have been obtained from the Ministry of Electricity and Water directly.

(2) Ministry of Planning; "An evaluation and estimation of government subsidies in the State of Kuwait", (Kuwait, Dec.1978 - Arabic).

(3) Ministry of Electricity and Water; "Electrical energy and water: statistical yearbook, 1983" (Kuwait, 1984).

Water

As a result of the lack of indigenous sources of water in Kuwait, the cost of supplies to consumers is higher than in most countries. But most prices at which

the water is sold by the Ministry of Electricity and Water are far from representing the true production and distribution cost involved in water supply. Thus, water is supplied to most users at subsidised rates.

Water is supplied by pipes through a distribution system to many areas in Kuwait; however, many areas are still not connected to this distribution system. In these areas, water is distributed by privately-owned tanker vehicles which draw water from Ministry bulk supply points.

Total cost of production and distribution of desalinated water amounted to KD 4.039/1000 gallons in the year 1981/82. Out of this figure, KD 2.706/1000 gallons was for production costs, and KD 1.333/1000 gallons was for distribution.

Desalinated water is sold at the following prices:

- 800 fils/1000 gallons for water delivered by pipes.
- 300 fils/1000 gallons for water sold to private tankers.
- 250 fils/1000 gallons for water sold to industries, located in Shuaiba area[4].

Private tankers on the other hand, sell their water to users at prices previously fixed by the Ministry of Commerce and Industry. The following is the private tankers' price structure for desalinated water:

- KD 1.750/1000 gallons' tanker.
- KD 3.250/2000 gallons' tanker (KD 1.625/1000 gallons)

- KD 4.750/1000 gallons' tanker (KD 1.583/th. gallons)[5].

Fuel

Kuwait is a petroleum based economy which relies entirely upon crude oil and associated natural gas as the main sources of thermal energy in electrical power stations and subsequently in water desalination. Until 1981, petroleum and natural gas were provided free of charge for the production of electricity and water. Due to this heavy subsidy, prices of electricity, water and fuel for most periods of time, during the past three decades, have been fairly stable and far below costs.

Fuel prices were raised in April 1982, the previous as well as the present prices are illustrated in Table 3.2. The new prices which were back-dated to July 1981 were to be paid by all users, domestic and industry, and the Ministry of Electricity and Water together with any other government department[6].

The Ministry purchases its fuel needs of gas, oil, lean gas, heavy gas, propane and butane and crude oil from the Kuwait Petroleum Corporation at prices equal to international price levels on an annual base, except for natural gas. The natural gas price was set equal to 30 per cent of the international price level based on prices of natural gas

Table 3.2 Fuel prices before and after April 1982

Fuel	Prices before April 1982	Present prices	% inc.
Gasoline - 98 octane (fils/litre)	25	50	100%
Gasoline - 90 octane (fils/litre)	15	40	167
Kerosine (fils/litre)	6	20	233
Diesel (fils/litre)	6	40	567
Liquid gas (fils/12 Kg cylinder)	400	500	25
Natural gas (fils/cubic feet)	14	490*	3500

*This is equivalent to 30 per cent of world price for natural gas at the equivalent price for crude oil of $31/barrel (100,000 cubic feet of natural gas = KD 150). The amount will change with changes in crude oil prices).

exported from Holland to France.

The new pricing policy limited the only comparative advantage available for industries in Kuwait, i.e. cheap gas fuel and feedstock. Moreover, because the previous pricing policy had been fairly stable over the past two decades, the oil-based industries were not prepared to absorb such a sudden rise in the cost factor without losses. In addition, some new private gas- or oil-based projects which could have emerged under the old fuel-pricing system may not emerge under the new one. The country may not be given the chance to compensate for such opportunities which have been foregone.

Effects of utilities subsidies

1. Price effect

A subsidy on infrastructure utilities results, like any other type of production subsidy, in a fall in production cost, and hence causes a price effect. If the subsidy was fully or partly passed on to consumers, a lower price level will be paid by them. This is likely to cause purchases of a product to rise. Domestic industries on the other hand, will become more capable of competing with imports. In this way, domestic consumers as well as producers gain, while foreign competitors lose. If the subsidy was not passed on in consumer prices, the

profits of the industries would then be higher than normal by the amount of subsidy.

2. Investment effect

Since the same rate of subsidy is provided per unit used, then the greater the consumption of these utilities, i.e. electricity, water and fuel, the larger the subsidy received. In other words, the subsidy increases with increased usage. Thus, lower prices of electricity, water and fuel attract more investments into large-scale, capital- and energy-intensive industries. This implies, on the other hand, a substitution effect in favour of capital-intensive rather than labour-intensive techniques of production.

3. Misallocation of resources

Due to the heavily subsidised prices of electricity, water and fuel, industries as well as other consumers, may have a large amount of non-essential use and wastage of these services. It is generally aceepted that pricing is an important factor in controlling demand for utilities, i.e. utility demand is price responsive. However, demand for elasticity with respect to price in large-scale industries is believed to be lower than elasticity in small-scale industries. This is due to the fact that machinery in

large-scale plants consumes the largest share of electricity, water and fuel, while a greater share in small-scale plants is consumed by non-productive equipment such as air-conditioning, excessive lighting, etc. In general, the very low prices of public goods in Kuwait have caused unnecessary usage because demand appears to be relatively price elastic. Another related effect is, for example, cheap fuel may lead to the use of non-efficient machinery in terms of energy conservation.

Because utility subsidies in Kuwait are not confined to manufacturing industry, or to any other particular sector, their investment effect is believed to be neutral among the various sectors of the economy. They will not contribute, in any significant degree, to draw capital from other sectors of the economy into the manufacturing sector.

Industrial financing

Successful industrialisation in developing countries would necessarily depend, first and foremost, on increased self-help endeavours through the marshalling of domestic savings and their chanelling, appropriately and effectively, into the industrial sector.

It is generally recognised that lack of adequate financing for industries is a major obstacle to industrial development. This situation is reflected in a shortage of

available financial resources (domestic and foreign), inadequate institutional arrangements to channel the available resources into investment in industry, and as a consequence a high cost of financing[7]. Thus, efficient means of mobilising and allocating capital are important to the development process[8]. Indeed, formal credit markets in developing countries are often badly distorted[9].

Governments often have financial schemes to assist their national industries. These schemes may take several forms: direct financing by the public banks and development finance companies, rediscounting facilities, guarantees to meet a certain percentage of losses, or some combination of the foregoing[10]. Governments may also provide inducements for, and pressures on, commercial banks to increase loans to the industrial sector[11].

The financial sector in Kuwait

The financial sector assumes an important role in Kuwait, particularly because of the openness of the economy and the absence of major restrictions on dealing in foreign exchange, the outflow of remittances and the movement of private capital.

However, the money market is still at infancy in Kuwait. The absence of developed monetary policy instruments such as

open market operations and reserve requirements supports this view[12].

There is an abundant supply of capital funds in Kuwait which is far in excess of the current needs for industrial development. There exist a high level of domestic savings such that the level of domestic savings exceeds the level of domestic investment, with the result that a large proportion of domestic savings is being transferred abroad.

It seems that only a small fraction of the abundant financial capital in Kuwait is directed towards domestic investments and a smaller percentage yet towards industrial products. The Kuwaiti financial system is not yet geared to the requirements of a modern industrial sector. An inter-bank agreement has resulted in very little competition between the Kuwaiti commercial banks. Their domestic credits are directed to short-term, trade financing, construction, and services; only about 4.5 per cent of bank credits go to the industrial sector.

Table 3.3 illustrates credit facilities of the commercial banks distributed by the different economic sectors. It is noted that total credits have increased about four times in the period increasing from KD 849 million in 1976 to KD 3,809 million in 1984.

The commercial loans to the manufacturing sector increased to KD 145 million in 1984, an increase of

Table 3.3 Commercial banks credit facilities by sector (KD million)

Year	Trade		Manufacturing		Construction		Financial services		Real estate		Personal		Others*		Total	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total	Amount	%
1976	292.4	34.4	37.2	4.4	166.7	19.6	53.1	6.3	94.7	11.2	171.1	20.1	34.2	4.0	849.4	100
1977	375.6	35.0	49.4	4.6	199.4	18.6	69.9	6.5	123.6	11.6	212.6	19.8	42.0	3.9	1072.5	100
1978	400.2	29.1	66.3	4.8	254.4	18.5	92.3	6.7	180.7	13.2	319.7	23.3	60.9	4.4	1374.5	100
1979	523.5	27.3	91.4	4.8	332.2	17.3	120.9	6.3	254.3	13.3	520.1	27.1	75.1	3.9	1917.5	100
1980	671.7	27.8	159.2	6.6	408.0	16.9	142.8	5.9	306.6	12.7	620.7	25.6	109.5	4.5	2418.6	100
1981	843.2	26.6	174.3	5.5	523.2	16.5	236.0	7.4	371.2	11.7	890.3	28.1	134.7	4.2	3172.9	100
1982	955.4	24.5	193.7	5.0	673.4	17.3	269.0	6.9	612.1	15.7	1002.8	25.7	190.0	4.9	3897.3	100
1983	948.8	24.7	148.2	3.8	664.2	17.3	314.1	8.2	683.4	17.8	934.5	24.3	151.1	3.9	3844.3	100
1984	987.7	25.9	145.1	3.8	683.2	18.0	360.6	9.5	442.8	11.6	1040.4	27.3	149.2	3.9	3809.1	100
Average	-	28.4	-	4.8	-	17.8	-	7.1	-	13.2	-	24.6	-	4.2	-	-

Source: Derived and calculated from Central Bank of Kuwait, Quarterly Statistical Bulletin, Jan-March 1983; and Oct-Dec. 1984.

*Agriculture is included

about four-fold from the 1976 figures of KD 37 million. However, the average share of manufacturing credits in total for the period was the lowest share of 4.8 per cent, where only the hardly existing agricultural sector and the unclassified activities had a lower share. Over the years of the period under study the share of manufacturing had increased from a 4.4 per cent in 1976 to 6.6 per cent in 1980. However, this share drastically declined to 3.8 per cent in both 1983 and 1984.

Commercial banks generally make loans only on an overdraft basis, taking personal liabilities on personal accounts, with the primary criterion being an evaluation of the borrower's individual net worth, not an evaluation of the purpose of the borrowing. The practical consequences of a banking system which operates in this manner is that industrial credit, for working capital or term loans, is not extended on the basis of a company's financial performance or prospects. In other words, it is still personal banking. An industry which is new or which wishes to expand - no matter how feasible its project may be - often has difficulty in obtaining all the needed financing unless it has high liquidity or the personal backing of a substantial Kuwaiti partner or supporter. This problem in obtaining working and loan capital is particularly acute for the smaller-sized undertakings.

It has been suggested that the lack of staff with the necessary expertise to assess the financial needs of industries can lead to misunderstanding the purpose of the loan which explains in turn the commercial banks' reluctance to provide loan facilities. Moreover, the banks justify the low percentage of their industrial credit compared to the total to be a result of the shortcomings in the banking system, and that the industrial loans are too small to justify the employment and training of the qualified staff that is required[13].

Industrial Bank of Kuwait (IBK)

The Industrial Bank of Kuwait was established in 1973 by a government initiative to promote industrial diversification, in response to the failure of the Credit and Savings Bank to meet the financial requirements of the industrial sector, and as a result of dissatisfaction with the policy of the commercial banks towards industry[14].

IBK is a hybrid institution capitalised at KD 20 million of which 49.1 per cent is owned by government represented by the Ministry of Finance and the Central Bank, 34.08 per cent is owned by seven commercial banks, 3.36 per cent by insurance companies, and 13.45 per cent is owned by three major industrial companies[15] which are in the meantime partly owned by the government. However, the bank

is an independent agency as one of its managers put it, "We behave wholly as a private organisation... Decisions are based solely on business criteria. Maximisation of income is the key consideration"[16].

The government have provided IBK with two loans to help it carry out its objectives. The first of KD 100 million at 2.5 per cent interest was granted after one year of operation, and the second of the same amount but at 3 per cent interest was granted in 1980. The duration of each one was set at fifteen years. These loans were regarded as an indication of the confidence the government places in the Bank.

IBK started its activities in 1974. Loans were given then at 4 per cent interest with a one and a half year's grace period to begin with the commencement of operation, and after which the principal is paid within five to eight years. The borrower is charged with a 1 per cent commitment fee on the loan amount which is not yet withdrawn from the Bank, and as soon as the whole amount of the loan is withdrawn this 1 per cent charge stops and the interest rate becomes payable.

IBK changed its loan policy in 1980 and imposed new rates of interest. The new interest structure became 5 per cent for new projects, 6 per cent for expansion purposes in manufacturing, and 7.5 per cent for industrial and marine

services projects. However, the entrepreneur starts paying the interest on the unpaid balance from the time actual production starts. Moreover, the grace period was extended to two years. Almost all IBK loans are long-term for periods of ten years. These increases in interest rates were justified by the Bank on grounds of the commercial basis of its operation, where it has to pay interest on its government funds and because of repayment difficulties which have already been faced by the bank.

IBK have granted a total of 326 loans, mainly to new establishments, during its years of operations between 1974 and 1984 as seen in Table 3.4. The total cost of these projects have been KD 563 million and total IBK financing has been KD 262 million, i.e. about 47 per cent of total projects' cost. The construction materials sub-sector has had a substantial share of the number of establishments financed by IBK, 29.4 per cent; and 33 per cent of total IBK financing.

The construction-related sub-sectors of metal products and engineering have had a total share of the number of establishments of 14.4 per cent. These two sub-sectors together make up about 44 per cent of total number of firms financed. This illustrates the importance of the construction industry among the other economic activities in the Kuwaiti economy, also it reflects the construction boom which has

Table 3.4 IBK's cumulative loan and equity commitments

Sub-sector	No. of ests.		Total cost of projects	IBK financing	
	No.	%		Amount (KDM)	%
Construction materials	96	29.4	176.3	86.2	32.9
Metal products & engineering	47	14.4	78.5	36.7	14.0
Food & beverages	39	12.0	74.5	36.3	13.9
Furniture	20	6.1	16.7	8.0	3.1
Marine & oil field services	12	3.7	41.0	23.8	9.1
Chemical Products	56	17.2	90.2	39.7	15.1
Paper	25	7.7	26.0	12.9	4.9
Printing	12	3.7	15.3	6.8	2.6
Textiles	8	2.4	16.0	4.9	1.9
Industrial services	1	0.3	1.2	0.6	0.2
Investment firms	2	0.6	22.8	4.8	1.8
Miscellaneous	8	2.5	4.3	1.4	0.5
Total	326	100.0	562.8	262.0	100.0

Source: Derived from the: Industrial Bank of Kuwait, "Annual Report, 1984".

been one of the outstanding characteristics of the Kuwaiti infrastructure since the in-coming of oil revenue in the late 1940s.

The chemical products sub-sector on the other hand, had a share of 17.2 per cent and a total number of 56 establishments; these are second only to the construction materials sub-sector. It is in the chemical products sub-sector where Kuwait's comparative advantage is thought to lie. Food and beverages had 39 projects financed, 12 per cent of the total.

The structure of loan distribution by size of capital of establishments reveals some interesting factors, as shown in Table 3.5. About 13 per cent of total IBK loans have been granted to establishments of less than KD 100 thousand in capital size. In the meanwhile, about 20 per cent of the estblishments have been of the over KD one million capital size. Establishments of the capital range of KD 100 thousand to half a million have been getting over half of total IBK loans. Thus about 71 per cent of all IBK financed firms have capital equal to or less than half a million Kuwaiti Dinars.

Evaluation

A low interest rate on credits to industry is the kind of subsidy (incentive) for investment which is obvious,

Table 3.5 IBK loans as classified by size of capital of establishments (KD thousand)

	1975*	1976	1977	1978	1979	1980	1981	1982	1983	1984	Total	%
50-100**	6	6	4	5	7	3	-	3	6	3	43	13.1
101-500	6	8	29	15	12	24	29	19	19	21	182	55.5
501-1,000	2	3	5	1	5	5	3	3	2	7	36	11.0
1,000 & over	3	5	8	8	4	9	7	6	10	7	67	20.4
Total	17	22	46	29	28	41	39	31	37	38	328	100.0
%	5.2	6.7	14.0	8.8	8.5	12.5	11.9	9.5	11.3	11.6	-	100.0

Source: Data gathered and calculated from the annual reports of the Industrial Bank of Kuwait, 1975-1984 reports.

* 1974 figures are also included in 1975 figures

** One project with capital under KD 50,000 in 1979 is included here

attractive, and assured for the life of the loan whereas other subsidies have the potential of being reduced or withdrawn. Since the subsidy on the cost of capital - the relatively "low interest" loans - from the Kuwaiti commercial banks is not applied on a selective basis, for instance not directed towards the industrial sector specifically, its investment effect is seen to be neutral among the various domestic investment activities. However, the subsidy on the cost of capital from IBK has the effect of somewhat offsetting the commercial banks' bias against the industrial risky and long-term borrowing, and hence, will stimulate investment in the manufacturing sector.

Some economists in Kuwait have suggested that the interest rates of IBK are not greatly different than those of the commercial banks and of those pertaining in the Euro-Currency market. M. Girgis[17], for instance, gave an example of an entrepreneur who financed a project from IBK and commercial banks and showed that the price of capital in Kuwait was only about one per cent lower than what it was in 1976 and 1977 in the United States and the Euro-Currency markets. Thus, Girgis as well as Omran[18], in a comparative study of interest rates, believe that the effect of the difference in price of capital between Kuwait and abroad is insignificant.

Moreover, Omran, together with many other economists in Kuwait[19], believe that such effects could be offset by the higher cost of physical capital (plant) when installed in Kuwait, compared to a similar plant installed in the industrialised countries. The latter are well-endowed with technical experts, developed infrastructures, suitable industrial environments, etc., developments which are necessary for adequate industrialisation which place Kuwait at a comparative disadvantage.

Furthermore, the cost of imported equipments are certainly higher due to the cost of shipping, insurance, different fees and commissions, onsite modifications, etc. In addition, handicaps are manifested in low capital productivity caused by the low skill level of labour available in the local market, by unplanned shutdowns, and by a faster rate of depreciation than in western economies.

An unavoidable conclusion here is that an industrial entrepreneur in Kuwait would have no net advantage, with regard to the capital component, and in a broader sense, over competitors in industrialised countries. Therefore, the abundance of capital in Kuwait does not necessarily mean that capital is a "cheap" factor of production, especially when it is used in the context of industrial investment.

Industrial sites and areas in Kuwait

The purposes of establishing industrial areas differs between countries. In the developed countries, the main purpose is not to help and advise industries, but mainly to develop backward rural areas and regions of industrial decline such as has been the case in the United States and the United Kingdom where emphasis has been placed on moving capital to the unemployed labour force in development areas, and not vice versa. In the developing countries on the other hand, the main purpose is to create a favourable climate for industries to develop and grow, having access to all essential services, public utilities, and other requirements at relatively low cost[20].

When discussing the provision of land, factory buildings and other physical facilities as an incentive measure, a distinction should be made between an industrial estate and an industrial area. An "industrial estate" is a tract of land which is subdivided and developed according to a comprehensive plan for the use of a community of industrial enterprises. The estate provides for installation of utilities and access to transportation. It may provide factory buildings or worksheds for lease or sale[21]. The "industrial area" on the other hand, offers only improved sites as an inducement to the establishment of industries of all types and sizes. Finally, an "industrial zone" is a

part of an urban or suburban centre restricted to industrial use, on which no improvements are made. Both industrial estates and areas should be located in industrial zones[22].

Industrial sites

The Kuwaiti government gives a substantial subsidy to commercial and industrial enterprises by means of its policy on leasing industrial and commercial land and property. While it would place an impossible economic burden on commerce and industry if goverment rents were to be related to outlays on land purchase; it is clear that rents actually levied bear little relation to the market values put on some types of industrial land and buildings in property transactions between enterprises, although the exact market value cannot be assessed accurately.

The principal form of incentive given by the Kuwaiti authorities to industrialisation consists of making government owned industrial land available to sponsors of licenced industrial projects, for nominal leasing fees.

This system is effective in attracting entrepreneurs to industrial activities and in maintaining within reasonable limits the cost of industrial investment which would otherwise become prohibitively high in view of the high cost of real estate in the free market in Kuwait, as will be discussed later.

The nominal rents paid in Shuaiba area used to be 50 or 70 fils/square metre, and 5/fils square metre in Mina Abdulla area. Since January 1980, rents were increased to 150 fils/square metre in Shuaiba area, and 75 fils/square metre in Mina Abdulla, still nominal rates by local standards. All these rates are annual rents. In other industrial areas, rents vary between 50-75 fils/square metre. For early tenancy contracts concluded, leases were fixed at 50 years, but now the maximum length of a contract is 25 years, with provision made for renewal.

The drawback of the system, however, is that the implicit subsidisation of industrial investment resulting from the provision of almost cost-free plots of land, is not geared to any set of specific pre-established objectives.

The Industrial Development Committee (IDC) is the relevant government organisation in the allocation of industrial sites. When the IDC decides to licence a particular industrial project it also decides on the site to be granted.

The area of the land plot is estimated on the basis of volume of production, size of equipment and plant needed, administrative buildings, warehouses and future expansion possibilities[23]. Definition of need is an element totally dependent on the discretionary powers of the IDC members. Often the entrepreneur negotiates with the

Ministry of Commerce and Industry in order to define the actual area needed by his project[24].

On many occasions, the shape of the site has not been in accordance with the needs of the project, for example, the shape of the site might be in a rectangular form where it should be in a square form, or vice versa. Moreover, in some cases the shape has been of an "L" form. In many cases, entrepreneurs have had to change shape of plant and equipment in order for them to fit the site[25].

Industrial areas

There are presently eleven industrial areas in Kuwait making a total area of about 75 million square metres. Industrial areas can be divided into two broad divisions, (i) for light industries, and (ii) for heavy industries. Some areas also include plots for uses such as storages and warehouses. These are mainly for importers, commercial firms, contractors, and government ministries. Shuaiba apart, all industrial areas are planned and supervised by the municipality which makes its decisions concerning locations, types of industries in each area, number of plots and their areas, etc.

Table 3.6 shows the eleven industrial areas and the total area of each one. It is seen from the Table that 18.5 per cent of total industrial area is designated for

Table 3.6 Industrial areas in Kuwait (Thousand square metres)

Area	Total area		Type of industry
	Area	%	
Shuwaikh	7,637	10.2	Light industries and commercial and ministrial warehouses
Al-Rey	2,000	2.7	Light industries and medium-scale industries
Sulaibiya	2,800	3.7	Medium- and heavy-scale industries
Major contractors	2,925	3.9	Large-scale industries
Al-Jahra	926	1.2	Light industries
East Ahmadi	1,053	1.4	Light and medium-scale industries
Fahaheel	256	0.3	Light industries
Sabhan	2,000	2.7	Light- and medium-scale industries
West of Mina Abdulla	41,200	54.8	Large-scale industries
Shuaiba	8,400	11.2	Large-scale industries and mostly oil-related
Shuaiba extension	6,000	8.0	Large-scale industries
Total	75,197	100.1	

Source: Total area data: Industrial Bank of Kuwait, "Industry problems in Kuwait", (Kuwait, Industrial Bank of Kuwait, 1984), p.30.

light- and medium-scale industries, together with commercial and Ministry-owned warehouses.Large- and medium-scale industries on the other hand have been designated the remaining 81.6 per cent of the total industrial areas. An immediate conclusion here may be that small-scale industry, while being an overwhelming characteristic of the manufacturing sector in Kuwait and having by far the largest number of establishments, is placed at a disadvantage as compared with the much fewer large-scale industrial establishments, as far as the total industrial area is concerned. It is also noted from the Table that Shuaiba administration is responsible for 55.6 million square metres, i.e. 74 per cent of total industrial areas in Kuwait. Here we will discuss three industrial areas in some detail. These are chosen because they provide distinctive cases on their own as will be shown later.

Shuwaikh Industrial Area

The Shuwaikh Industrial Area was the first zone established for commercial and industrial use. It is more diversified than Shuaiba area and only about a quarter of it is occupied by manufacturing enterprises.

There is no overall administrative authority for the Shuwaikh area. Its layout was planned and is controlled by the Municipality and rents are payable to the Ministry

of Finance. The Ministry of Communication is responsible for customs and the General Authority of Ports is responsible for the Shuwaikh port, both of which form part of the zone.

Thus, firms within Shuwaikh (as well as other industrial areas except for Shuaiba) are not provided with a fully integrated service of a closed industrial area. They are rather, located in an area zoned for industry.

Given the level of rents and the upkeep to the area involved, it is clear that the government's costs in the area (excluding the rent on the land itself) are not covered. The level of this subsidy is not, however, measurable, since suitable accounts showing the costs are not kept.

Sabhan Industrial Area

Sabhan is considered to be an ideal industrial area because it is allocated to industrial projects only (as compared to commercial warehouses and other activities) and has been given special attention by policy-makers in recent years.

However, although this area was designated for industry in 1973 and the first projects established there were in 1975; infrastructural utilities were not completed even in early 1984, when this researcher undertook his field visits and interviews. Telephones were

not yet connected, canteen, police and fire protection services had not yet been provided, while more than four fifths of the area has been occupied by industries. Roads were only built in the early 1980s; likewise, piped water. Gas is not connected by pipes, rather, it is transferred to firms by 12Kg. cylinders via road vehicles.

Shuaiba Industrial Area

This area is located 50 kilometres south of Kuwait City. The Shuaiba Industrial Area was established in 1964 as an independent agency to create an infrastructure which would facilitate industrial development. The area is administered by the Public Administration of Shuaiba Area which is directly responsible to the Minister of Commerce and Industry and is represented in the Industrial Development Committee.

PASA has extensive powers and duties in planning the area's development, approving industries to be located there, fixing conditions for plant operations, and providing infrastructure and utilities.

The area was designed specifically to cater for industries relying directly or indirectly on the utilisation of oil and natural gas, to ensure the integrated use of by-products of various processes. The chemical fertilizer production plant, for example, draws raw materials from the

oil refinery located within the area.

Mina Abdulla industrial area is adjacent to Shuaiba and was added to the responsibility of PASA in 1977. Although Mina Abdulla started to be occupied by various industries in the mid-1970s, infrastructural utilities in early 1984 were not yet complete, the latest stages of this researcher's field visits. Water was being transferred by road-tankers at high costs, as will be shown later, because water pipes had not yet been connected. Roads were just being laid in early 1984. West of Mina Abdulla had been specifically designated for large-scale industries.

In accordance with government policy, PASA leases the industrial sites for long-term accommodation of projects at an annual nominal rent of 150 fils and 75 fils per square metre in the Shuaiba area and the West Mina Abdulla area, respectively[26]. Until the late 1970s this annual rent was only 50 fils per square metre in Shuaiba. Rents are directly paid to the government.

PASA provides some direct services such as sea-cooling water and marine facilities at the harbour roads at subsidised prices; and coordinates with other public authorities for the provision of power, water and natural gas. Sea-cooling water is provided at 4.69 fils/cubic metre, fresh water at 250 fils/1,000 gallons (800 fils/1,000

gallon in other areas), electricity at 1 fils/Kwh (2 fils/ Kwh in other areas), and natural gas at 260 fils/cubic foot (until 1981, it was 14 fils/cubic foot only)[27]. Natural gas prices have been tied to export prices of similar hydrocarbon prices since 1981, and receive a 70 per cent subsidy.

Evaluation

A major problem encountered by entrepreneurs in the industrial zones, according to a report[28] by the Industrial Bank, stems from the absence of any one authority in charge of ensuring the availability of basic utilities and infrastructure on time for the start-up of a project's industrial operations, except for Shuaiba, where PASA centralises the responsibility of providing utilities and maintaining facilities.

The actual hook-up of utilities main lines to a new industrial plant is at times only possible several years after the completion of the project. Indeed, this happened at least in Sabhan and West of Mina Abdulla, as mentioned earlier, as well as the Major Contracts industrial area, where entrepreneurs found themselves in desert-like areas from the point of view of the unavailability of services[29]. As a result, the Industrial Bank report notes, many industrial investors prefer to build their own water tanks (which are supplied by road tankers), autonomous electrical generators, and septic tanks to dispose of their waste.

Obviously, the situation hampers the orderly operation of existing enterprises and discourages the establishment of new ones.

Another deficiency[30] which is clearly felt in the existing industrial areas is the absence of agencies capable of providing to the industrial establishments (especially medium- and small-scale ones) required support and extension services. These include transporation and cafeteria services and, especially, housing for workers (a major problem constraining industrial development), central maintenance services, and, on general, expert assistance to trouble-shoot technical and managerial problems. A technical consultancy agency within Shuaiba, for example, to be used as a reference point for the local industries might prove to be a useful instrument in this area.

Government procurement policy

In view of the growing significance of public authorities' spending in the total of national expenditures, government procurement (purchasing) policy constitutes a significant instrument of national industrial policy[31]. Indeed, the role played by government as purchaser of goods and services can influence the development, structure, or efficiency of industry[32]. Government procurement policy could be used to promote the manufacture of new products

as well as help to encourage the standardisation of product design[33].

Where the various forms of discrimination are used in public purchasing, the subsidy is the difference between the price the public agency would have had to pay had there been no discrimination among suppliers, and the price it actually paid in order to support a domestic supplier[34].

A theoretical analysis of the effects of preferential government procurement policies was made by Brian Hindley[35]. He showed that these effects vary according to the cost conditions prevailing in the affected industry.

It should be noted that there are moral as well as practical objections to preferential procurement policies as there are to other forms of subsidies. Mainly, the costs of providing public goods and services will rise[36] with the consequent effect on the increased public spending.

In accordance with other governments, the Kuwaiti government's purchasing policy discriminates in favour of domestic suppliers. The preferential treatment and the priority given to the purchase of local products in government expenditure programmes was first stipulated in the Industrial Law of 1965.

However, it was not until 1972 when the Council of Ministers conferred a ten per cent premium on prices to domestic goods over imports. Of course, local industry may

still lose in bidding because of quality differences, or the size of orders in spite of the ten per cent price preference[37].

However, it is believed that importers as well as foreign exporters have been able to absorb the ten per cent premium, and have therefore, undercut local producers[38]. Therefore, a report of a sub-committee which was set-up by the Industrial Development Committee[39] suggested a range of 20 to 30 per cent to be applied as a premium and to change in accordance with the nature of products involved in the tenders.

It is alleged that government agencies often specify detailed standards which are only available in foreign-produced products while their Kuwaiti alternatives have specifications slightly different than those of the foreign-produced[40]. This in turn will neutralise the effects of the ten per cent preference.

The Council of Ministers decided in April 1984 to commit the international contractors to purchase their requirements of materials and equipments from the domestic market. However, this has not been translated into a clear policy by the different ministries and government agencies[41]. Therefore, international contractors operating in the Kuwaiti markets have been importing all their needs. The lack of such commitments have caused great difficulties

for industrial firms in the construction sub-sector specifically.

The Gulf Cables and Electrical Industries Company have been cited in particular to be facing marketing difficulties in the government projects for electrical cables. This is so mainly because of a lack of commitment on the part of international contractors as well as a clearly defined policy by the Ministry of Electricity and Water[42].

Customs duty protection

Protection has caused a great deal of discussion and analysis in international trade theory. Some economists argue that protection is beneficial to overcome cost disadvantages, balance of payments problems, unemployment, etc. Other economists on the other hand, believe that such protection creates various distortions in international trade, adversely affecting particular industries, giving rise to market distortions and entails a decrease in world welfare.

However, most of the industrialisation of the industrially developed countries took place behind high-tariff walls and tight quota systems. The Japanese market, for instance, is still considered to be a "closed market". Moreover, most developing countries opted to protect infant industries in the 1950s because it seemed the most practical

approach to promoting industrialisation[43]. For instance, a World Bank report[44] noted that "A certain degree of protection for infant industries is a normal and often indispensable initial phase in the industrialisation process".

Protection arguments in Kuwait

Because the Kuwaiti economy is a free enterprise economy, its markets are free and open, thus, merchants can import goods of any quantity and type from many different countries without any official limits whether direct or indirect. This characteristic of the Kuwaiti economy has been considered as a main constraint on the development of Kuwaiti industry and has caused demands for protection.

The infant industry case has been used as one of the main arguments for the protection of industry in Kuwait on the grounds that infant industries often make losses to begin with. A government-formed committee[45] reported that the high-cost of establishing infant industrial plants in Kuwait, as compared with the cost of establishing similar plants in the industrialised countries, is the most important argument for protecting domestic industry. For instance, a Kuwait Chamber of Commerce and Industry report estimated that setting-up costs are 20-40% higher in Kuwait than they are in the industrialised countries[46]. In addition, operational costs, for various reasons, are

often higher in the early stages of production.

A counter argument, also in Kuwait, is that if the potential profits of infant industries after they "pass" their infancy stage are certain, and since access to "adequate" local capital is feasible without difficulty, then such industries could cover their temporary losses through fund raising from the local capital market. Obviously, the counter-argument is not without its weak points, as for instance, how temporary can "temporary" losses be?

Another argument for protection is that it is more likely to encourage private capital to be drawn into the industrial sector than would otherwise happen.

Moreover, import-substitution industries face many problems of local acceptance as a result of consumer preference for imported goods because of the historical dependence on imports. Therefore, protection is said to be needed to either "modify" such preferences in favour of locally produced goods, or to at least neutralise it. However, the relatively high income enjoyed by the inhabitants might reduce this effect of protection measures. Although this is more true for the higher wages' class than the lower one.

An industrial bank economist notes that the 30 per cent protection tariff granted to the plastic-related industries is not sufficient to offset the severe competition from Southeast Asian countries, especially Korea and Taiwan who subsidise their industries[50].

A major constraint which hampers the effects of tariff protection measures, it is argued, is the over-valued exchange rate (trade-wise) of the Kuwaiti Dinar. Indeed, this implies a further reduction in the economic size of the market[51]. The exchange value of the Kuwaiti Dinar is relatively high vis-a-vis the dollar being determined primarily by the high value of oil exports and foreign reserves. The effect of this, however, is discrimination against non-oil exports and the encouragement of imports[52]. The price effect of the exchange rate, thus, runs contrary to the effect of import protection duty and reduces import prices while increasing export prices.

However, in what seems to be a major change of direction in the policy-makers' intentions as regards customs protection is a recent (12th August 1985) press conference by the Minister of Oil and Industry in which he said that the mistake of imposing more protection than needed is better than the mistake of giving less protection than required. He also said that the Council of Ministers has given the Industrial Development Committee increased

authorities to grant customs duty protection to more industries. Moreover, it was said that for consumers to pay higher prices to locally produced goods is a national duty[53]. To be able to evaluate the directions and effects of these new policies will need some time.

Export subsidies

The focus of incentives available in Kuwait has been directed to the development of industry in general rather than specifically oriented toward export. Furthermore, while the incentives are generally available, the approval of specific measures is on a case-by-case basis and varies widely, as has been mentioned earlier. In some cases these incentives may even discourage exports. For instance, many of the manufacturing firms were established initially to serve the domestic market. In many cases, just at the time firms are considering expanding into export activities, the eligible incentive period is about to run out.

Article No. 4 of the Industrial Law of 1965 permits the Minister of Commerce and Industry to exempt the export products of local industry from all duties and export taxes. Since then, many orders have been issued by the Council of Ministers exempting local exports from the payment of export duties. The last such order was issued in February 1984 with a five year exemption period[54]. It is worth

mentioning that the export duties in Kuwait, which are paid by re-exports, are 2 per cent on goods destined for Arab countries and 4 per cent if destined for non-Arab countries[55].

Another method of promoting exports, but which has been used on a very limited basis, is that of trying to tie the government's foreign aid programmes to the purchase of locally produced goods. Financed through bilateral credits for exports to public buyers in developing countries, this scheme if applied properly could prove to be very beneficial in the promotion of the local manufacturing industry by the provision of the expanded markets. However, it has been used only once or twice by the government. The one case which has been publicised was a deal with Sudan in 1976/77 where the latter bought Kuwaiti-produced pipes as part of an aid deal.

Some industrialists believe that Kuwait's foreign investment should be directed in such a way as to allow domestic industry access to new technology, to industrial activities that could be transferred in time to Kuwait, and to activities in the third world that could be tied-in to the end-processing activities within Kuwait[56].

Customs duty exemption

Customs duties in Kuwait are assessed *ad valorem* on the cost and freight value, and in most cases are levied at the standard rate of 4 per cent. Goods exempt from customs duties include foodstuffs, livestock, animal feed, seeds, books, and all government and oil companies' imports.

The Council of Ministers in 1976 laid down rules and regulations organising the bases on which exemptions may be granted. These are as follows:

1. Imports by new industries of machines, equipment, raw materials, packaging materials and spare parts will be exempted for five years.
2. Imports of machines and equipment by existing establishments for the purpose of substituting depreciated ones will be exempted only if the new return on investment of such industries does not exceed 15 per cent.

Table 3.7 illustrates the customs duty exemptions of the imports of industrial establishments. The exemption amounts are in each case four per cent of the value of imports of the industrial establishments. It is clear from the value of these exemptions being only a relatively small proportion of the full amount which each firm has to pay, for example on KD 50,000 imports the exemption will amount to KD 2,000.

Thus the subsidy element, although required in its own

Table 3.7 Customs duty exemptions of the imports of industrial establishments (KD Million)

Exempted materials	1967-75	1977	1978	1979	1980	1981	1982	1983	Total
Machines & capital equipments	1.9	1.1	1.2	1.5	0.6	1.6	2.6	1.9	12.4
Raw & packing materials	4.0	1.1	0.8	0.6	2.1	1.2	3.0	2.3	15.1
Spare parts	0.9	0.2	0.1	0.1	0.8	0.1	0.3	0.3	2.8
Total	6.8	2.4	2.1	2.2	3.5	2.9	5.9	4.5	30.3
Total value of imports	170	58.3	53.1	45.7	87.5	71.7	147.5	112.8	746.6

Source: (1) Ministry of Commerce and Industry, 1977 and 1983 annual reports.

(2) Al-Zayed, A.; "Government subsidy and industrial development", (Industry symposium in Kuwait, 10-12 December, 1983 "for the 1967-75 figures)

* Some discrepancies have been unavoidable as a result of roundings.

right, is negligible. Especially if we add to this the routine and paper work procedures that are involved which make this subsidy a not worth the "hassle" one. Indeed many entrepreneurs and managers of industrial enterprises have told the researcher that they simply do not apply for exemption because it will cost them more. Of course, if the customs duty was higher than the present tariff of four per cent, the reaction would have been different. Total amounts of customs exemption for the whole period from 1967-83 (except 1976) was about KD 30 million against total imports of about KD 747 million.

An industrial entrepreneur said that often imports reach Kuwaiti ports while exemption procedures have not yet been completed, therefore he has to clear them by paying the duties and then wait for a refund from the Ministry of Finance(57). This results in more paper work procedures and waste of time and effort. Moreover it causes the firm to freeze some of its funds for a few months and not be able to use it in its other purposes.

In 1980, 186 industrial firms requested exemption, out of which 159 requests were accepted while 27 requests were rejected(58). Thus, 14.5 per cent were rejected. The Customs Duty Exemptions Division at the Ministry of Commerce and Industry, or the Industrial Development Committee are not required by law to explain reasons for rejections.

The relation that exists between the provision of the subsidy and the low rate of net return on investment appears to be a reward which is provided only to the inefficient producer. The already established industries can continue to benefit from customs duty exemptions on their imports of raw and packaging materials and spare parts, according to the regulations, only if their net return on investment is 15 per cent or less. Thus, many efficient producers with the potential for further expansion toward their optimal output are deprived of such a subsidy only because their net return on investment is higher than 15 per cent.

Notes

Chapter Three

The Kuwaiti Government subsidies policy

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CHAPTER FOUR

METHODOLOGY AND RESEARCH DESIGN

Introduction

This chapter explains the general procedures utilised in setting-up the research study and the empirical data obtained through field research in Kuwait. The study relies on secondary and primary data. The limited secondary data has been mainly presented in chapters two and three. Secondary data was compiled from the records of government agencies and institutions consulted in Kuwait in the preliminary stages of the research. The primary data was collected by using a questionnaire study, which is considered to be the main tool for gathering information about the effects of subsidies on manufacturing industry in Kuwait.

During the planning stage of the research, it was felt that there were very few reliable investigations and little information about industrial firms in Kuwait. Therefore, it became evident that the information required to fulfil the aims of this research could only be obtained through questionnaires to be filled in by the establishments' managers themselves. According to Sellitz[1], the questionnaire may be especially beneficial to a person who seeks information about what he knows or believes; or about

explanations for any of these. Others such as Mason and Bramble[2] argue that a questionnaire has the advantage of increasing the volume of data collected, and at the same time it gives respondents more freedom for expressing their points of view.

The approach used in this study was the mail questionnaire, in spite of the newness of the questionnaire technique in Kuwait. The device was decided upon as a matter of convenience. Its advantage was obvious. It made it possible to approach the sample firms selected for the purpose of this study relatively quickly and inexpensively as compared to interviews of all potential respondents.

According to Lund[3], the main motivation and justification for questionnaire studies is a desire to observe the "real" world and to get the "feel" of the practices of actual businessmen, to avoid the "mechanistic" view of the world sometimes ascribed to the model-building approach, and to obtain additional (new in the case of Kuwait) statistical information.

However, questionnaire surveys have their own limitations. Some of these limitations, such as unrepresentative sample selection, inadequate sample size, or failure to correctly weight the replies of individual respondents, may be avoided by careful research practices. Other limitations, such as low response rates, may be

avoided by a combination of authoritative sponsorship, persuasion and good fortune; whilst others such as the importance of the precise wordings of questions and the choice of person to whom the questions are addressed, appear to be virtually inherent in this type of study.

Sampling procedures

After evaluating the results of the pilot study, which arediscussed below, a final sampling strategy was derived. The characteristics of this strategy are given below.

(1) Definition of Population. The population was defined to include firms of all industrial sectors operating in Kuwait. Since this study is directed towards the private industrial sector, public corporations and other industrial activities that are carried out directly by government departments (e.g power generation) have been excluded from the study. The mixed-sector, discussed in chapter 2, has been treated as belonging to the private sector because it is dealt with in the same manner by the Ministry of Finance and government agencies in general.

(2) Sampling Frame Used. The sample was selected from a list published in 1983 by the Ministry of Commerce and Industry, which included the names, addresses, and telephone numbers of all licenced industrial companies established in Kuwait.

(3) Sampling Unit Used. Manufacturing firms obtaining industrial licences from the Ministry of Commerce and Industry.

(4) Sampling Method Used. The probability sampling method was used in this study, where the sample was selected by use of a stable, independent data generating process. More specifically, a systematic probability sampling method was used. This involves picking a random starting point and then taking every Kth unit in the frame. An example where K would be equal to 100 is when the systematic sample would be taken by starting at a randomly selected number between 001 and 100 and then taking every 100th name on the list. In general terms, K is equal to the number of sample units (N) divided by the sample size in units (n) or $K = N/n$.

(5) Selection of Sample Units. This was made arbitrarily by pointing a blind finger to the above mentioned Ministry of Commerce and Industry's Industrial List. Thus, firm number 17 on the list was pointed at first, hence it was chosen as the starting point. Selection went down the list by skipping one and taking the other.

(6) Desired Sample Size. A sample of 100 completed questionnaires was specified to be sufficient for the provision of the required data. However, due to the fact that there is a relatively small number of industrial firms established in Kuwait, and because of the relatively low

cost of the mail questionnaire; 256 firms were selected from the 528 companies' MCI list. Thus, these firms were chosen to constitute the potential sample of the survey.

Assuming optimistically a 50 per cent return to the questionnaire, it was thought that the resultant total would be sufficient to allow cross-sector comparisons to be undertaken, in order to make the study manageable by one person, within a reasonable period of time.

The Field work

The survey was administered by the researcher himself and was conducted in Kuwait in December 1983-January 1984.

In total, two hundred and fifty six (256) questionnaires were sent out. They were distributed by the researcher by hand to the secretaries of the general managers of the firms. Each questionnaire was enclosed with a return envelope addressed to the researcher and a covering letter explaining the reason for the study and encouraging the recipients to fill out the questionnaire as promptly as possible.

In addition, the top managements of twenty nine companies were interviewed by the researcher through personal approach to each company, but answers were sent by the pre-paid envelopes provided. Valuable information was obtained from these interviews, information from which has already been included in the text, throughout. A total of 132 other

replies were received by return mail giving a total of 161 responses. Thus, the response rate was 62.9 per cent of all the questionnaires sent out.

Although 37.1 per cent of the firms did not reply, however, the 161 respondent companies represented 30.5 per cent of all industrial firms operating in Kuwait in 1983. This is an acceptable percentage of the total population for the purposes of the study. In spite of that, the failure of some respondents to reply to the whole of the questionnaire should not pass through unnoticed and may be a problem because individuals who are difficult to contact or who are reluctant to cooperate will differ, on at least some characteristics, from those who are relatively easy to contact or who readily cooperate(4). It has been noted that, in general, the lower the response rate to a survey, the higher is the probability of nonresponse error(5).

In the case of this survey, the response rate of 63 per cent is considered to be high by many statisticians, especially for this type of study and lessens cause for concern. That in this study we will use the data as being representative of the whole population of firms, in common with other researchers, despite the problems caused by non-response.

Total responses are summarised in Table 4.1. It is noted that while 7.5 per cent of the respondents belong to

the mixed sector, the overwhelming majority of 92.5 per cent fall in the wholly private sector.

Table 4.1 The ownership structure of the respondent firms in the sample

Ownership	No.	%
Mixed sector	12	7.5
Private sector	149	92.5
Total	161	100.0

A cover letter together with a letter from the head of the Management Department of Kuwait University was sent to the general managers of each firm involved in the study, asking for their permission and cooperation. However, the head of the faculty in the university had no authority over these firms.

In order to minimise bias, the introductory explanation emphasised that the questionnaire would be confidential, that no names need be attached, and that feedback as to brief overall results would be sent later to those participants on their request, upon the availability of the results. Respondents were also encouraged to remain completely anonymous in filling out the questionnaire, so that they could answer questions honestly and freely, and

provide accurate information.

In all cases, respondents were assured of their anonymity, in fact, the instructions on the questionnaire pointed out that there were no right or wrong answers. At the same time, respondents were asked to feel free to add comments or explanations. Therefore, the comments which were added reflect both the participants' seriousness in their responses to the questionnaire and their understanding of the questions.

Pilot studies

After the initial questionnaire was formulated, it was decided to pilot it on a small scale so as to find out whether individuals filling-in the questionnaire understood the questions as intended, and to have a general idea of how long it took to complete. In other words, an attempt was made to identify the weak points of the questionnaire before it was used in the main survey.

The pilot test was carried out in two ways: First, the researcher contacted two university academics in the Economics Department of Kuwait University, two economics experts in the Industrial Bank of Kuwait, an economics professor at the Kuwait Chamber of Commerce and Industry, and an expert on the issue of subsidies in Kuwait - a former Ministry of Planning under-secretary and member of the

Industrial Development Committee.

Second, nine establishments were approached where prior appointments were made with their top managements. Five interviews were made with general managers, three with financial managers, and one with a personnel manager. The researcher was referred to the latter four by top management and not by his request. As a result, modifications were made, particularly in the expressions, in an effort to eliminate ambiguities.

Originally the questionnaire had a length of nine pages (as compared to five pages when it was finally distributed). In that form, however, it was feared that the questionnaire might appear too burdensome and time consuming to be filled-out. This could affect the response rate and impair the quality of the research findings.

Although the interest the recipient of a questionnaire takes in the subject under investigation is an important factor in the decision to respond, the format of the questionnaire also was felt to have a bearing on the response rate. An effort was made to compact the questionnaire in terms of content and layout to reduce its length as far as possible and feasible. This included a condensation of questions wherever possible. Also, a 20 per cent reduction in the size of typing made more space available while affecting the readability of the text only marginally.

The Questionnaire

The questionnaire was designed to gather information about items which arose from the survey of literature as applied to the case of Kuwait. Thus, most items on the questionnaire were developed by the researcher based on his perception of important research areas.

Altogether the questionnaire contained fifty nine items (see Appendix B), some of which were concerned with wider issues, although the bulk of the questions were directly related to the problem of subsidies. Those items included in the questionnaire were designed to make possible an analysis of relationships among the elements and other related variables. The order of the questions was such that the information deemed most vital to the study was requested first, and those items which were conceptually related were in the same or adjacent sections.

The questionnaire was constructed so that it would hopefully be easily understood. The questions themselves were mostly multiple choice, which in turn had the advantage of being easier and relatively quicker to answer[6], e.g. see Appendix B. In fact, this type of question requires no writing and questions can be answered often within a reasonably short period of time. Most of the questions were closed-ended, requiring a simple tick in an appropriate box. Questions were also worded to achieve

consistency of expression.

Some of the questions required the respondent to choose among a previously defined number of points in replying to the concerned question. It was thought that in this way he would spend minimum time in answering as compared to the respondent's personal feeling of the importance of the hierarchy of points. Other questions concerned with asking for detailed figures employed a lining (_____) technique which was used at the end of each question to provide what was thought to be the appropriate space required.

The final questionnaire which was sent to companies consisted of seven main areas, each one integrated into a separate section. The first section involved the asking of specific information about the firm itself. These included the firms' year of establishment, industrial activity, total capital employed, location, area of industrial land, labour size as to its Kuwaiti and non-Kuwaiti components, and the different utilities bills paid by the concerned firm. It should be noted that these data, in addition to providing general information about the firm, were very important and crucial in the calculation of subsidies obtained by each firm.

The second section concerned itself with financial issues and whether the firm faced difficulties in obtaining the finance it requires. Questions were asked regarding attitudes towards the suitability of the industrial bank's

loan terms. These were yes or no questions where each one was immediately followed by an open-ended question asking the respondent to provide what he thought to be the most suitable loan and grace periods as well as interest rates.

The third section was related to the issue of land and whether its plot was large enough for the needs of the firm. Other items in this section concerned the suitability of the plot area as in relation to the future expansion programmes of the firm, and whether there were any unused adjacent free land that could be used by the firm in future. All of these were questions which had yes or no answers. In order to gain some idea about the real effect of the land subsidy, questions were asked concerning land that was leased on a commercial basis and the amounts of rents that were paid, if any.

The fourth section contained items related to the issue of customs duty protection. Questions about the firms' estimates of their market shares were asked. Also, the respondent was asked, where applicable, what rate of duty he thought most realistic and suitable for the firm's products, and hence, what he perceived its market share would become under such a duty. It was hoped that this would give some feeling of the "best" tariff rate from the industrialists' points of view, and how realistic this would be. A hypothetical tariff of 50 per cent was set and

all the concerned firms were asked what they felt their market shares would become in such circumstances.

The fifth section was concerned with the issue of public purchasing. Items included the firms' estimates of their share of total governmental purchases of their types of products, and the percentage that they could actually supply of such purchases. In cases these purchases were less than an establishment thought that it could supply, the firm was asked what were the perceived reasons for this. A number of items were listed of which the respondent was instructed not to choose more than three, if any. Finally, three items were included concerning the ten per cent preference granted to local industries as compared to foreign enterprises in public tenders. The respondent was asked whether he thought that this preference rate was actually applied, and if it was enough. In addition, if the respondent thought that this rate of preference was too low he was required to propose the rate which would be necessary for it to be effective.

The sixth section concerned the issue of subsidies in Kuwait in general, and their various effects on the firms' profitability and market share. Also, items were related to the effects of subsidies in counteracting difficulties faced by industry in Kuwait and the firms' attitude concerning the effectiveness of the subsidies in attracting

private capital into the industrial sector. A list of twelve items together with space for a thirteenth one - for comments to be added by the firm - were provided concerning different types of assistance. From this list the firm was asked to choose the most important form of assistance but that the number chosen should not exceed five.

The final section of the questionnaire contained a list of twenty items, out of which the respondent had the choice of selecting not more than ten, concerning the various difficulties that are perceived to face industrial establishments in Kuwait. An open-ended question was also included giving the respondent an opportunity and incentive to add any difficulties that were not included in the list. The questionnaire was concluded with a final question asking the respondents to propose any system of subsidues which they thought to be the most effective in promoting their industry.

A number of the returned questionnaires contained letters or notes. Two main types of comments were conveyed through these messages. One group of firms communicated their feelings that such a study had long been needed and that they were highly interested in the results. Most of those firms were concerned with the lack of assistance given to them by the Kuwaiti government. The other group of firms stated their distrust of government intentions and the uselessness of any industrial undertaking. Although the

opinions were divided, the arrival of 13 letters and notes seems to indicate that a sensitive issue had been raised with the respondents.

Analysis preparation

The returned questionnaires were stored on a computer file using the CDC 7600 at the University of Manchester Regional Computer Centre (UMRCC). The system was changed later to AMDAHL when all calculations were halfway through. This caused a two months delay when the researcher had to learn the new computer procedures.

Initially a total of 89 variables were coded and key punched on computer cards. For verification purposes the data was repunched to check for errors. All cards were also hand checked against the original questionnaire data to look for coding errors.

It should be noted that all forms of analysis in this thesis were made by using the Statistical Package for the Social Sciences (SPSS) computer programme.

SPSS computer programming can be described as an integrated system of computer programmes designed for the analysis of social science data. Along with the basic descriptive statistics such as, one-way frequency distributions, measures of central tendency and dispersion, and crosstabulations between two or more variables, SPSS

contains programmes for a host of other statistical procedures and measures. In addition to being used in conjunction with any of the statistical procedures, data management facilities can be employed to modify a file of data permanently. By use of these facilities, the user is able to generate new variables which are mathematical and/or logical combinations of existing variables, to recode variables, and to sample, select, or weight specified cases. Finally, the user can easily manipulate the data cases or the data-descriptional information in the file, such as labels, missing value codes, etc. In general then, SPSS provides a unified and comprehensive package that enables the user to carry out many different forms of data analysis in a simple and convenient manner(7). Accordingly, all these facilities were utilised in order to obtain the mathematical inferences and other characteristics relationships which are presented in Chapters five, six and seven.

Notes

Chapter Four

Methodology and research design

(1) Sellitz, C. et al.; "Research method in the social relations", (New York: Hold, 1959).

(2) Mason, E. and W. Bramble; "Understanding conducting research: applications in education and behaviour sciences", (New York: McGraw-Hill, 1978).

(3) Lund, P.J.; "The econometric assessment of the impact of investment incentives", in Whiting, A.(ed.); "The economics of industrial subsidies", (London: HM Stationary Office, 1976), p. 246.

(4) Tull, D.S. and D.I. Hawkins; "Marketing research: measurement and method - a text with cases", (New York: Macmillan, 1984, 3rd. ed.), p. 41.

(5) Ibid., p.140.

(6) Oppenheim, A.; "Questionnaire design and attitude measurement", (New York: Heinemann, 1966).

(7) Nie, N. et al.; "Statistical Package for the Social Sciences", (New York: McGraw-Hill, 1975, 2nd.ed.), p. 1.

CHAPTER FIVE

MEASURABLE SUBSIDIES

Introduction

There are mainly two types of subsidies which are provided in Kuwait; namely, measureable and non-measurable subsidies. While measurable subsidies include electricity, water, gasolene, kerosene, gas oil, liquid gas and land subsidies, non-measurable subsidies include subsidised loans, trade protection, exemption of customs duties and government purchasing preference of the locally produced goods. This chapter is concerned with the measurable subsidies.

Section 1

Electricity subsidy

Electricity is one of the main services provided by the state which is subsidised across the whole economy. The average cost of electricity generation and distribution was 29.07 fils/Kwh in 1982, as mentioned in Chapter 3. The price which is charged to all users, on the other hand is 2 fils/Kwh, except for industries located in Shuaiba who get it for 1 fils/Kwh (for simplicity reasons and because only a few firms in the sample are located in Shuaiba, all our calculations of the electricity issue will be based on the 2 fils/Kwh price base).

Table 5.1 illustrates the relationship between firm size as measured by its total labour structure and the average electricity bill and electricity bill per worker which are paid by the firm. It is noted from the Table that the "smaller" firms pay, on average, lower electricity bills than the larger ones, i.e.KD 875 as compared to KD 8,444, respectively. However, it is noted that from an electricity bill per worker point of view, smaller firms are seen to pay, on average, higher electricity bills than the larger ones, i.e.KD 33 as compared to KD 23, respectively.

Table 5.1 Relationship between electricity bills and electricity bills per worker and firms labour size

Size of labour force	No. of firms	Elect.bill (Average per firm)	Elect.bill per worker (Average per firm)
8-50	73	875	33.1
51-100	31	1,723	23.6
101-200	28	4,592	32.5
201-1,000	29	8,444	23.2
Total/Average	161	3,048	29.4

Furthermore, it is noted from Table 5.1 that the statistical median electricity bill (the number exactly in the middle of the frequency of electricity bills) is KD 1,100. It was found from the frequencies table in the computer output that 78 firms, 48.4 per cent of the total, had electricity bills equal to or less than KD 1,100.

By knowing the electricity bill of the firm, electricity price and electricity cost of production as borne by the Ministry of Electricity and Water (MEW), we were able to calculate the electricity subsidy for each firm. By dividing the electricity bill by 2 fils/Kwh (price paid by the firm) we could calculate the amount of electricity units (Kwh) used by the firm. Multiplying the resulting figure by 29.07 fils (the cost of electricity production by MEW) the total MEW cost of generating the electricity used by the firm will be known. Deducting the firm's electricity bill from this figure, the amount of electricity subsidy involved will be known. This description is summarised in the following equation:

$$\text{Electricity subsidy} = \frac{\text{Electricity bill (fils)}}{\text{2 fils}} \times 29.07 \text{ fils}$$

$$- \text{Electricity bill (fils)} \ldots \qquad (1)$$

It should be noted that comparing electricity cost (electricity bill) of the firm to its total cost structure would be the most efficient method of knowing the real importance of the electricity subsidy to the firm. However, it was noted from the pilot testing stage of the questionnaire that firms were very reluctant in providing data concerning their total costs or revenues. Accordingly, it was felt that any questions regarding costs had to be removed from the final questionnaire. In view of the lack of this important information, alternatives had to be found in order to provide some kind of measure. One such alternative is to compare the electricity bill of the firm with what it would cost MEW to produce that amount of electricity. In addition, the total electricity subsidy may be considered as another measure, but one which is somewhat similar to MEW cost of production. The electricity subsidy element is the measure which will be given major attention in our subsequent discussions because it constitutes part of the subject matter of this study, subsidies.

Table 5.2 illustrates electricity bill, electricity subsidy and the MEW cost of generating the electricity which is used by the firm. It is obvious from the Table that electricity prices are indeed substantially subsidised. Firms which paid electricity bills of the average KD 208 were subsidised in reality by an average of KD 2,812. The

Table 5.2 Electricity bill, electricity subsidy and MEW cost of generating the used electricity (KD)

Electricity bill (KD)		Electricity subsidy* (KD)		MEW cost of generating the* used electricity (KD)		No. of firms
Range	Average	Range	Average	Range	Average	
100-300	207.8	1,300-4,100	2,812.4	1,400-4,400	3,020.2	19
301-500	438.4	4,101-7,000	5,934.2	4,401-8,000	6,372.6	19
501-1,000	811.5	7,001-14,000	10,983.8	8,001-15,000	11,795.5	32
1,001-1,500	1,285.2	14,001-21,000	17,395.8	15,001-22,000	18,681.0	22
1,501-2,000	1,898.6	21,001-27,000	25,698.1	22,001-29,000	27,596.8	14
2,001-5,000	3,594.1	27,001-70,000	48,646.0	29,001-75,000	52,240.1	23
5,001-10,000	7,095.8	70,001-115,000	96,041.4	75,001-124,000	103,137.1	9
10,001-15,000	12,235.1	139,000-204,000	165,602.2	124,001-220,000	177,837.3	9
24,000-60,000	35,250.0	324,000-813,000	477,108.8	340,000-873,000	512,358.8	4

*Figures of the range columns of electricity subsidy and MEW cost of generating the used electricity do not correspond exactly to the electricity bill range figures because of an attempt to modify the former range figures in a compact manner. However, they have been done consistently.

involved average electricity subsidy reached approximately half a million KD for firms which used more electricity and paid an average electricity bill of KD 35,250. Moreover, the actual cost incurred by MEW to generate this electricity exceeded half a million KD, reaching in one case KD 873,000. Obviously, if firms were charged the actual costs incurred by MEW, their financial positions would be greatly affected and it is doubtful whether they could continue to exist in such circumstances. This point will be probed more deeply as our discussion develops.

Table 5.3 illustrates the relationship between total labour and electricity subsidy, electricity subsidy per worker and electricity subsidy as a percentage of total capital employed (defined on p. 301). It is seen from the Table that, in absolute terms, average electricity subsidy increased from KD 11,845 for the smaller firms to KD 114,291 for the larger ones. It is also noted from the Table that electricity subsidy median is KD 14,883. Thus, about half of the firms receive less than KD 15,000 in electricity subsidies, each; despite the fact that the overall average is KD 41,256.

However, when electricity subsidy was measured in relation to firm size (electricity subsidy per worker) it was noted that smaller firms enjoyed higher electricity subsidies than did the larger ones. Indeed, while firms

Table 5.3 Relationship between electricity subsidy and electricity subsidy per worker and firms labour size

Size of Labour Force	No. of firms	Elect.sub. (Average KD per firm)	Elect.sub. per worker (Average KD)	Elect.sub. % total capital	
				No.of firms	Average %
8-50	73	11,844.6	448.1	71	3.8
51-100	31	23,316.0	319.7	30	3.1
101-200	28	62,154.2	440.0	28	4.2
201-1,000	29	114,291.4	314.3	26	2.3
Total/ Average	161	41,256.0	397.9	155	3.5

of the 8-50 persons size category received average electricity subsidy per worker of KD 448; firms of the 201-1,000 persons size category received average electricity subsidy per worker of KD 314, i.e. 70 per cent of the former one. It is also noted from the Table that electricity subsidy per worker median is found to be KD 224. Thus, about half of the firms receive less than KD 225 in electricity subsidy per worker, each; despite the fact that the overall average is KD 398.

The above observations regarding electricity subsidy per worker are further illustrated in Table 5.4. It is noted from this Table that while 30 per cent of the 8-50

Table 5.4 Relationship between electricity subsidy per worker and firms labour size (KD)

Subsidy (KD)

Size of labour force		10-200	201-500	501-1,000	1,001-3,000	Total
8-50	No.	20	26	15	6	67
	%	29.8	38.8	22.4	10.00	100.0
51-100	No.	12	10	5	2	29
	%	41.4	34.5	17.2	6.9	100.0
101-200	No.	15	5	3	5	28
	%	53.5	17.9	10.7	17.9	100.0
201-1,000	No.	15	5	5	2	27
	%	55.6	18.5	18.5	7.4	100.0
Total	No.	62	46	28	15	151
	%	41.1	30.5	18.5	9.9	100.0

persons category firms receive between KD 10-200 electricity subsidy per worker; 56 per cent of the 201-1,000 persons category firms fall in the same "low" electricity subsidy per worker. Moreover, while 32 per cent of the 8-50 persons category firms receive between KD 501-3,000 electricity subsidy per worker; 26 per cent of the 201-1,000 persons category firms fall in the same "high" electricity subsidy per worker. A similar trend is noted for the 101-200 persons category firms where 54 per cent of the firms fall in the KD 10-200 electricity subsidy per worker category; and 29 per cent of the firms falling in the KD 501-3,000 electricity subsidy per worker.

Accordingly, in percentage terms, more smaller firms receive higher electricity subsidies per worker as compared to larger firms.

In addition, as illustrated in Table 5.3, when electricity subsidy was measured as a percentage of total capital employed, it was found that smaller firms, on average, still benefited of more electricity subsidies than did the larger ones. While firms of the 8-50 persons size category received, on average, electricity subsidy of 3.8% of their total capital employed; firms of the 201-1,000 persons category size had average electricity subsidies of 2.3%, i.e. 61 per cent of the former group's average. It is also noted that the median value of electricity subsidy as a percentage of total capital employed is 0.25%. Thus, although, the overall average is 3.5%, about half of the firms receive electricity subsidies as a percentage of their total capital employed of less than 0.26%.

In order to further illustrate the above observations, the various relationships between electricity subsidy as a percentage of total capital employed and the total capital employed by the respondent firms will be manipulated.

It is seen from Table 5.5 that while in total, 77 per cent of the electricity subsidy as a percentage of total capital of the 1% category are of the larger firms (over KD one million); 91 per cent of the over 10% category are

Table 5.5 Relationship between electricity subsidy as a percentage of total capital employed and total capital employed

Elect.sub.% total capital		1-500 (KD th)	501-1,000 (KD th)	1,001-5,000 (KD th)	Over 5,000 (KD th)	Capital Total
1%	No.	4	5	22	8	39
	%	10.3	12.8	56.4	20.5	100.0
2%	No.	15	7	11	3	36
	%	41.7	19.4	30.6	8.3	100.0
3-5%	No.	15	11	13	4	43
	%	34.9	25.6	30.2	9.3	100.0
6-10%	No.	13	2	-	1	16
	%	81.3	12.5	-	6.2	100.0
Over 10%	No.	6	4	1	-	11
	%	54.5	36.4	9.1	-	100.0
Total	No.	53	29	47	16	145
Elect.sub.% total capital (Average)	KD	5.2	4.2	1.9	1.3	3.5
Elect.bill per worker (Average)	No.	57	31	49	18	155
	KD	27.2	34.8	27.1	38.9	30.0
Elect.sub. per worker (Average)	KD	368	471	366	526	406

of the smaller firms (less than or equal to KD one million). Also, 94 per cent of the 6-10% category are of the smaller firms group.

Moreover, average electricity subsidy as a percentage

of total capital employed is noted to be four times greater than for the smaller total capital group of firms than the larger one. It is also noted that while firms of the total capital employed category KD 1-500 thousand had average electricity subsidy as a percentage of total capital of 5.2%, firms of the category of over KD five million had a percentage of 1.3%, i.e. a quarter of that of the former one.

In addition, while the over KD five million total capital firms receive, on average, the highest electricity subsidy per worker, the KD one to five million total capital firms receive, on average, less electricity subsidy per worker than the KD 501-1,000 thousand category.

Table 5.6 summarises the electricity subsidy measured as a percentage of total utilities subsidies (total subsidies variable is defined on p. 255). It is seen from the Table that while 21 per cent of the firms' electricity subsidy constitutes up to 50% of the total utilities subsidies which they benefit from, the remaining 79 per cent of the firms' electricity subsidy constitutes more than 50% of the total utilities subsidies which they benefit from. Moreover, 39 per cent of the firms' electricity subsidy constitutes more than 80% of the total utilities subsidies which they receive. Accordingly, electricity subsidy, apart from land subsidy, is the form of subsidy which is more received by the industrial firms as compared

Table 5.6 Electricity subsidy as a percentage of total utilities subsidies

Percentage	No. of firms	%	Cumulative %
8-30%	10	6.7	6.7
31-50	21	14.1	20.8
51-70	32	21.5	42.3
71-80	28	18.8	61.1
81-90	29	19.5	80.6
91-95	23	15.4	96.0
96-99	6	4.0	100.0
Total	149	100.0	-

Mean = 66.4
Median = 74.1

to the other forms of subsidies which are of the direct form and that can be readily quantifiable, i.e. water, fuel and land subsidies as compared to trade protection, etc.

Table 5.7 illustrates the relationship between total capital employed per worker and electricity bill per worker, electricity subsidy per worker, electricity subsidy as a percentage of total capital employed and electricity subsidy as a percentage of total utilities subsidies.

It is noted from Table 5.7 that 33 firms of the total capital per worker KD 6-10 thousand category size receive, on average, KD 538 in electricity subsidy per worker. This high figure, as compared to the others in the column,

Table 5.7 Total capital employed per worker by electricity bill per worker, electricity subsidy as a percentage of total capital employed, and electricity subsidy as a percentage of total utilities subsidies

Total capital per worker (KD th)	No. of firms	Elect.bill per worker (Average KD)	Elect.sub per worker (Average KD)	Elect.sub. % total capital (Average %)	Elect.sub. % total subs.	
					No. of firms	Average %
1-5	23	12.8	173.5	6.5	22	64.3
6-10	33	39.8	538.3	6.9	33	70.9
11-20	43	21.9	296.9	2.0	42	62.6
21-30	20	32.7	442.4	1.9	20	67.2
31-50	21	42.2	570.5	1.6	19	72.3
51-100	12	25.4	343.3	0.5	9	52.6
101-260	3	86.4	1,169.9	0.8	3	76.4
Total	155	30.0	406.3	3.5	148	66.2

reflects a high degree of capital intensity for this group of firms. In the meantime, this group of firms also have the highest average share of electricity subsidy as a percentage of total capital employed of 7%.

If we disregard the KD 101-260 thousand total capital per worker category (because of the small number of firms in the category as well as the relatively high figures in the first two and the fourth columns); we will see that firms of the total capital per worker of the KD 51-100 thousand category receive, on average, less electricity subsidy per worker than many of the categories that precede it. While firms in this category receive, on average, electricity subsidy per worker of KD 343, the two preceding total capital per worker categories of KD 21-30 thousand and KD 31-50 thousand receive, on average, KD 442 and 571, respectively. In the meantime, the total capital per worker KD 51-100 thousand category size has the lowest average of electricity subsidy as a percentage of total capital employed of 0.5% as compared to 6.5% and 6.9% for the first two categories and the high rates of the subsequent ones. The KD 51-100 thousand category also has the lowest electricity subsidy as a percentage of total utilities subsidies of 53%.

Accordingly, smaller firms, with some exception, receive more electricity subsidies than the larger ones. Also, the electricity subsidies received by firms constitute

higher percentages of total capital employed of the smaller firms as compared to the larger ones. Thus, the smaller firms are, on average, more heavily subsidised than the larger ones.

Table 5.8 illustrates the relationship between electricity subsidy per worker and year of establishment of the project. In order to clearly show the relationship, we will make our comparison between the following major periods: 1965-74 and 1975-83. It is noted that in the electricity subsidy per worker of KD 1-100 category, 11 firms were established in 1975-83 as opposed to 7 firms in 1965-74 period, and in the KD 101-200 category, 18 firms were established in 1975-83 as compared to 15 in 1965-74. On the other hand, it is noted that in the electricity subsidy per worker of KD 501-1,000 category, 20 firms were established in 1975-83 as opposed to 5 firms in 1965-74; and in the KD 1,001-3,000 category, 9 firms were established in 1975-83 as compared to 2 firms in 1965-74.

Accordingly, one may conclude, with some caution, that the low prices of electricity, and thus the heavily subsidised service, may have a positive effect on the establishment of electricity-intensive industries.

Conclusion

In conclusion, it may be said that "smaller" firms

Table 5.8 Relationship between electricity subsidy per worker and year of establishment

Elect.sub. per worker (KD)		1940-64	1965-74	1975-79	1980-83	Total
						Year
1-100	No.	4	7	10	1	2
	%	18.2	31.8	45.5	4.5	100.0
101-200	No.	7	15	13	5	40
	%	17.5	37.5	32.5	12.5	100.0
201-500	No.	4	20	10	12	46
	%	8.7	43.5	21.7	26.1	100.0
501-1,000	No.	3	5	9	11	28
	%	10.7	17.9	32.1	39.3	100.0
1,001-3,000	No.	3	2	5	4	14
	%	21.4	14.3	35.7	28.6	100.0
Total	No.	21	49	47	33	150
	%	14.0	32.7	31.3	22.0	100.0
Average	No.	22	49	48	41	160
	KD	351	321	422	455	390

receive more electricity subsidies, as related to their sizes, than the "larger" ones. Also that electricity subsidies constitute higher ratios of the total capital employed of the smaller firms as compared to those of the larger ones. Moreover, firms, in general terms, receive more electricity subsidies than the other measurable forms

of subsidies. Finally, more firms have been established in the recent years that are more electricity-intensive than the previous years. This fact was clear when electricity subsidy per worker was related to time of establishment.

Section 2

Water subsidy

The cost of water desalination is heavily subsidised by the State in Kuwait. However, as stated earlier, although water is supplied by pipes to many areas, there are still others which are not connected to the piped distribution system. In these areas, water is distributed by privately-owned tanker vehicles which draw water from MEW's bulk supply points. The duality has caused variations in MEW's costs of water production, and subsequently, changes in the price structure which are controlled by MEW as well as the Ministry of Commerce and Industry (MCI), as mentioned earlier. The details are explained below.

Table 5.9 illustrates the relationship between firm size as measured by its total labour structure and the water bill and water bill per worker averages which are paid by the firms. It is noted from the Table that the smaller groups pay, on average, lower water bills than the larger ones, i.e. KD 968 as compared to KD 7,589, respectively. However, it is noted, from a water bill per worker point of view, that smaller firms are seen to pay,

Table 5.9 Relationship between water bills and water bills per worker and firms labour size (KD)

Labour	No. of firms	Water bill (Average KD per firm)	Water bill per worker (Average KD)
8-50	69	967.8	37.8
51-100	29	1,314.2	19.2
101-200	28	3,706.6	24.7
201-1,000	27	7,589.0	17.8
Total/Average	153	2,703.1	28.3

on average, higher water bills than the larger ones, i.e. KD 38 as compared to KD 18, respectively.

In addition, it has been found that the water bill median is KD 850. Thus, about half of the firms pay water bills of less than KD 851. In the case of water bill per worker, on the other hand, the median is found to be KD 13.7. Thus, about half of the firms pay less than KD 14 in water bill per worker.

By knowing the water bill of the firm, water price structure and MEW cost structure for water production, we were able to calculate the water subsidy for each firm. By multiplying the water bill by the proportion (by cost) of water

supplied through the method of water distribution to the firm (pipes, public and private tankers) by the MEW cost of producing that water, dividing the resultant by the price charged for the concerned method of water supply, adding for the three methods, and then deducting the water bill, we were able to calculate the amount of water subsidy conferred to the concerned firms. This description is illustrated in the following formula:

Water subsidy (fils) =

$$\frac{\text{Water bill x Proportion supplied by pipes x 4,250 fils}}{\text{800 fils}}$$

$$+ \frac{\text{Water bill x Proportion supplied by public tankers x 3,574 fils}}{\text{1,750 fils}}$$

$$+ \frac{\text{Water bill x Proportion supplied by private tankers x 3,574 fils}}{\text{300 fils}}$$

$$- \text{Water bill.} \qquad \ldots.(2)$$

The figures which are present in the equation were discussed in chapter 3 and will be described here again and are as follows:

4,250 fils = MEW cost of producing and distributing 1,000 gallons of water distributed by pipes to final consumers.

3,574 fils = MEW cost of producing and distributing 1,000 gallons of water distributed through MEW water distribution depots and delivered by public or

private road tanker vehicles.

800 fils = MEW price charges for 1,000 gallons of water sold through piped distribution systems.

1,750 fils = MCI fixed price charges for 1,000 gallons of water obtained via public road tanker vehicles.

300 fils = MEW price charges for 1,000 gallons of water sold directly to tanker vehicle owners obtaining water from MEW water distribution depots.

As noted earlier in the electricity section, in the absence of the total cost structures of the firms, the water bills of firms will be compared with what it would cost MEW to produce the concerned amounts of water. In addition, water subsidy will be used as a measure for showing the magnitude and relative importance of water subsidies to the concerned firms.

Table 5.10 illustrates water bill, water subsidy and the MEW cost of producing the amount of water which is consumed by the firms. It is obvious from the Table that water prices are substantially subsidised by the State. Firms which paid water bills of the average KD 123 were paying in fact about 39 per cent of what it cost MEW to produce that water and were actually subsidised, on average, by KD 188. The involved average water subsidy reached KD 83,302 for firms which consumed more water quantities

Table 5.10 Water bill, water subsidy and MEW cost of producing the consumed water (KD)

Water bill		Water subsidy*		MEW cost of producing the consumed water*		No. of firms
Range	Average	Range	Average	Range	Average	
30-200	122.5	31-370	187.5	61-630	312.8	21
201-500	369.6	371-1,500	730.6	631-2,120	1,189.4	36
501-1,000	804.6	1,501-3,500	2,500.6	2,121-5,300	3,439.3	34
1,001-2,000	1,558.0	3,501-8,000	5,300.4	5,301-10,500	6,809.7	22
2001-10,000	4,345.0	8,001-45,000	16,933.0	10,501-60,000	21,946.6	32
10,001-35,000	21,482.9	45,001-150,000	83,302.0	60,001-181,000	101,897.7	7
46,652	-	509,129	-	557,781	-	1

*Figures of the range columns of water subsidy and MEW cost of producing the used water do not correspond exactly to the water bill range figures because of an attempt to modify the former range figures in a compact manner. However they have been done consistently.

and paid an average water bill of KD 21,483. Moreover, the actual cost incurred by MEW to produce this water exceeded KD 100,000, i.e. about five times the water bill which is actually paid by the concerned firms. One firm is noted to have had a water bill of KD 46,652 which was, therefore, receiving a water subsidy of KD 509,129, i.e. about 11 times what it was actually paying. Moreover, its bill constituted about 8.4 per cent of what it actually cost MEW to produce that amount of water. However, this is only one extreme case and is not a general trend.

Table 5.11 illustrates the elationship between total labour and water subsidy, water subsidy per worker and water subsidy as a percentage of total capital employed. It is seen from the Table that, in absolute terms, average water subsidy increased from KD 3,390 for the smaller firms to KD 44,812 for the larger ones. It has been found

that the water subsidy median is KD 2,508. Thus, about half of the respondent firms receive less than KD 2,510 in water subsidies, each; despite the fact that the overall average is KD 12,197.

However, when water subsidy was measured in relation to firm size (water subsidy per worker) it was noted that the middle-sized firms received less water subsidies than the smaller as well as the larger ones. Moreover, the smaller firms received, on average, the highest water subsidy per

Table 5.11 Relationship between water subsidy, water subsidy per worker and water subsidy as a percentage of total capital employed and firms labour size

Size of labour force	No. of firms	Water sub. (Average KD per firm)	Water sub. per worker (Average KD per firm)	Water sub. % total capital	
				No.	Average
8-50	69	3,389.6	148.0	67	1.59
51-100	29	4,045.4	57.2	28	0.47
101-200	28	10,895.1	75.5	28	0.50
201-1,000	27	44,811.8	103.1	25	0.78
Total	153	12,197.2	109.6	148	1.04

worker, KD 148. On the contrary, the larger firms of the 201-1,000 persons size category received an average of water subsidy per worker of KD 103. It has also been noted that water subsidy per worker median is found to be KD 35. Thus, about half of all the respondent firms receive less than or equal to KD 35 in water subsidy per worker, each; despite the fact that the overall average is KD 110.

The above observations regarding water subsidy per worker are further illustrated in Table 5.12. It is noted from this Table that, in percentage terms, there is a somewhat similar distribution of the 8-50 persons category

Table 5.12 Relationship between the size of firms labour force and the water subsidy per worker of these firms (KD)

Size of labour force		Subsidy 1-20 (KD)	21-100 (KD)	Over 100 (KD)	Total
8-50	No.	23	28	18	69
	%	33.3	40.6	26.1	100.0
51-100	No.	11	10	8	29
	%	37.9	34.5	27.6	100.0
101-200	No.	9	15	4	28
	%	32.1	53.6	14.3	100.0
201-1,000	No.	9	12	6	27
	%	33.3	44.5	22.2	100.0
Total	No.	52	65	36	153
	%	34.0	42.5	23.5	100.0

size firms and the 201-1,000 persons category size firms. Although, in terms of number of firms, there are many times more smaller firms receiving high water subsidies per worker than there are larger ones. If a comparison is made between the 51-100 persons category size firms and the 101-200 persons category size firms, which also have nearly the same total numbers of firms, it will be noted that while 8 firms of the former category fall in the water subsidy per worker of over KD 100, only four firms, of the latter group fall in this category. Therefore, although the 51-100 persons category size firms are smaller than the 101-200 persons category size firms; however, there are more firms

of the former category which receive higher water subsidies.

Accordingly, in terms of number of firms, more smaller firms receive, on average, higher water subsidies per worker as compared to larger firms.

In addition, as illustrated in Table 5.11, when water subsidy was measured as a percentage of total capital employed, it was found that smaller firms, on average, still benefited of more water subsidies than did the larger ones. While firms of the 8-50 persons category size received, on average, water subsidy of 1.6% of their total capital employed; firms of the 201-1,000 persons category size had average water subsidies of 0.8%, i.e. 50 per cent of the former group's average. It has been seen that the median value of water subsidy as a percentage of total capital employed is 0.25%. Thus, although the overall average is about 1%, about half of all the respondent firms receive water subsidies as a percentage of their total capital employed of less than 0.26%.

In order to further investigate the above observations, the various relationships between water subsidy as a percentage of total capital employed and the total capital employed by the respondent firms will be manipulated.

It is seen from Table 5.13 that in total half of the firms receiving water subsidy as a percentage of total capital of 0.008-0.5% category are of the smaller firms

Table 5.13 Relationship between water subsidy as a percentage of total capital employed and total capital employed

Water sub % total capital		1-500 (KD th)	501-1,000 (KD th)	1001-5000 (KD th)	Over 5,000 (KD th)	Total
						Capital
.008-.5%	No.	31	16	36	14	97
	%	32.0	16.5	37.1	14.4	100.0
.6-1%	No.	7	6	5	1	19
	%	36.8	31.6	26.3	5.3	100.0
2%	No.	10	7	3	1	21
	%	47.6	33.3	14.3	4.8	100.0
Over 2%	No.	8	-	2	1	11
	%	72.7	-	18.2	9.1	100.0
Total	No.	56	29	46	17	148
Water bill per worker (Average KD)		31	29	21	45	29
Water sub. per worker (Average KD)		143	62	74	192	111
Water sub. % total capital (Average)		1.94	0.55	0.42	0.58	1.04

(KD 1,000-1,000,000), while the other half are of the larger firms (over KD one million). However, 81 per cent of the water subsidy as a percentage of total capital category of 2% are of the smaller firms, and 73 per cent of the over 2% category are also of the smaller firms. This is also

noted when average water subsidy as a percentage of total capital is related to total capital indicator of firm size, where firms of the KD 1-500 thousand size category receive, on average, 1.94% of their total capital size of water subsidy as compared to 0.58% for the over KD 5 million firms.

Accordingly, smaller firms receive more water subsidies as a percentage of their total capital employed as compared to the larger firms.

Table 5.14 summarises the water subsidy measured as a percentage of total utilities subsidies. It is seen from the Table that 82 per cent of the firms' water subsidy constitutes between 1-20% of total utilities subsidies. This compares with the fact that only 7 per cent of the firms' electricity subsidy constituting between 8-30% as noted earlier from Table 5.6. Moreover, in the water subsidy case, only six firms' water subsidy constituted between 41-96% of the total utilities subsidies received by the respondent firms. The water subsidy median is found to be 9%; thus, about half of the firms' water subsidy as a percentage of total utilities subsidies is up to 9%.

Accordingly, water subsidy as compared to electricity subsidy, generally speaking, is not a major form of measurable subsidy enjoyed by Kuwaiti firms.

Table 5.14 Water subsidy as a percentage of total utilities subsidies

Water sub.% total subs.	No. of firms	%	Cumulative %
1-2%	14	9.2	9.2
3-5	25	16.3	25.5
6-10	40	26.1	51.6
11-20	46	30.1	81.7
21-40	22	14.4	96.1
41-96	6	3.9	100.0
Total	153	100.0	-
Mean = 13.3			
Median = 9.1			

Table 5.15 illustrates the relationship between total capital employed per worker and water bill per worker, water subsidy per worker, water subsidy as a percentage of total capital employed and water subsidy as a percentage of total utilities subsidies.

It is noted from Table 5.15 that 33 firms of the total capital per worker KD 6-10 thousand category size receive, on average, KD 185 in water subsidy per worker. This high figure, as compared to the others in the column, corresponds to a similar high figure of electricity subsidy per worker which was noted earlier in Table 5.7. Therefore, these firms, as was noted earlier are probably capital intensive

Table 5.15 Total capital employed per worker by water bill per worker, water subsidy per worker, water subsidy as a percentage of total capital employed, and water subsidy as a percentage of total utilities subsidies

Total capital per worker (KD th)	No. of firms	Water bill per worker (Average KD)	Water sub.per worker (Average KD)	Water sub. % total capital (Average %)	Water sub. % total subs. (Average %)
1-5	22	16.5	42.1	1.47	13.1
6-10	33	32.6	184.9	2.47	11.3
11-20	42	25.5	81.5	0.53	15.4
21-30	20	31.0	125.8	0.56	16.9
31-50	19	36.0	91.3	0.24	11.6
51-100	9	41.7	128.1	0.158	7.6
101-260	3	21.9	211.5	0.163	12.3
Total	148	28.7	111.4	1.04	13.3

as well as water intensive industries. (It should be noted at this stage that both water and electricity are produced by burning natural gas and crude oil,although electricity is considered to be much more "cheaply" priced than water). In the meanwhile, this group of firms is noted to have the highest average share of water subsidy as a percentage of total capital employed of 2.5%.

Other than the above observation, no other major and significant trend is noted as regards water subsidy per worker and the averages vary in magnitude between one size category and another.

However, as regards water subsidy measured as a percentage of total capital employed per worker, it is noted from the Table that the share decreases in magnitude as one moves from top to bottom of the column. With the exception of the total capital per worker category of KD 6-10 thousand, the shares consistently decrease from 1.5% to 0.16%.

Table 5.16 illustrates the relationship between water subsidy per worker and year of establishment of the concerned projects. As in the case of the electricity discussed earlier, in order to clearly show the relationship, we will make our comparison between the following major periods: 1965-74 and 1975-83. It is noted that in the water subsidy per worker of KD 1-20 category, 24 firms were established in 1975-83 as opposed to 20 firms in 1965-74 period; and

Table 5.16 Relationship between water subsidy per worker and year of establishment

Water sub. per worker (KD)		Year 1940-64	1965-74	1975-79	1980-83	Total
1-20	No.	7	20	17	7	51
	%	13.7	39.2	33.4	13.7	100.0
21-100	No.	6	22	19	18	65
	%	9.2	33.9	29.2	27.7	100.0
101-200	No.	4	4	8	5	21
	%	19.0	19.0	38.2	23.8	100.0
Over 200	No.	4	3	3	5	15
	%	26.7	20.0	20.0	33.3	100.0
Total	No.	21	49	47	35	152
	%	13.8	32.3	30.9	23.0	100.0
Average (KD)		122	58	81	215	110

in the KD 21-100 category, 37 firms were established in 1975-83 as compared to 22 firms in the 1965-74 period. On the other hand, it is noted that in the water subsidy per worker of the KD 101-200 category, 13 firms were established in 1975-83 as opposed to 4 firms in 1965-74; and in the over KD 200 category, 8 firms were established in 1975-83 as compared to 3 firms in the 1965-74 period.

The ratios of the firms established in 1975-83 as compared to the 1965-74 period for all the categories,

therefore, are as follows: 120%, 168%, 325% and 267%, respectively. The higher ratios of the higher water subsidy per worker categories may tempt one to conclude, though rather cautiously, that subsidised water may have had a positive effect on the establishment of the more recent heavy-water user firms. It is, indeed, seen that firms established in the 1980-83 period consumed, on average, KD 215 in water subsidies, i.e. 265% of that of the 1975-79 firms and 370% of that of the 1965-74 firms.

Conclusion

In conclusion, it may be said that "smaller" firms pay higher water bills per worker than the "larger" ones. Subsequently they receive higher water subsidies than the latter group. Moreover, water subsidies as a percentage of total capital of the smaller firms are higher than those of the larger ones, that is in percentage terms and the absolute number of firms. Furthermore, water subsidies constitute a relatively small proportion of the total utilities subsidies received by the respondent firms. Finally, more firms have been established in the recent years that consume higher ratios of water subsidies per worker than the previous years.

Section 3

Fuel subsidy

The availability of ample liquid fuel in Kuwait is taken to be a major international comparative advantage of the domestic economy. However, because the sale and export of crude oil and natural gas is the only main source of public revenue, their use in the domestic utilities is constrained. Moreover, while natural gas is used as the main source of energy in electricity and water plants, it is only produced in association with crude oil. With the stagnant international crude oil market, natural gas has become a scarcer resource.

Natural gas, its associated products as well as refined oil products are supplied to the manufacturing sector and the rest of the domestic economy as a whole at heavily subsidised prices. Their prices, like those of electricity and water, do not discriminate or favour the manufacturing sector, and therefore, their effects are neutral as compared to the domestic economy.

The questionnaire contained five elements which were directly related to the issue of fuel subsidies. These included 98 Octane gasolene, 90 Octane gasolene, kerosene, gas oil and liquid gas. Because we are concerned with the more broad issue of fuel subsidies rather than the detailed issues of each of these specific elements, they will be treated in an aggregate form and called altogether, fuel

bills and subsidies.

Table 5.17 illustrates the relationship between firm size as measured by its total labour structure and the fuel bill and fuel bill per worker averages which are paid by the firms. It is noted from the Table that the smaller firms group pay, on average, lower fuel bills than do the larger ones, i.e. KD 3,219 as compared to KD 48,203, respectively. However, it is noted from a fuel bill per worker point of view, that smaller firms are seen to pay, on average, higher fuel bills than the two larger firm categories which follow it. Although the much larger firms pay, on average, the highest fuel bills. These fuel bills are KD 116, KD 67, KD 94 and KD 125, respectively.

In addition, it has been seen that the fuel bill median is KD 2,546. Thus, about half of the firms pay fuel bills of less than KD 2,550. In the case of fuel bill per worker, on the other hand, the median is found to be KD 36.6. Thus, about half of the firms pay less than KD37 in fuel bill per worker.

By knowing the specific fuels bills of the firms, as mentioned earlier, fuel price structures and State cost structures of producing these fuels, we were able to calculate the total fuel subsidy involved for each firm. This was done by multiplying the concerned fuel bill by the State cost of producing that fuel minus its fixed price,

Table 5.17 Relationship between fuel bill and fuel bill per worker and firms labour size (KD)

Size of labour force	No. of firms	Fuel bill (Average)	Fuel bill per worker (Average)
8-50	73	3,219.3	115.8
51-100	31	4,635.9	67.3
101-200	27	15,248.1(1)	94.2(2)
201-1,000	29	48,202.7	125.1
Total	160	13,676.9(1)	104.4(2)

(1) A case of fuel bill of KD 1,250,000 (about 3 times larger than the case which just preceded it) has been excluded from the calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise the averages would have been KD 59,346.4 and KD 21,355.9, respectively.

(2) As in note (1) above, a case of fuel bill per worker of KD 7,911 (about 4.6 times larger than the case which just preceded it) has been excluded. Otherwise, the averages would have been KD 152.9 and KD 36.6, respectively.

and then by dividing the resultant by the fixed price we were left with a figure which gave a partial fuel subsidy as concerning the particular type of fuel under consideration. By adding together all five types of fuel subsidies, i.e. 98 octane gasolene, 90 octane gasolene, kerosene, gas oil and liquid gas, we will find the final total fuel subsidy. This description is summarised in the following formula:

Fuel subsidy =

$$\frac{\text{Fuel bill (specific type) x (Fuel cost - Fuel price)}}{\text{Fuel price}} \quad \ldots.(3)$$

It should be noted that while prices are based on figures publicly available and are fixed by Kuwait Petroleum Corporation as prevailed in 1983, cost figures are drawn from estimates made by Dr. Al-Abrash, a former economics expert at the Ministry of Commerce and Industry[1]. The price and cost figures upon which the calculations are based are as follows:

	Cost	Price
(1) 98 octane gasolene	100 fils/litre	50 fils/litre
(2) 90 octane gasolene	90 fils/litre	40 fils/litre
(3) Kerosene	75 fils/litre	20 fils/litre
(4) Gas oil	72 fils/litre	40 fils/litre
(5) Liquid gas	1,400 fils/12 Kg. cylinder	500 fils/12 Kg. cylinder

As noted earlier in the electricity and water sections, in the absence of the total cost structures of the firms, fuel bills of the firms will be compared with what it would cost the State to produce the concerned amounts of fuel. In addition, fuel subsidy will be used as a measure for showing the magnitude and relative importance of fuel subsidies to the concerned firms.

Table 5.18 illustrates fuel bill, fuel subsidy and the

Table 5.18 Fuel bill, fuel subsidy and State cost of providing the used fuels (KD)

Fuel bill		Fuel subsidy*		State cost of providing the used fuels*		No. of firms
Range	Average	Range	Average	Range	Average	
30-1,000	535.3	70-1,124	954.9	111-2,100	1,145.8	38
1,001-2,500	1,545.8	1,125-2,670	1,775.9	2,101-5,100	3,347.6	20
2,501-5,000	3,479.9	2,671-5,300	3,995.4	5,101-10,000	7,503.2	29
5,001-10,000	7,219.1	5,301-12,500	8,576.8	10,001-22,500	15,888.1	21
10,001-30,000	18,521.8	12,501-37,200	19,321.5	22,501-60,000	37,659.6	20
30,001-100,000	48,316.7	37,201-90,000	63,446.7	60,001-180,000	112,820.0	6
100,001-425,000	244,821.8	90,001-351,000	219,787	180,001-780,000	463,340.8	5
1,250 000	-	1,000,000	-	2,250,000	-	1

*Figures of the range columns of electricity subsidy and State cost of providing the used fuels do not correspond exactly to the fuel bill range figures because of an attempt to modify the former range figures in a compact manner. However, they have been done consistently.

State cost of providing the amount of fuel which is used by the firms. It is obvious from the Table that fuel prices are substantially subsidised by the State (the bill being almost a third of the cost throughout all bill categories). Firms which paid fuel bills of the average KD 535 were paying in fact 47 per cent of what it costs the State to produce (in opportunity cost and shadow price terms) that fuel and were actually subsidised, on average, by KD 955. The involved average fuel subsidy reached KD 219,787 for firms which used more fuel quantities and paid an average fuel bill of KD 244,822. Moreover, the actual cost incurred by the State to produce this fuel, on average, exceeded KD 463,000, i.e. about twice the fuel bill which is actually paid by the concerned firms.

In general terms, it is noted that in ratio terms the fuel subsidy is much less than electricity and water subsidies. While electricity subsidy was about 14.5 times the price (2 fils/Kwh price as opposed to 29.07 cost), water bill was, on average, one third of MEW water cost for the smaller groups and as much as one fifth for the larger groups, as noted from Table 5.10. On the contrary, the fuel bill is seen to be about a half of State fuel cost for the smaller groups as well as the larger ones.

Table 5.19 illustrates the relationship between total labour and fuel subsidy, fuel subsidy per worker and fuel

Table 5.19 Relationship between fuel subsidy, fuel subsidy per worker, fuel subsidy as a percentage of total capital employed and firms labour size

Size of labour force	No. of firms	Fuel sub. (Average KD per firm)	Fuel sub. per worker (Average KD)	Fuel sub. % of total capital	
				No. of firms	Average %
8-50	73	4,000.0	133.5	71	1.19
51-100	31	5,127.3	72.0	30	0.80
101-200	27	14,813.8(1)	94.9(2)	27	0.67(3)
201-1,000	29	47,217.9	125.6	26	0.70
Total	160	13,876.5(1)	113.7(2)	154	0.94(3)

(1) A case of fuel subsidy of KD 1,000,000 (about 3 times larger than the case which just preceded it) has been excluded from the calculations because of the distorting ecfect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 49,999 and KD 15,972.5, respectively.
(2) As in note (1) above, a case of fuel subsidy per worker of KD 6,329 has been excluded. Otherwise, the averages would have been KD 317.5 and KD 175.1, respectively.
(3) As in note (1) above, a case of fuel subsidy % of total capital of 7.1% has been excluded. Otherwise, the averages would have been 0.9% and 0.98%, respectively.

subsidy as a percentage of total capital. It is seen from the Table that, in absolute terms, average fuel subsidy increased from KD 4,000 for the smaller firms to KD 44,218 for the larger ones. It is also noted from the Table that the fuel subsidy median is KD 2,880.5.Thus, about half of the respondent firms receive less than KD 2,881 in fuel subsidies,

each; despite the fact that the overall average is KD 13,877.

However, when fuel subsidy was measured in relation to firm size (fuel subsidy per worker) it was noted that the smaller firms received, on average, the highest fuel subsidies per worker, KD 134 as opposed to KD 126 for the larger ones. It has been found that fuel subsidy per worker median is found to be KD 40. Thus, about half of all the respondent firms receive less than or equal to KD 40 in fuel subsidy per worker, each; despite the fact that the overall average is KD 114.

The above observations regarding fuel subsidy per worker are further illustrated in Table 5.20. It is noted from this Table that, in percentage terms, there is a somewhat similar distribution of the 8-50 persons category size firms and the 201-1,000 persons category size firms. Although, in terms of number of firms, there are more than twice the number of smaller firms receiving high fuel subsidies per worker than there are larger ones. The 51-100 persons category size firms and the 101-200 persons category size firms, which both have nearly the same total numbers of firms, also have a somewhat similar distribution of firms amongst the different fuel subsidy per worker categories. The distribution is similar in spite of the fact that the latter size category is larger than the former.

Table 5.20 Relationship between fuel subsidy per worker and firms labour size

Subsidy (KD)

Size of labour force		1-30	31-100	Over 100	Total
8-50	No.	20	18	19	57
	%	35.1	31.6	33.3	100.0
51-100	No.	7	15	6	28
	%	25.0	53.6	21.4	100.0
101-200	No.	8	14	5	27
	%	29.6	51.9	18.5	100.0
201-1,000	No.	12	7	9	28
	%	42.9	25.0	32.1	100.0
Total	No.	47	54	39	140
	%	33.6	38.6	27.8	100.0

Accordingly, more smaller firms receive, on average, higher fuel subsidies per worker as compared to larger firms.

In addition, as illustrated in Table 5.19, when fuel subsidy was measured as a percentage of total capital employed, it was found that smaller firms, on average, still benefited of more fuel subsidies than did the larger ones. While firms of the 8-50 persons category size, received, on average, fuel subsidy of 1.2% of their total capital employed; firms of the 201-1,000 persons category size had average fuel subsidies of 0.7%, i.e. 59 per cent of the former group's average.

It is also noted that the median value of fuel subsidy as percentage of total capital employed is 0.26%. Thus,

although the overall average is 0.94%, about half of all the respondent firms receive fuel subsidies as a percentage of their total capital employed of less than 0.265%.

In order to further investigate the above observations, the various relationships between fuel subsidy as a percentage of total capital employed and the total capital employed by the respondent firms will be manipulated.

It is seen from Table 5.21 that in total, about half of the firms receiving fuel subsidy as a percentage of total capital of 0.001-0.5% category are of the smaller firms (KD 1,000-1,000,000), while the other half are of the larger firms. So, larger and smaller firms fall in nearly equal numbers in this category. However, this ratio structure changes drastically as we move down the fuel subsidy as a percentage of total capital categories to 85 per cent and 15 per cent, 65 per cent and 35 per cent, and 75 per cent and 25 per cent for the 2%, 3-5% and the over 6% categories, respectively.

The above trend is also noted when average fuel subsidy as a percentage of total capital is related to the total capital indicator of firm size, where firms of the KD 1,000-500,000 size category receive, on average, 1.65% of their total capital size of fuel subsidy as compared to 0.44% for the KD 1,000,001-5,000,000 and 1.06% for the over KD 5,000,000 category firms.

Table 5.21 Relationship between fuel subsidy as a percentage of total capital employed and total capital employed

Fuel sub. % total capital		1-500 (KD th)	501-1,000 (KD th)	1,001-5,000 (KD th)	Over 5,000 (KD th)	Subsidy Total
.001-.5%	No.	18	17	29	10	74
	%	24.3	23.0	39.2	13.5	100.0
.6-1%	No.	9	5	11	1	26
	%	34.6	19.2	42.3	3.9	100.0
2%	No.	8	3	1	1	13
	%	61.5	23.1	7.7	7.7	100.0
3-5%	No.	9	2	3	3	17
	%	53.0	11.8	17.6	17.6	100.0
Over 6%	No.	3	-	-	1	4
	%	75.0	-	-	25.0	100.0
Total	No.	47	27	44	16	137
Fuel sub.% total capital (Average)		1.65	0.55	0.44	1.06	0.98
Fuel bills per worker (Average)	No.	57	31	49	17	154
	KD	79	103	87	173	106.9
Fuel subs. per worker (Average KD)		113	95	87	162	116

Accordingly, smaller firms receive more fuel subsidies as a percentage of their total capital employed as compared to the larger firms.

Table 5.22 summarises the fuel subsidy measured as a percentage of total utilities subsidies. It is seen from

Table 5.22 Fuel subsidy as a percentage of total utilities subsidies

Fuel sub. % total utilities subs.	No. of firms	%	Cumulative %
1-5%	34	24.6	24.6
6-10	22	16.0	40.6
11-20	34	24.6	65.2
21-50	27	19.6	84.8
51-70	13	9.4	94.2
71-99	8	5.8	100.0
Total	138	100.0	-
Mean = 22.6			
Median = 10.9			

the Table that 65 per cent of the firms' fuel subsidy constitutes between 1-20% of total utilities subsidies. In the meantime, 85 per cent, in total, fall in the 1-50% category. This compares with 82 per cent of the firms receiving water subsidy as a percentage of total utilities subsidies of the 1-20% category, and 21 per cent of the firms receiving electricity subsidy as a percentage of total utilities subsidies of the 8-50%.

Therefore, fuel subsidy follows electricity subsidy in its importance, in magnitude terms, as a major form of measurable subsidy enjoyed by Kuwaiti firms, and then followed by water subsidy.

Table 5.23 illustrates the relationshop between total capital employed per worker and fuel bill per worker, fuel subsidy per worker, fuel subsidy as a percentage of total capital and fuel subsidy as a percentage of total utilities subsidies.

It is noted from Table 5.23 that to the contrary of the situation of the electricity and water subsidies, larger firms pay, on average, larger fuel bills per worker than the smaller ones. While the KD 1-5 thousand total capital per worker category size firms pay, on average, KD 46; firms of the KD 51-100 thousand category size pay, on average, KD 309. Therefore, one may not easily conclude that these firms are fuel-intensive. Indeed, it seems as if they are not so. Obviously, a similar trend is noted for fuel subsidy per worker, where the smaller firms pay, on average, KD 50; and the larger ones paying, on average, KD 266 and KD 192 for the largest group.

However, as regards fuel subsidy measured as a percentage of total capital employed when related to total capital employed per worker, it is noted from the Table that the share decreases in magnitude as one moves from the top to the bottom of the column. With the exception of the total capital employed per worker category of KD 6-10 thousand, the shares consistently decrease from

Table 5.23 Total capital employed per worker by fuel bill per worker, fuel subsidy per worker, fuel subsidy as a percentage of total capital employed, and fuel subsidy as a percentage of total utilities subsidies

Total capital per worker (KD th)	No. of firms	Fuel bill per worker (Average KD)	Fuel sub. per worker (Average KD)	Fuel sub. % total capital (Average %)	Fuel sub. % total subs. (Average %)
1-5	23	45.6	49.7	1.65	22.7
6-10	33	71.6	127.2	1.75	17.8
11-20	43	94.3	96.7	0.66	22.0
21-30	20	94.7	105.1	0.43	15.9
31-50	21	148.8	129.9	0.32	16.1
51-100	11	309.4 (1)	266.3 (2)	0.44 (3)	39.8
101-260	3	213.9	191.9	0.15	11.2
Total	154	106.9 (1)	115.8 (2)	0.94 (3)	20.5

(1) A case of fuel bill per worker of KD 7,911 has been excluded from the calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 942.8 and KD 157.2, respectively.

(2) As in note (1) above, a case of fuel subsidy per worker of KD 6,329 has been excluded. Otherwise, the averages would have been KD 771.5 and KD 155.9, respectively.

(3) As in note (1) above, a case of fuel subsidy as a percentage of total capital of 7.12% has been excluded. Otherwise, the averages would have been 1% and 0.98%, respectively.

1.65% to 0.15% for the KD 1-5 thousand and the KD 6-10 thousand, respectively.

Therefore, in conjunction with what was noted earlier from Table 5.19 as regards fuel subsidy as a percentage of total capital employed when measured with the labour size of the firm, and with what was noted above when relating fuel subsidy as a percentage of total capital employed when measured with the total capital employed per worker size of the firm; one may conclude that fuel subsidy as a percentage of total capital employed of the smaller firms are higher than those of the larger ones.

Table 5.24 illustrates the relationship between fuel subsidy per worker and year of the establishment of the concerned projects. As in the cases of electricity and water which were discussed earlier, in order to clearly show the relationship, we will make our comparison between the following major periods: 1965-74 and 1975-83.

It is noted that in the fuel subsidy per worker of KD 1-30 category, 16 firms were established in 1975-83 as opposed to 23 firms in the 1965-74 period; also, in the KD 31-100 category, 32 firms were established in 1975-83 as compared to 12 firms in the 1965-74 period. Hence, 35 per cent to 50 per cent, and 59 per cent to 22 per cent for the second and first periods, respectively.

On the other hand, it is noted that in the fuel

Table 5.24 Relationship between fuel subsidy per worker and year of establishment (KD)

Fuel sub. per worker (KD)		1940-64	1965-74	1975-79	1980-83	Total
						Year
1-30	No.	7	23	10	6	46
	%	15.2	50.0	21.7	13.1	100.0
31-100	No.	10	12	23	9	54
	%	18.5	22.2	42.6	16.7	100.0
101-500	No.	5	8	7	11	31
	%	16.1	25.8	22.6	35.5	100.0
Over 500	No.	-	-	3	5	8
	%	-	-	37.5	62.5	100.0
Total	No.	22	43	43	31	139
	%	15.9	30.9	30.9	22.3	100.0
Average	No.	22	49	48	41	160
	KD	61	65	137	327	153

subsidy per worker of the KD 101-500 category, 18 firms, 58 per cent of the total, were established in the 1975-83 period as opposed to 8 firms, 26 per cent of the total in 1965-74. In the meanwhile, 8 firms, 100 per cent of the total, were established in the 1975-83 period using total fuel subsidies of more than KD 500.

The ratios of the firms that were established in 1975-83 as compared to the 1965-74 period for all the categories, therefore, are as follows: 70%, 267%, 225% and 8 firms as opposed to none, respectively. The higher

ratios of the higher fuel subsidy per worker categories would lead one to conclude that subsidised fuel may have had a positive effect on the establishment of the more recent heavy-fuel user firms. It is, indeed, seen that firms established in the 1980-83 period consumed, on average, KD 327 in fuel subsidies per worker, i.e. 239% of that of the 1975-79 firms and 503% of that of the 1965-74 firms.

Conclusion

In conclusion, it may be said that "smaller" firms pay, on average, higher fuel bills per worker, than the middle sized firms. Moreover, to the contrary of the observation which was made earlier that larger firms were receiving electricity and water subsidies per worker, on average, lower than the smaller firms; in the case of fuel subsidy per worker, it was noted that larger firms received, on average, highest such subsidies. Furthermore, it has been found that fuel subsidies are, in general, smaller in ratios than were electricity and water subsidies.

In addition, it has been found that smaller firms' fuel subsidies are higher than those of the larger firms when measured to their total capital employed. Also fuel subsidy constitutes a smaller proportion of the total

utilities subsidies as compared to that of electricity subsidy, but higher than that of the water subsidy.

Finally, more firms have been established in the recent years that benefit of higher ratios of fuel subsidies per worker than the previous years. This trend runs, indeed, in conjunction with the fact that Kuwait is in an advantageous position in that it has ample liquid fuels, its international comparative advantage. However fuel prices were increased to more than double on many types of fuel, as was discussed in chapter 3, the effects of this will have to be seen in more future studies than at present.

Section 4

Total utilities subsidies

In our treatment of the issue of total subsidies we differentiate between two types of totals, i.e. total utilities subsidies and land subsidy, both of which include measurable subsidies as opposed to non-measurable subsidies which will be discussed later. Total utilities subsidies include electricity, water and fuel subsidies

The reason for this differentiation is that each of the concerned utilities have defined prices and costs while land does not have any defined prices or costs. Thus, and in an attempt to reach more definite conclusions, and in order to be realistic (in the case of total utilities subsidies) and, in the meantime, comprehensive (in the case of land subsidy), the utilities and land subsidies issues have been dealt with each one separately and equally comprehensively.

Table 5.25 illustrates the relationship between firm size as measured by its total labour structure and the total bill and total bill per worker averages which are paid by the respondent firms. It is noted from the Table that the smaller firms group pay, on average, lower total bills than do the larger ones, i.e. KD 5,298 as compared to

Table 5.25 Relationship between total utilities bills, total utilities bills per worker and total utilities bills as a percentage of total capital and firms labour size

Size of labour force	No. of firms	Total bills (Average KD per firm	Total bills per worker (Average KD)	Total bills % total capital	
				No. of firms	Average %
8-50	69	5,298.2	195.2	67	1.6
51-100	29	8,111.3	116.3	28	1.2
101-200	27	22,643.6(1)	145.9(2)	28	1.4
201-1,000	27	62,654.1	159.8	25	1.0
Total	152	19,104.2(1)	165.1(2)	148	1.36

(1) A case of total bills of KD 1,282,684 (about 3 times larger than the case which just preceded it) has been excluded from the calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 67,645.1 and KD 19,104.2, respectively.

(2) As in note (1) above, a case of total bills per worker of KD 8,118 has been excluded. Otherwise, the averages would have been KD 430.7 and KD 217.1, respectively.

KD 62,654, respectively. However, it is noted, from a total bill per worker point of view, that smaller firms are seen to pay, on average, higher total bills than the larger firms, i.e. KD 195 as compared to KD 160, respectively.

In addition, it has been found that the total bill median is KD 6,332. Thus, about half of the respondent firms pay total bills of less than KD 6,333. In the case of total bills per worker, on the other hand, the median is found to be KD 81.7. Thus, about half of the respondent firms pay less than KD 82 in total bill per worker.

Moreover, it is seen from the Table that the total bill constitutes a higher share of the smaller firms' total capital employed, than that of the larger firms, i.e. 1.6 per cent and 1%, respectively. In spite of that, the median is found to be 0.65 per cent, i.e. about half of the respondent firms' total bills is less than 0.66 per cent.

Table 5.26 illustrates total bills, total utilities subsidies and total state cost of providing the amounts of utilities which are used by the respondent firms. It is obvious from the Table that utilities, in total, are substantially subsidised by the State. Firms which paid

Table 5.26 Total utilities bills, total utilities subsidies and total State cost of utilities provision (KD)

Total utilities		Total utilities subsidies		Total State cost of utilities provision		No. of firms
Range	Average	Range	Average	Range	Average	
300-1,000	702	2,000-6,000	4,063	2,400-8,300	5,035.3	13
1,001-2,000	1,529	6,001-9,000	7,655	8,301-13,000	9,989.9	16
2,001-3,000	2,520	9,001-16,000	13,205	13,001-19,000	16,009.4	18
3,001-5,000	3,619	16,001-21,400	18,213	19,001-27,000	22,066.1	21
5,001-10,000	7,136	21,401-37,000	27,140	27,001-47,500	35,068.4	31
10,001-20,000	13,409	37,001-89,000	59,793	47,501-107,000	74,357.9	27
20,001-50,000	29,031	89,001-208,000	139,444	107,001-230,000	162,227.3	15
50,001-100,000	63,838	208,001-430,000	330,145	230,001-650,000	445,233.5	6
100,001-450,000	268,745	430,001-840,000	595,735	650,001-945,000	800,381	5
1,282,684	-	1,205,002	-	2,487,686	-	1

total bills of the average KD 702 were paying in fact 13.9 per cent of what it costs the State to provide the used utilities and were actually subsidised, on average, by KD 4,063. The involved average total utilities subsidies reached KD 595,735 for firms which used more utilities and paid, on average, total bills of KD 268,746. Moreover, the actual cost incurred by the State to provide these utilities, on average, exceeded KD 800,000, i.e. about three times the total bills which were actually paid by the concerned firms, as shown in Table 5.27.

Moreover, it is noted from Table 5.27 that firms paying, on average, higher total utilities bills in fact receive less subsidies than do firms which pay lower total bills. While total utilities bills average as a percentage of total State cost average for the total bills category KD 50,001-100,000 is 33.6 per cent, it is 13.9 per cent for the KD 300-1,000 category.

In addition, the high percentages of State subsidies are clearly presented in Table 5.27. It is seen that the average is 79 per cent for all the respondent firms.

Table 5.28 illustrates the relationship between total labour and total utilities subsidies, total utilities per worker and total utilities subsidies as a percentage of total capital employed. It is seen from the Table that,

Table 5.27 Total utilities bills by total bills average as % of total State cost average, total utilities subsidies average as % of total bills average, total utilities subsidies average as % of total State cost average and total State cost average as % of total bills average

Total utilities bills (KD)	No. of firms	Total bills average as % total State cost average	Total utilities subsidies average as % total bills averages	Total utilities subsidies average as % total State cost average	Total State cost average as % total bills average
300-1,000	13	13.9%	579%	80.7%	717%
1,001-2,000	16	15.3	501	76.6	653
2,001-3,000	18	15.7	524	82.5	635
3,001-5,000	21	16.4	503	82.5	610
5,001-10,000	31	20.3	380	77.4	491
10,001-20,000	27	18.0	446	80.4	555
20,001-50,000	15	17.9	480	86.0	559
50,001-100,000	6	14.3	517	74.2	697
100,001-450,000	5	33.6	222	74.4	298
1,282,684	1	51.6	939	48.4	194
Average*	153	18.4	461	79.4	579.4

Source: Calculations are based on figures from Table 5.26.

*Average calculations exclude the KD 1,282,684 total utilities bills case.

Table 5.28 Relationship between total utilities subsidies, total utilities subsidies per worker and total utilities subsidies as a percentage of total capital and firms labour size (1)

Size of labour force	No. of firms	Total utilities subs. (Average KD)	Total utilities subs. per worker (Average KD)	Total utilities subs. % total capital	
				No of firms	Average %
8-50	69	18,684	761.3	67	6.9
51-100	29	34,450	476.0	28	4.7
101-200	28	123,048	833.0	28	5.6
201-1,000	27	210,104	551.6	25	3.7
Total	153	75,205	683.4	148	5.7

(1) When figures were calculated, no abnormal cases were found, and thus, no cases have been excluded from this Table as was done with the previous Tables which were similar to this one.

in absolute terms, average total utilities subsidies increased from KD 18,684 for the smaller firms to KD 210,104 for the larger ones. It has been found that total utilities subsidies median is KD 24,046. Thus, about half of the respondent firms receive less than KD 24,047 in total utilities subsidies, each; despite the fact that the overall average is KD 75,205.

However, when total utilities subsidies element was measured in relation to firm labour size (total

utilities subsidies per worker) it was noted that the smaller firms received, on average and with the exception of the 101-200 persons category size, the highest total utilities subsidies per worker, KD 761 as opposed to KD 552 for the larger ones. It is also noted from the Table that total utilities subsidies per worker median is found to be KD 435.9. Thus, about half of all the respondent firms receive less than KD 436 in total utilities subsidies per worker, each; despite the fact that the overall average is KD 683.

The above observations regarding total utilities subsidies per worker are further illustrated in Table 5.29. It is noted from this Table that, in percentage terms, the majority of all size category firms receive total utilties subsidies of between KD 201-1,000. However, the picture is slightly different for the lower and higher total utilities subsidies per worker categories.

It is seen from the Table that while 15 per cent of the smaller firms receive between KD 60-200 in total utilities subsidies per worker, 41 per cent of the larger firms fall in this category. Moreover, 7 per cent (5 firms) of the smaller category firms fall in the highest total utilities subsidies per worker as compared to none of the larger firms. Likewise, 13 per cent of the smaller category firms receive between KD 1,001-2,000 total

Table 5.29 Relationship between total labour and total utilities subsidies per worker (KD)

Size of labour force		60-200	201-1,000	1,001-2,000	2,001-7,700	Subsidy Total
8-50	No.	10	45	9	5	69
	%	14.5	65.2	13.0	7.3	100.0
51-100	No.	7	19	3	-	29
	%	24.1	65.5	10.4	-	100.0
101-200	No.	8	14	3	3	28
	%	28.6	50.0	10.7	10.7	100.0
201-1,000	No.	11	11	5	-	27
	%	40.8	40.8	18.4	-	100.0
Total	No.	36	89	20	8	153
	%	23.5	58.2	13.1	5.2	100.0

utiltiies subsidies per worker as compared to 18 per cent of the larger ones; although in number of firms they are 9 and 5 firms, respectively.

Accordingly, more smaller firms receive, on average, higher total utilities subsidies per worker as compared to larger firms.

In addition, as illustrated in Table 5.28, when total utilities subsidies were measured as a percentage of total capital employed, it was found that smaller firms, on average, still benefited of more total utilities subsidies than did the larger ones. While firms of the 8-50 persons category size received, on average, total utilities subsidies

of 6.9% of their total capital employed, firms of the 201-1,000 persons category size had average total utilities subsidies of 3.7%, i.e. 54 per cent of the former group's average. It is also noted that the median value of total utilities subsidies as a percentage of total capital employed is 3.1%. Thus, although the overall average is 5.7%, about half of all the respondent firms receive total utilities subsidies as a percentage of their total capital employed equal to or less than 3.1%.

In order to further illustrate the above observations, the various relationships between total utilties subsidies as a percentage of total capital employed and the total capital employed by the respondent firms will be manipulated.

It is seen from Table 5.30 that in total, 78 per cent of the firms receiving total utilities subsidies as a percentage of their total capital of 1% are of the larger firms (over KD one million). On the contrary, 69 per cent and 95 per cent of the firms receiving total utilities subsidies as a percentage of their total capital of 6-10% and over 10% categories are of the smaller firms (KD 1,000-1,000,000), respectively.

The above trend is also noted when average total utilities subsidies as a percentage of total capital employed is related to the total capital employed indicator of firm size, where firms of the KD 1,000-500,000 size

Table 5.30 Relationship between total utilities subsidies as a percentage of total capital employed and total capital employed

Total utilities subs. % total capital		Capital 1-500 (KD th)	501-1,000 (KD th)	1001-5,000 (KD th)	Over 5,000 (KD th)	Total
1%	No.	1	3	10	4	18
	%	5.6	16.7	55.5	22.2	100.0
2-3	No.	15	11	21	7	54
	%	27.8	20.3	38.9	13.0	100.0
4-5	No.	13	5	11	-	29
	%	44.8	17.3	37.9	-	100.0
6-10	No.	15	5	3	6	29
	%	51.7	17.3	10.3	20.7	100.0
Over 10%	No.	12	5	1	-	18
	%	66.7	27.8	5.5	-	100.0
Total	No.	56	29	46	17	148
Total bills % total capital (Average)		2.0	1.5	0.6	1.5	1.4
Total utilities subs. % total capital (Average)		8.9	5.7	2.8	3.1	5.7
Total utilities subs. per worker (Average KD)		633	662	546	1,367	696

category receive, on average, 8.9% of their total capital size of total utilities subsidies as compared to 2.8% for the KD 1,000,001-5,000,000 and 3.1% for the over KD 5,000,000 total capital category size firms.

Accordingly, smaller firms receive more total utilities subsidies as a percentage of their total capital employed as compared to the larger firms.

Table 5.31 describes the frequency distribution of the respondent firms as regards total utilities subsidies as a percentage of total capital employed. It is noted from the Table that 12 per cent of the respondent firms receive total utilities subsidies of 1% of their total capital employed. Ironically, 8 firms, 5 per cent of the total receive total utilities of more than 20% of their total capital employed. Of course there is not any defined percentage at which one could say this is high and that is low in this context; however, one may assume that total utilities subsidies of 5% of total capital employed is rather high. If we take 5% as a base figure, we find that about 32 per cent of the respondent firms receive total utilities subsidies of more than 5% of their total capital employed. Certainly, one would think that 20% is a high figure, and therefore one may wish to see very sound and justifiable reasons for the eight firms which receive total utilities subsidies between 24-54%.

Table 5.31 Total utilities subsidies as a percentage of total capital employed

Total utilities subs. % total capital	No. of firms	%	Cumulative %
1%	18	12.2	12.2
2	30	20.3	32.5
3	24	16.2	48.7
4-5	29	19.6	68.3
6-10	29	19.6	87.9
11-20	10	6.7	94.6
21-28	4	2.7	97.3
35-54	4	2.7	100.0
Total	148	100.0	-
Mean	5.7		
Median	3.1		

In order to further investigate the above remarks, we will attempt to further analyse the issue. Table 5.32 shows the relationship between total labour firm size and total utilities subsidies as a percentage of total capital employed. It is seen from the Table that, in percentage terms, there are more larger firms than there are smaller ones in the 1-2% category, 44 per cent as opposed to 31 per cent, respectively. On the contrary, 6 firms of the smaller firms category and 2 firms of the two middle-sized

Table 5.32 Relationship between total utilities subsidies as a percentage of total capital employed and firms labour size

Size of labour force		Subsidies % capital 1-2%	3-5%	6-10%	11-20%	21-54%	Total
8-50	No.	21	25	12	3	6	67
	%	31.3	37.3	17.9	4.5	9.0	100.0
51-100	No.	5	16	4	2	1	28
	%	17.9	57.1	14.3	7.1	3.6	100.0
101-200	No.	11	6	6	4	1	28
	%	39.3	21.4	21.4	14.3	3.6	100.0
201-1,000	No.	11	6	7	1	-	25
	%	44.0	24.0	28.0	4.0	-	100.0
Total	No.	48	53	29	10	8	148
	%	32.4	35.8	19.6	6.8	5.4	100.0

firms categories as opposed to none of the larger firms fall in the very high total utilities subsidies as a percentage of total capital category of 21-54%.

Accordingly, more smaller firms receive higher shares of total utilities subsidies as a percentage of their total capital employed as do smaller firms.

Table 5.33 illustrates the relationship between total capital employed per worker and total bills per worker, total utilities subsidies per worker, total bills as a percentage of total capital employed and total utilities subsidies as a percentage of total capital employed.

It is noted from Table 5.33 that larger total capital

Table 5.33 Total capital employed per worker by total utilities bills per worker, total utilities subsidies per worker, total utilities bills as a percentage of total capital employed, and total utilities subsidies as a percentage of total capital employed

Total capital per worker (KD th)	No. of firms	Total bills per worker (Average KD)	Total utilities subs. per worker (Average KD)	Total bills % total capital (Average %)	Total utilities subs. % total capital (Average %)
1-5	22	74.4	275.4	2.73	10.0
6-10	33	144.0	850.4	1.89	11.2
11-20	42	136.0	472.5	0.90	3.1
21-30	20	158.4	673.2	0.66	2.9
31-50	19	247.0	865.4	0.63	2.3
51-100	9	483.3(1)	846.2(2)	1.72	2.1
101-260	3	322.3	1,573.4	0.24	1.1
Total	148	168.7(1)	648.7(2)	1.36	5.7

(1) A case of total bills per worker of KD 8,118 has been excluded from the calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 1,331.6 and KD 168.7, respectively.

(2) As in note (1) above, a case of total utilities subsidies per worker of KD 7,627 has been excluded. Otherwise, the averages would have been KD 1,599.6 and KD 695.9, respectively.

per worker firms, on average, pay higher total utilties bills than the smaller ones. While smaller total capital per worker firms pay, on average, KD 74; the larger ones pay on average KD 483 and KD 322 for the KD 51-100 thousand and the KD 101-260 thousand category size, respectively.

Moreover, it is noted that the smaller total capital employed per worker firms receive lower total utilities subsidies per worker than do the larger ones. However, firms of the KD 6-10 thousand category size receive the second highest share of total utilities subsidies per worker, only after the largest total capital employed per worker category.

As regards total utilities subsidies measured as a percentage of total capital employed, it is noted from the Table that the share decreases in magnitude as one moves from the top to the bottom of the column. Although the first major drop is seen to be when moving from the KD 6-10 thousand category size to the KD 11-20 thousand category size which drops by 72.3 per cent, i.e. from 11.2 per cent to 3.1 per cent, respectively.

Then, in conjunction with what was noted earlier from Table 5.28 as regards total utilities subsidies as a percentage of total capital employed when measured with the labour size of the respondent firms, and together with what was noted above when relating total utilities subsidies

as a percentage of total capital employed when measured with the capital per worker size of the respondent firms; one may conclude that total utilities subsidies as a percentage of total capital of the smaller firms are higher than those of the larger ones.

Table 5.34 illustrates the relationship between total utilities subsidies per worker and year of the establishment of the concerned projects. As discussed earlier, we will make our comparisons between the following major periods: 1965-74 and 1975-83.

It is noted that in the total utilities subsidies per worker of KD 60-200 category, 17 firms were established in 1975-83 as opposed to 14 firms in the 1965-74 period; also, in the KD 201-500 category, 21 firms were established in 1975-83 as compared to 18 firms in the 1965-74 period. Hence, 47 per cent to 39 per cent, and 46 per cent to 39 per cent for the second and first periods, respectively. These ratio structures, then, change drastically with the higher total utilities subsidies per worker.

It is noted that in the total utilities subsidies per worker of the KD 501-1,000 category, 24 firms, 56 per cent of the total, were established in the 1975-83 period as opposed to 14 firms, 33 per cent of the total, in 1965-74. In the meantime, 12 firms, 63 per cent of the total, were established in the 1975-83 period as compared to 3 firms,

Table 5.34 Relationship between total utilities subsidies per worker and year of establishment (KD)

Total utilities subs. per worker (KD)		1940-64	1965-74	1975-79	1980-83	Total
						Year
60-200	No.	5	14	14	3	36
	%	13.9	38.9	38.9	8.3	100.0
201-500	No.	7	18	12	9	46
	%	15.2	39.1	26.1	19.6	100.0
501-1,000	No.	5	14	12	12	43
	%	11.6	32.6	27.9	27.9	100.0
1,001-2,000	No.	4	3	6	6	19
	%	21.0	15.8	31.6	31.6	100.0
Over 2,000	No.	-	-	3	5	8
	%	-	-	37.5	62.5	100.0
Total	No.	21	49	47	35	152
	%	13.8	32.3	30.9	23.0	100.0
Average (KD)		546	444	641	1,128	677

16 per cent of the total, in 1965-74, receiving total utilities subsidies per worker between KD 1,001-2,000. Finally, 8 firms, 100 per cent of the total, were established in the 1975-83 period which benefit of more than KD 2,000 in total utilities subsidies per worker.

The ratios of the firms that were established in 1975-83 as compared to the 1965-74 period for all the

categories, therefore, are as follows: 121%, 117%, 171%, 400% and 8 firms as opposed to none, respectively. The higher ratios of the total utilities subsidies per worker categories would lead one to conclude that subsidies, in general, may have had a positive effect on the establishment of the more recent relatively heavily subsidised firms. It is indeed seen that firms established in the 1980-83 period benefited, on average, of KD 1,128 in total utilities subsidies per worker, i.e 176% of that of the 1975-79 period firms and 254% of that of the 1965-74 firms.

Conclusion

In conclusion, it may be said that "smaller" firms paid, on average, higher total utilities bills per worker than the "larger" firms. Moreover, smaller firms receive, on average, higher total utilities subsidies per worker than do the larger firms.

In addition, it has been found that smaller firms' total utilities subsidies are higher than those of the larger firms when measured to their total capital employed. Also, more smaller firms were found to receive higher shares of total utilities subsidies as a percentage of their total capital employed.

Finally, more firms have been established in the recent years that benefit of higher ratios of total utilities subsidies per worker than in the previous years.

Section 5

Land subsidy and market price

Land prices in Kuwait are considered to be relatively high. However, this does not reflect the scarcity of land. Indeed, free and unutilised land is abundant in Kuwait. The main reasons for the artificially high prices of land may be said to include: (1) scarcity of planned land, (2) availability of funds to invest in land, and (3) lack of other alternatives for local investment.

Land in Kuwait is organised in such a way that special areas are designated for specific purposes. For instance, some areas are designated as purely trading and commercial centres, others are solely designed as residential areas. Yet other areas are specially designated as industrial areas which were discussed in chapter 3.

Plots in the commercial and residential areas are freely traded in the real-estate market. They have commercial prices which reflect the demand and supply situation in the market place.

Plots in the industrial areas, on the other hand, are allocated by the State at nominal rents, and are not easily tradeable. State approval is required for any trading deals which may be undertaken in the industrial areas.

Therefore, calculating the extent of the industrial land subsidy and its market price is not a straight-forward exercise. Estimates have to be based on expected rates in the other areas, bearing in mind that industrial plots are, generally speaking, non-tradeable.

Dr. Al-Abrash, former economics expert at the Ministry of Commerce and Industry in a study about public subsidies in Kuwait(2) mentioned that some engineering authorities have estimated State cost of preparing the ground as well as the provision of the major infrastructural facilities to equal 179 fils/square metre. He said that such a figure is considered to be very low and proposed KD 1/square metre as a more appropriate estimate. Thus, one method of estimating the land subsidy is to assume, given low rents, that it is equal to the cost of preparing the land. Therefore, we will base one estimate of land subsidy on the KD 1/square metre figure.

An alternative treatment of the land issue will be based on another idea, land market price. Our reason for this study is to show the real extent (in terms of market price) of the land subsidy. Also, because land subsidy is considered to be one of the major subsidy forms in Kuwait, as will be shown later, and therefore, deserves detailed attention.

Land subsidy by the first method is estimated by

multiplying the total land area of the concerned firm and the estimated State cost of preparation of KD 1/square metre. The annual land rent which is paid to the State has not been included (subtracted) from the calculation. Because it is very nominal (between KD 0.050 /square metre and KD 0.150/square metre depending on the industrial area in which the establishment is to be located), and its variation between one area and another makes it difficult to have a unified base for all the areas.

Table 5.35 illustrates the relationship between total labour and land subsidy, land subsidy per worker, and land subsidy as a percentage of total capital employed. It is seen from the Table that, in absolute terms, average land subsidy increased from, on average, KD 4,733 for the smaller firms to KD 63,305 for the larger ones. It has been seen that land subsidy median is KD 5,000. Thus, about half of the respondent firms receive less than KD 5,001 in land subsidies, each; despite the fact that the overall average is KD 17,815.

However, when land subsidy was measured in relation to firm size (land subsidy per worker) it was noted that the smaller firms received, on average, the highest land subsidies per worker, KD 4,733 as opposed to KD 63,305 for the larger ones. It is also noted from the Table that land subsidy per worker median is found to be KD 89.3.

Table 5.35 Relationship between land subsidy, land subsidy per worker and land subsidy as a percentage of total capital and firms labour size

Size of labour force	No. of firms	Land sub. (Average KD per firm)	Land sub. per worker (Average KD)	Land sub. % total capital	
				No.	Average %
8-50	63	4,732.5	174.7	61	1.02
51-100	26	10,185.1	140.3	25	0.97
101-200	25	15,048.0	112.1	25	0.92
201-1,000	24	63,305.0(1)	143.7(2)	21	0.73(3)
Total	138	17,815.1(1)	151.5(2)	132	0.96(3)

(1) A case of land subsidy of KD 8,740,000 (more than 20 times larger than the previous case) has been excluded from the average calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 410,373 and KD 80,565, respectively.

(2) As in note (1) above, a case of land subsidy per worker of KD 26,012 (over 31 times larger than the KD 830 case which preceded it) has been excluded. Otherwise, the averages would have been KD 1,178 and KD 338, respectively.

(3) As in note (1) above, a case of land subsidy % total capital of 47% (over 5 times larger than the 9% case which preceded it) has been excluded. Otherwise, the averages would have been 2.93% and 1.31%, respectively.

Thus, about half of all the respondent firms receive less than KD 90 in land subsidy per worker, each; despite the fact that the average for smaller firms is KD 175 and that the overall average is KD 152.

The above observations regarding land subsidy per

worker are further illustrated in Table 5.36. It is noted from this Table that, more of the smaller firms receive higher land subsidy per worker than larger firms. While 56 per cent of the 8-50 persons category size benefit of more than KD 100 in land subsidy per worker, it is seen that only 40 per cent of the larger firms benefit of this subsidy category.

Accordingly more small firms benefit of, on average, higher land subsidies per worker than do larger firms.

In addition, as illustrated in Table 5.35, when land subsidy was measured as a percentage of total capital employed, it was found that smaller firms, on average, still benefited of more land subsidies than did the larger ones. While firms of the 8-50 persons category size benefited of, on average, land subsidy of 1.02% of their total capital employed; firms of the 201-1,000 persons category size had average land subsidies of 0.73%, i.e. 72 per cent of the former group's average.

It is also noted that the median value of land subsidy as a percentage of total capital employed is 0.56%. Thus, although the average of the smaller firms is 1.02% and the overall average is 0.96%, about half of all the respondent firms benefit of land subsidies as a percentage of their total capital employed of less than 0.57%.

In order to further investigate the above observations,

Table 5.36 Relationship between land subsidy per worker and firms labour size (KD)

Labour		Subsidy 8-50	51-100	101-200	Over 200	Total
8-50	No.	13	15	18	17	63
	%	20.6	23.8	28.6	27.0	100.0
51-100	No.	10	10	2	4	26
	%	38.5	38.5	7.7	15.3	100.0
101-200	No.	11	6	5	3	25
	%	44.0	24.0	20.0	12.0	100.0
201-1,000	No.	9	6	4	6	25
	%	36.0	24.0	16.0	24.0	100.0
Total	No.	43	37	29	30	139
	%	30.9	26.6	20.9	21.6	100.0

the various relationships between land subsidy as a percentage of total capital employed and the total capital employed by the respondent firms will be manipulated.

It is seen from Table 5.37 that 42 per cent of the land subsidy as a percentage of total capital of the 0.05-0.5% are of the smaller firms (KD 1,000-500,000), while 58 per cent of the same category are of the larger firms (more than KD one million). However, this ratio structure changes position in the higher land subsidy as a percentage of total capital employed categories.

It is noted from the Table that 35 per cent of the 0.6-1% and 22 per cent of the 2% land subsidy as a percentage of total capital employed categories are of

Table 5.37 Relationship between land subsidy as a percentage of total capital employed and total capital employed

Land sub. % total capital		Capital 1-500 (KD th)	501-1,000 (KD th)	1,001-5,000 (KD th)	Over 5,000 (KD th)	Total
.05-.5%	No.	10	15	26	8	59
	%	16.9	25.4	44.1	13.6	100.0
.6-1%	No.	15	11	9	5	40
	%	37.5	27.5	22.5	12.5	100.0
2%	No.	11	3	3	1	18
	%	61.1	16.7	16.7	5.5	100.0
3%	No.	4	-	2	1	7
	%	57.1	-	28.6	14.3	100.0
Over 3%	No.	3	1	2	1	7
	%	42.9	14.3	28.5	14.3	100.0
Total	No.	43	30	42	16	131
Land sub. per worker (Average KD)	No.	44	30	42	16	132
	KD	127	139	154	269(1)	156(1)
Land sub. % total capital (Average KD)		1.40	0.73	0.72	0.83(2)	0.96(2)

(1) A case of land subsidy per worker of KD 26,012 (more than 31 times larger than the preceding case of KD 830) has been excluded from the calculations because of the distorting effect which it would have had by concealing some qualities of the data. Otherwise, the averages would have been KD 1,784 and KD 350, respectively.

(2) As in note (1) above, a case of land subsidy as % of total capital employed of 47% has been excluded (it was over 5 times more than the 9% which preceded it). Otherwise, the averages would have been 3.54% and 1.3%, respectively.

the larger firms as opposed to 65 per cent and 78 per cent of the smaller firms, respectively. As for the higher categories, the distribution is more tilted towards the KD 1,000-500,000 and the KD 1,000,001-5,000,000 category size firms where 57 per cent as opposed to 29 per cent are located in the 3% land subsidy category, and 43 per cent and 29 per cent are located in the over 3% category, respectively.

The above trend is also noted when average land subsidy as a percentage of total capital employed is related to the total capital employed indicator of firm size, where firms of the KD 1,000-500,000 size category benefit of, on average, 1.4% of their total capital employed size of land subsidy as compared to 0.83% for the over KD 5 million category firms.

Accordingly, smaller firms benefit of more land subsidies as a percentage of their total capital employed as compared to the larger firms.

Table 5.38 illustrates the relationship between total capital employed per worker and land subsidy, land subsidy per worker and land subsidy as a percentage of total capital employed.

It is noted from Table 5.38 that land subsidy per worker of the smaller total capital per worker firms are much lower than those of the larger firms. While the

Table 5.38 Relationship between total capital employed per worker and land subsidy, land subsidy per worker, and land subsidy as a percentage of total capital employed

Total capital per worker (KD th)	No of firms	Land sub. (Average KD)	Land sub. per worker (Average KD)	Land sub. % total capital (Average %)
1-5	16	5,413	54.0	1.80
6-10	24	7,496	86.7	1.18
11-20	40	17,838	141.9	0.99
21-30	20	36,900	150.8	0.64
31-50	19	16,059	214.8	0.58
51-100	11	15,091(1)	355.6(2)	0.52(3)
101-260	2	103,661	454.2	0.32
Total	132	18,155(1)	155.6(2)	0.96(3)

(1) A case of land subsidy of KD 8,740,000 has been excluded from the average calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise the averages would have been KD 742,167 and KD 83,733, respectively.

(2) As in note (1) above, a case of land subsidy per worker of KD 26,012 has been excluded. Otherwise, the averages would have been KD 2,494 and KD 350, respectively.

(3) As in note (1) above, a case of land subsidy % total capital of 47% has been excluded. Otherwise, the averages would have been 4.39% and 1.31%, respectively.

KD 1-5 thousand total capital employed per worker category size firms benefit of, on average, KD 54; firms of the KD 51-100 thousand category size benefit of, on average, KD 356, i.e. more than six times of the previous category's firms.

Therefore, one may conclude that, smaller total capital employed per worker firms benefit of lower land subsidy per worker than do the larger total capital employed per worker firms.

However, as regards land subsidy measured as a percentage of total capital employed when related to total capital employed per worker, it is noted from the Table that the share decreases in magnitude as one moves from the top to the bottom of the column. These shares consistently decrease from 1.8% to 0.3% for the KD 1-5 thousand and the KD 6-10thousand, respectively.

Therefore, in conjunction with what was noted earlier from Table 5.35 as regards land subsidy as a percentage of total capital employed when measured with the labour size of the firm, and with what was noted above when relating land subsidy as a percentage of total capital employed when measured with the total capital employed per worker size of the firm, one may conclude that land subsidy as a percentage of total capital employed of the smaller firms are higher than those of the larger ones.

As noted earlier, land commercial prices are considered to be highly inflationary in Kuwait. In order to show the importance of the land subsidy and the "real" magnitude of subsidy involved, we have attempted to provide an estimate of the market price for the concerned firms.

The land market price estimate will be based on the assumption that a square metre will be priced at KD 50. This figure is almost one third of the price of a square metre of land in Mishref and Ardhya (both newly built residential areas) in 1983. The reasons for our choice of this relatively small average figure are: (1) the plots are distributed in different industrial areas each of which have different market prices. (2) Each plot has a different exact market price depending on its exact street location within an area. And (3) Land market prices are very unstable depending on many factors in the domestic economy as well as the region as a whole (for example, Al-Manakh stock market crash, Iran-Iraq war and the internationally depressed oil market); for instance, land market prices dropped by 1985 by about 30 per cent of their 1982 prices. For all these reasons, a KD 50/square metre as land market price have been thought to be reasonable.

Table 5.39 illustrates the relationship between total labour and market price per worker and land market price as a percentage of total capital employed. It is noted from

Table 5.39 Relationship between land market price per worker and land market price as a percentage of total capital employed and firms labour size

Size of labour force	No. of firms	Land mkt. price per worker (Average KD)	Land mkt. price % total capital	
			No.	Average %
8-50	63	8,734	61	51.0
51-100	26	7,013	25	48.6
101-200	25	5,604	25	46.1(2)
201-1,000	24	7,187(1)	21	42.0
Total	138	7,573(1)	132	48.2(2)

(1) A case of land market price per worker of KD 1,300,595 has been excluded from the calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 58,924 and KD 16,876, respectively.

(2) As in note (1) above, a case of land market price as a percentage of total capital employed of 2,341% has been excluded. Otherwise, the averages would have been 146.6% and 65.4%, respectively.

the Table that the land market price per worker of the smaller firms are higher than those of the larger firms. They are KD 8,734 and KD 7,187, respectively. However, the land market price per worker median has been found to equal KD 4,464.3. Thus, about half of all the respondent firms' land market price per worker is less than KD 4,465, each.

As regards land market price as a percentage of total capital employed, the great magnitude of the land subsidy

becomes apparent. In all cases, on average, land market price has exceeded 40 per cent of total capital employed, a substantially high ratio by all means.

However, the data in Table 5.39 disguise some of the detailed information as may be figures by looking at the land market price as a percentage of total capital employed median which equals 27.78%. That means that about half of all the respondent firms' shares are less than 27.8%, each. Indeed, a review of the computer output frequency distribution showed that 12 firms were found to be in the 2-10% category, 21 firms in the 11-15% category, 16 firms in the 16-20% category, 22 firms in the 21-30% category, 28 firms in the 31-50% category, 17 firms in the 51-100% category, 11 firms in the 101-200% category, 4 firms in the 201-455% category, and one case had a percentage share of 2,341%.

Hence, in a summarised manner, 71 firms, 54 per cent of the total have land market price as a percentage of their total capital employed of 2-30%. Another 45 firms, 34 per cent of the total, have shares between 31-100%. Then, 16 firms, 12 per cent of the total have shares of more than 100% of their total capital employed.

It is seen from Table 5.39 that the average land market price as a percentage of total capital employed of the smaller firms is 51%, while, it is 42% for the larger

firms. Therefore, the smaller firms' land market price as a percentage of total capital employed are, on average, higher than those of the larger firms.

Conclusion

In conclusion, it may be said that more "smaller" firms benefit of, on average, higher land subsidies per worker than do the "larger" firms. Moreover, smaller firms benefit of more land subsidies as a percentage of their total capital employed as compared to the larger firms.

Also, the smaller firms' land market price as a percentage of total capital employed are, on average, higher than those of the larger firms.

Section 6

Employment average wages

It has been found out from the 1984 Annual Statistical Abstract published by the Ministry of Planning that the overall annual average labour wages in the manufacturing sector (excluding the publicly-owned oil industry) were KD 2,052 in 1981. Because the survey data were for 1982 we need to adjust the total average figure to take account of inflation. If we assume an inflation rate of 5% for 1982, the overall annual average labour wage would become KD 2,155. By comparing this figure to data in Tables 5.28 and 5.33, we could find some interesting points.

It is seen from Table 5.28 that the overall average total utilities subsidies per worker was in 1982 (the year for which the survey data were collected) KD 683, i.e. 32 per cent of the average wage bills paid by the concerned firms. This may be taken to mean that the State is indirectly paying about 32 per cent of the firms' wage bills.

Section 7

Hypothetical effects of the measurable subsidies

In studying the issue of subsidies, it is important to consider the significance and effect on firms' cost structures. However, lack of essential data regarding firms' costs, prices and output hamper any factual attempt in analysing the impact of subsidies on firms' costs. Despite this deficiency in data alternatives are available, although they are hypothetical choices of cost and price structures.

The following is a summary of the average costs to the State of providing the utilities and facilities to manufacturing firms. Also, average prices of supplying such utilities and facilities are provided. These are as follows:

	Average costs	Average prices
Electricity	2 fils/Kwh	29.07 fils/Kwh
Fuel	1	2
Water	1	2

If we assume a hypothetical base price of 100 across the board for all firms. Also, if we assume that profits represent 25% of the price, wages and salaries to represent another 25% of the price, and the remaining 50% of the price to represent the cost of materials. Furthermore, if we

assume that each one of the above items represented 1% of total unit price, the aggregate effect will be 3% of total unit price.

Then, if the subsidy element was withdrawn the proportionate prices of the above items to be paid by the concerned firms will increase, and obviously, their proportionate shares of the price structures will be changed. The percentage share of electricity, fuel and water will, thus, become 14.5%, 2% and 2%, respectively. In an aggregate form, their percentage shares will increase from 3% to 18.5% of the price structure. With no changes in the remaining costs items, unit price would increase to 118.5 from its previous level of 100. Or, alternatively, if the firm wanted to, or had to because of market pressures, keep the current price level of 100, it would have to eliminate its 25% profit margin and still total materials and wages and salaries costs would be 93.5, i.e. only 6.5% below unit price.

Therefore, if the materials bought by firms were not subsidised their cost structures would change dramatically depending on the relative importance of each subsidised item. Clearly, changing the prices of electricity, fuel and water which are paid by the concerned firms to what it costs the State in providing them would represent a substantial effect on unit price of the products of the

firms and reduce value added or would increase prices of these products.

Of course the 1% estimate for each item, 3% in total, might be too high or might be not, depending on how large the quantities of each item any concerned firm consumes as proportionate to its total cost structure. For example, if a firm consumes low amounts of electricity, etc., then the effects will not be as dramatic as estimated, whereas if a firm consumes larger amounts of electricity, etc., the effects may become even more dramatic than we have portrayed. Also, since the subsidy ratio varies from one item to another, the firms' consumption of one item, rather than another, depending on which one is greater and which is less, the effects on cost structure, will, therefore, shift accordingly.

Notes

Chapter Five

(1) Al-Arbash, M.R.; "Government subsidy to the industrial sector in Kuwait", (The Kuwaiti Economy, February 1981 and March 1981, Kuwait Chamber of Commerce and Industry - Arabic).

(2) Ibid.

CHAPTER SIX

STRUCTURAL CHARACTERISTICS OF THE SAMPLE FIRMS

Introduction

This Chapter, as its title implies, analyses the structural characteristics of the sample firms. The issues which will be studied in this regards include the ownership structure, the year of establishment of the projects, total capital employed and employment structures, the industrial sector activities, the exports structure and the industrial area distribution and characteristics of the respondent firms in the sample.

In the usual practice this chapter is supposed to precede the previous chapter. However, to the contrary of that "rule" we have forwarded the measurable subsidies chapter to the characteristics chapter. Our cause for doing so has been that we wanted to apply the measurable subsidies to the structural characteristics of the sample firms, and therefore, we had to define the different subsidies before doing so.

Section 1

Ownership structure

Essentially, there are two sectors in any economy; namely, the public and the private sectors. However, there is another sector which is prevalent in many countries as well as Kuwait, i.e. the "mixed" sector. The salient features of each one of these sectors in Kuwait were discussed in Chapter 2.

This study has been confined to looking at the private and the mixed sectors. The public sector activities have been set up by state initiatives and are heavily supported and subsidised by the State. The mixed sector in Kuwait is considered to be part of the private sector and their shares are traded on the official stock market irrespective of the proportion of shares held by the Government where proportion of ownership varies between companies and from time to time. The private sector firms are owned wholly by one person, one family, or a group of persons. They are often limited liability firms and their shares are not usually traded in the stock market.

As noted earlier in chapter 4, out of the 161 respondent firms, 12 belonged to the mixed sector and 149 belonged to the wholly private sector, i.e. 7.5 per cent and 92.5 per cent, respectively. The reason for the

relatively small numbers of mixed sector firm participants is their relatively low representation in Kuwait in general.

Table 6.1 illustrates the relationship between the ownership structure and some of the relevant indicators of the previous chapter. It is seen from the Table that mixed sector firms have, on average, higher total capital employed per worker than do the private sector firms. Of course, the mixed sector's high total capital employed ratios may be the main reason for State involvement, particularly if the risks are high.

The mixed sector have been found to receive, on average, more electricity subsidies than do the private sector firms. In terms of electricity subsidy per worker, mixed sector companies still enjoyed higher shares than did the private sector firms. A similar trend is also noted for water subsidies and water subsidies per worker.

It is noted from the Table that mixed sector companies received more fuel subsidies and fuel subsidies per worker than did the private sector companies, as was also noted in the cases of electricity and water subsidies above.

However, the fuel subsidy average in percentage terms is found to be many times larger than those of electricity and water subsidies. This could be as a result of government policy and initiative in undertaking activities

Table 6.1 Ownership structure by some indicators (KD averages) (*)

Indicators	Private (1) (Averages)	Mixed (2) (Averages)	Total	
			Average	(2%) (1)
Total capital employed (KD th.)	2,231	12,697	2,906	569
Total capital/ worker (KD th.)	21.4	41.9	22.7	196
Elect. sub.	35,547	119,109	41,256	335
Elec. sub./worker	397	411	398	104
Water sub.	11,218	27,858	12,197	248
Water sub./worker	106	169	110	159
Fuel sub.	11,352	137,946	20,001	1215
Fuel sub./worker	110	724	152	138
Total utilities subs.	59,580	325,212	75,205	546
Total utilities subs./worker	632	1,501	683	238
Elect.sub.% total utilities subs.	67.7	46.0	66.4	68
Water sub.% total utilities subs.	13.2	14.0	13.3	106
Fuel sub.% total utilities subs.	19.1	39.9	20.4	209
Land sub./worker	342.4	274.5	337.5	80
Total bills % total capital	1.31	2.19	1.36	167
Total utilities subs. % total capital	5.8	3.8	5.7	66

*The numbers of firms have been ignored in order to simplify the Table. However, they range between 140-150 for the top private indicators and 120-129 for the bottom private indicators. Also, between 8-11 and 7-10, respectively.

which are more dependent on the oil industry.

Similarly, mixed sector firms receive, on average, more total utilities subsidies and total utilities subsidies per worker than do the private sector firms.

In terms of electricity subsidy as a percentage of total utilities subsidies, mixed sector firms do not receive, on average, more such subsidies than do the private sector firms. However, in terms of water and fuel subsidies as a percentage of total utilities subsidies of the mixed sector companies are, on average, higher than those of the private sector firms.

As regards total utilities subsidies as a percentage of total capital employed and total subsidies as a percentage of total capital employed in what may be thought of as a reflection of the relatively higher percentages of total capital of the mixed sector firms, it is noted that the averages of the mixed sector are lower than those of the private sector firms. However, the fact is that the private sector benefit of, on average, more total subsidies than do the mixed sector firms as proportionate to their total capital employed.

In what may be thought of as a reflection of the relatively higher percentages of the total capital of the mixed sector firms as compared to the private sector firms, the total utilities subsidies as a percentage of the total

capital employed of the former group constitute 66 per cent of those of the latter.

Conclusion

It has been found that the mixed sector firms benefit of, on average, more electricity subsidy than do the private sector firms. Also, mixed sector firms benefit of more water and fuel subsidies than do the private sector firms.

Section 2

Year of establishment of projects

As has been noted earlier in Chapter 3, the first attempt to organise the industrial sector from a constitutional point of view was in 1965 when the first (and the only one as of now) industrial law was promulgated, in which the Government was to start offering incentives for the establishment of industrial projects. Therefore, the year 1965 will be taken to mark the beginning of a new era for the manufacturing sector as a whole.

The quadruple oil price rises of 1973-74 caused substantial increases in the country's wealth. This was reflected in increased public reveneues, public expenditures and increased financial assets of the private sector. Also, a higher demand for consumer and construction as well as a host of other goods has been noted. Therefore, the year 1975 may be taken as the start of yet another era for the domestic manufacturing sector.

Finally, 1979 observed another oil price rise boom which, as in the 1973-74 boom, had its clear effects on the domestic economy in many ways, as described above. Thus 1979 will be taken as the third mark in the age of the Kuwaiti manufacturing sector.

Table 6.2 illustrates a categorised frequency

distribution of the years of establishments of the concerned respondent firms. It is seen from the Table that 89 firms, 56 per cent of all firms in the sample were established in the nine year period of 1975-83. In the meanwhile, only 49 firms, 31 per cent of the total were established in the previous ten year period and 22 firms, 14 per cent, in the previous 25 years. Therefore, it appears that the oil boom had its effect on the increase in the number of industrial projects which were established to take advantage of the expanding market.

It is noted from the Table that 41 firms, 26 per cent of the total were established in 1980-83, i.e. they have been in operation for four years or less. Moreover, it was found from the computer output frequency distribution that 54 firms, 34 per cent of the total have been operating between 1-5 years. In addition, 40 firms, 25 per cent of the total were found to have been in operation between 6-10 years. Hence, and in total, 94 firms, i.e. 59 per cent of total number of the respondent firms have been operating for ten years or less.

Accordingly, Kuwaiti manufacturing firms have been in business for relatively short periods of time and may be regarded as young firms operating in activities that may be considered to be infant industries.

Table 6.2 Years of establishment of projects

Year	No. of firms	%	Cumulative %
1940-64	22	13.8	13.8
1965-74	49	30.6	44.4
1975-79	48	30.0	74.4
1980-83	41	25.6	100.0
Total	160	100.0	-

Assuming that an industrial firm often requires an average of 5-10 years in order to benefit from its learning costs, for example overcoming technical difficulties, getting the labour used to the specific production processes, the management becoming well-geared to the firm's activities and needs, etc. Then, about 59 per cent of the established firms fall in the category of firms that have not yet reached maturity and ironed out all start-up difficulties. Even if we only consider firms of 5 years of age or less, some 34 per cent of the firms can be considered not to have reached maturity.

Section 3

Total capital employed

The questionnaire contained two related questions, the first asked the respondent what was the total capital which was budgeted for the project at the start of the setting-up stage. The second question asked the respondent to provide the total capital employed of the firm at present. These two figures were explained as to include the total of the present value of all fixed assets of the firm, the value of raw materials, the value of any stock and completed goods, the bank deposits, etc. The first will be referred to as the "initial capital" and the second as "total capital employed" or "total capital" in different places of the text.

Table 6.3 illustrates the total capital employed structure of the respondent firms. It is seen from the Table that about 26 per cent of the total number of firms had total capital employed of between KD 30,000-500,000. Another 20 per cent had total capital employed of between KD 500,001-1,000,000. Yet another 32 per cent were in the KD 1,000,001-5,000,000 category. Some 12 per cent of the total number of firms had total capital employed of more than KD 5,000,000.

Table 6.3 Total capital employed (KD thousand)

Total capital	No. of firms	%	Cumulative %
30-200	17	11.0	11.0
201-500	40	25.8	36.8
501-1,000	31	20.0	56.8
1,001-2,000	31	20.0	76.8
2,001-5,000	18	11.6	88.4
Over 5,000	18	11.6	100.0
Total	155	100.0	-
Mean	2,906 KD thousand		
Median	850 KD thousand		

By selecting the exchange rate of the Kuwaiti Dinar as against the Sterling Pound of KD 1.000 = £2.50 which prevailed, on average, in the period 1983-84; it will be noted that about 57 per cent of the firms had total capital employed of less than or equal to £2.5 million. If this was taken to be the border line between small- and medium-scale firms; then 57 per cent of the firms may be taken to be of the small-scale type.

Moreover, if £12.5 million is taken to be the upper limit of medium-scale firms; then, 32 percent of the firms are found to be of the total capital employed category of between £2.6-12.5 million, i.e. of the medium-

scale type. Also, some 12 per cent are found to have total capital employed of over £12.5 million, i.e. they are of the large-scale type firms.

According to the above size criteria, most of the Kuwaiti firms are of the small-scale type firms. Another large proportion are of the medium-scale type firms. Only a small fraction of the Kuwaiti undertakings have been found to be large-scale entities.

By knowing the initial capital, the total capital employed and the year of establishment of the concerned projects, we were able to calculate the compound growth rate for the respondent firms. The specific formula used was as follows:

$$\left[\left(\frac{\text{Total capital employed}}{\text{Initial capital}}\right)^{\left(\frac{1}{83 - \text{Production year}}\right)} - 1\right] \times 100 \quad \ldots (4)$$

Table 6.4 illustrates the respondent firms' compound growth rate. It is seen from the Table that 18 per cent of the respondent firms have had compound growth rates of between 1-10%. Another 22 per cent had compound growth rates of between 11-20%. Yet another 34 per cent were in the 21-50% category. Finally, some 17 per cent had

Table 6.4 Compound growth rate

Compound growth rate	No. of firms	%	Cumulative %
Zero	13	9.3	9.3
1 - 5%	11	7.9	17.2
6 - 10	14	10.1	27.3
11 - 20	30	21.6	48.9
21 - 30	20	14.4	63.3
31 - 50	27	19.4	82.7
51 - 100	20	14.4	97.1
Over 100	4	2.9	100.0
Total	139	100.0	-
Mean	31.0%		
Median	21.6%		

compound growth rates of more than 50%.

In total, if we consider a compound growth rate of more than 20% per annum to be very desirable and a high rate, we find that 51 per cent of the total number of the respondent firms have experienced high compound growth rates. In addition, 22 per cent of the firms had moderate compound growth rates of between 11-20%.

Accordingly, most of the Kuwaiti firms have experienced high compound growth rates.

Table 6.5 illustrates the relationshop between total labour and total capital employed and total capital employed per worker. It is noted from the Table that larger firms have higher total capital than do the smaller ones. While the smaller firms had total capital employed of, on average, KD 704,000, the larger ones' total capital employed was, on average, KD 11,261.

However, in terms of total capital employed per worker, the smaller and larger firms, as opposed to the middle-sized firms, had high total capital per worker. It is seen from the Table that the 8-50 persons and the 201-1,000 persons category size firms had total capital employed per worker averages of KD 25,600 and KD 27,800, respectively. In the meantime, the 51-100 persons and the 101-200 persons category size firms had total capital employed per worker averages of KD 16,600 and KD 17,500, respectively.

Accordingly, smaller and larger firms are more capital-intensive than the middle-sized firms.

In order to further illustrate the above observation we analyse Table 6.6 which presents the distributional relationship between total labour and total capital employed per worker. It is seen from the Table that of the 15 firms with the most capital-intensive methods

Table 6.5 Relationship between total capital employed and total capital employed per worker and firms labour size (KD thousand)

Size of labour force	No.of firms	Total capital (Average KDth)	Total capital per worker (Average KDth)
8-50	71	704	25.5
51-100	30	1,280	16.6
101-200	28	4,472	17.5
201-1,000	26	11,261	27.8
Total	155	2,906	22.7

of production, i.e. in excess of KD 50,000 per worker, 10 employed between 8 and 50 workers. This appears to support the view advanced in the previous chapter that small firms have been encouraged by subsidies to become capital-intensive enterprises.

Of the 56 firms with the least capital-intensive methods of production, 22 were small while 8 were of the larger size firms.

Table 6.6 Relationship between total capital employed per worker and firms labour size

Capital

Size of labour force		1-10 KDth.	11-20 KDth.	21-50 KDth.	Over 50 KDth.	Total
8-50	No.	22	21	18	10	71
	%	31.0	29.6	25.3	14.1	100.0
51-100	No.	12	8	9	1	30
	%	40.0	26.7	30.0	3.3	100.0
101-200	No.	14	7	6	1	28
	%	50.0	25.0	21.4	3.6	100.0
201-1,000	No.	8	7	8	3	26
	%	30.8	26.9	30.8	11.5	100.0
Total	No.	56	43	41	15	155
	%	36.1	27.7	26.5	9.7	100.0

Section 4

Employment

Besides our interest in the details of the employment structure of the sample firms, we will use the employment structure as a measure of firm size. In this regards it is important to keep in mind that the concept of size, whatever measure is used in applying it, is of necessity a relative notion and must be considered in the context of the size of the Kuwaiti economy and the degree of industrial concentration.

The number of persons employed is a size criterion which is frequently resorted to. The practice of using this criterion may result more from certain statistical limitations - since the number of persons employed is the most generally available datum - than from thorough analysis. However, it should be noted that exclusive reference to number of persons employed leaves out of consideration numerous other, and economically significant, ways of looking at "size" (and the resort to employment figures may also encounter complications resulting from the prevalence of seasonal fluctuations in certain industries).

There is no officially used criteria in the Ministry of Commerce and Industry for classifying industrial

establishments according to size. One such classification was put forward in an interview by the head of the Planning and Development of Industrial Projects Department[1] on the basis of: (i) degree of mechanisation, (ii) size of investment, and (iii) area of industrial land required for the project. In addition, there are no values in the Ministry attached to any of these measures. Obviously, all three criteria are open to anybody's personal judgement.

A study[2] carried out by the Ministry suggested the following criteria for the classification of industrial establishments: (i) size of invested capital, (ii) number of employees, and (iii) the volume of annual production. According to this criteria, the study added, classification of industrial establishments in Kuwait may be divided into two main types: small and large establishments. Small establishments are those firms which do not employ more than 25 labourers, and that their investment capital or annual production does not exceed KD 500,000. Large establishments are those whose labourers and investment capital or annual production exceed the above mentioned figures.

Table 6.7 illustrates the employment structure of the respondent firms and the concentration of employment by firm size category. It is seen from the Table that 34

Table 6.7 Employment structure

Labour size	No.of firms	No.of firms %	Total employees	Average total employees
8-25	34	21.1	605	18
26-50	39	24.2	1,471	38
51-100	31	19.3	2,357	76
101-200	28	17.4	3,901	139
201-500	22	13.7	6,944	316
501-1,000	7	4.3	4,474	639
Total	161	100.0	19.752	123
Median	61			

firms, 21 per cent of the total number of firms, employ between 8 and 25 persons. In the meantime, 39 firms, 24 per cent employ between 26-50 persons. While 19 per cent of the firms employ between 51-100 persons and 17 per cent employ between 101-200. Out of the remaining 18 per cent of the firms, 14 per cent employ between 201-500 persons and some 4 per cent employ between 501-1,000 persons.

Accordingly, only one fifth of the Kuwaiti establishments may be considered to be small-scale undertakings.

However, if we wanted to consider firms having 50

employees or less as small-scale establishments, then we would conclude that about 45 per cent of the Kuwaiti firms are small-scale entities. Moreover, if one considers firms having 100 employees or less as small-scale establishments, then we would conclude that about 65 per cent of the Kuwaiti establishments to be small-scale entities.

By the same token, if one considers firms employing between 101-200 employees as medium-scale entities, then one would conclude that about 17 per cent of Kuwaiti firms are of the medium-scale type. Likewise, if one considers firms employing more than 200 employees as large-scale entities, one would conclude that about 18 per cent of Kuwaiti establishments are of the large-scale type. But by international standards even the bigger firms may be considered to be relatively small-scale enterprises.

Moreover, it is seen from Table 6.7 that smaller firms have lower employment concentrations than do the larger ones.

Nationality of employees

The respondent firms, as shown in Table 6.7 employed a total of 19,752 persons in 1982. Out of this total, 303 persons were Kuwaitis and 19,449 persons were non-Kuwaitis. Thus, the overall ratio was 1.5 per cent Kuwaitis to 98.5

per cent non-Kuwaitis. Obviously, the nationality of the labour structure is greatly biased against the Kuwaiti labour force. The main reasons for this bias are many.

First, there is a serious gap between the supply and demand for labour in Kuwait and paradoxically there is also a severe problem of disguised unemployment in some sectors, particularly in the civil services sector as will be explained later. The gap is not only in terms of the quantity of labour, but also and more critically, in terms of labour quality.

Secondly, the Government's employment policies have been one of the principal reasons for diverting the Kuwaiti labour force mainly into the civil services. The Government have felt obliged to secure a job in the public sector for all Kuwaiti applicants. Consequently, employment in the public sector was not geared to real needs, but was instead used to solve the problem of the lack of competitive employment opportunities in the private sector. A productivity study(3) which was published in 1972 revealed that, though a top few civil servants work hard, the then 45,000 Kuwaiti employees were found to have a per capita output of 15 minutes for every six hours of employed work. It is doubtful whether this situation has changed. This has become a major problem because of its effect in directing human efforts away from the most productive work

and increasing disguised unemployment in the public sector. Thus, most of the productive activities (outside the government) came to be performed by expatriate labour.

Thirdly, foreign labour has been recruited to offset deficiencies in local supplies,and since manpower development is a time-consuming process, the dependence on foreign labour is likely to remain a basic feature of Kuwaiti labour market for still some time to come. Although there has been a continuing available supply of expatriate labour, attracted largely by high salaries and the ability to remit earnings freely, the cost of employing such labour is rising. The cost of supporting a rapidly growing labour force in terms of housing, schools, medical and other facilities are also rising. These costs are likely to prove a continuing constraint in the development of labour-intensive industries.

Table 6.8 shows the Kuwaiti labour structure. It is seen that 74 firms, 46 per cent of the total, do not employ any Kuwaitis at all. On the other hand, 35 per cent of the firms employ only one or two Kuwaitis. The Kuwaiti element in this category is thought to be mostly manager/owners. Some 16 per cent of the firms are found to employ between 3-10 persons. These are also thought to include manager/owners as well as those employed in high administrative positions.

Table 6.8 The Kuwaiti labour structure

Labour	No.of firms	%	Cumulative %
Zero	74	46.0	46.0
1	34	21.1	67.1
2	23	14.3	81.4
3 - 5	19	11.8	93.2
6 - 10	6	3.7	96.9
11 - 15	4	2.5	99.4
50	1	0.6	100.0
Total	161	100	-

Only the remaining five companies, 3 per cent of the total, employ between 11-50 Kuwaiti employees. Again, most of those employees are thought to hold high executive and administrative positions. These may include a few blue-collar workers, though very few of the remaining Kuwaitis are expected to hold "dirty" technical jobs or even engineering positions.

Kuwaitis generally represent a small proportion of the labour force of each firm. This is shown in Table 6.9 where it ranges between 0% and 20%. It is noted from the Table that 30 per cent of the firms have Kuwaiti workers representing between 1-3% of their total labour

force. In another 21 per cent of the firms, the Kuwaiti workers represent between 4-10%. In three companies, 2 per cent of the total, the Kuwaiti labour force constitutes 13% of total labour employed in each of the firms, and only in one company does the Kuwaiti labour constitute 20% of the total labour.

In an aggregate form, 42 per cent of the firms have a Kuwaiti work force of between 1-5% of their total work force. Added to this are the 46 per cent which do not employ any Kuwaitis at all. Therefore, 88 per cent of the firms either do not have any Kuwaiti employees or their Kuwaiti work force in relation to their total work force is equal to or less than 5 per cent. The remaining 12 per cent have, as mentioned earlier, a Kuwaiti work force of between 6-20 per cent of their total work force.

Article 21 of the Industrial Law No. 6 of 1965 stated the following:

> "The number of Kuwaiti labourers and staff employed by every industrial firm shall not be less than 25% of the total number of the firm's labourers and employees. The Minister of Commerce and Industry may, in case no sufficient Kuwaitis are available, exempt the firm from such a stipulation or reduce the percentage referred to".

Moreover, the 25% requirement was introduced as a condition for manufacturing firms to qualify for the receiving of government subsidies.

Table 6.9 Kuwaitis as a percentage of total labour

Percentage	No.	%	Cumulative %
Zero %	74	46.0	46.0
1%	15	9.3	55.3
2%	24	14.9	70.2
3%	10	6.2	76.4
4 - 5%	19	11.8	88.2
6 - 10%	15	9.3	97.5
11 - 13%	3	1.9	99.4
20%	1	0.6	100.0
Total	161	100.0	-

However, by comparing the above figures concerning the percentage of the Kuwaiti labour force as related to the total labour force of the firms, it is obvious that the 25% requirement is nowhere near realisation even after 20 years since the legislation was passed.

The 25% provision of the Industrial Law has been consistently waived, although it remains as the expression of a longer-run aim. One of the main reasons is that Kuwaiti society, being a traditional society, has not become fully adjusted, culturally and sociologically, to modern industry. Other important factors are low wages, low social prestige of many industrial occupations, long working

hours, and poor industrial relations in many enterprises.

A report[4] by the Ministry of Commerce and Industry suggested the formulation of a detailed and practical policy through which the state might be able to encourage the attraction of Kuwaiti labour to industry by two ways: (i) increasing the training opportunities, and (ii) subsidising their salaries. A subsidy to be paid for each Kuwaiti worker, and to be the sum of the difference between what the entrepreneur is willing to pay at the market rate and what the Kuwaiti would have gained if he had worked in the civil service.

Section 5

Industrial sectors

Table 6.10 shows the frequency distribution of the respondent firms by industrial sector. It is seen from the Table that the largest group, 29 per cent of the firms, are involved in producing metallic products. Second largest group is seen to be firms producing chemicals or chemical based products counting for 24 per cent of the total number of firms. Indeed, the chemicals sector forms the basis for Kuwait's international comparative advantage in the oil industry, and having this relatively high number of firms could be seen as a positive reaction to government policy of encouraging private initiative in the oil industry.

The food and beverages sector's (called food for short in the Table) share is 15 per cent of the total number of firms. This is followed by the construction materials sector with 13 per cent of the total number of firms. The paper and printing (called paper for short in the Table), the wood products and the textiles sectors each have 8 per cent, 7.5 per cent and 3 per cent of the total number of firms, respectively.

Table 6.10 Frequency distribution of the industrial sectors

Industry	No.of firms	%
Metallic pdts.	47	29.2
Chemicals	39	24.2
Food	24	14.9
Const. mtls.	21	13.0
Paper	13	8.1
Wood pdts.	12	7.5
Textiles	5	3.1
Total	161	100.0

Table 6.11 illustrates the relationship between the industrial sectors and some subsidies indicators. It is seen from the Table that the construction materials sector firms, on average, have the highest electricity (subsidy) per worker with KD 647. This is followed by the food and beverages sector firms with an average of KD 502 and the chemicals sector with KD 430.

On the other hand, the wood products, the textiles and the paper and printing sectors had the lowest electricity subsidy per worker consumption averages of KD 145, KD170 and KD 243, respectively.

Accordingly, the construction materials,the food and

Table 6.11 Relationship between industrial sectors and some subsidies indicators (KD averages)

Industry	No. of firms	Elect. sub./ worker (average)	Fuel sub./ worker (Average)	No. of firms	Water sub./ worker (Average)	Total utilities subs./ worker (Average)	Total utilities subs. % total capital		Land sub./ worker	
							No. of firms	Average	No. of firms	Average
Metallic pdts.	47	339	49	46	44	440	45	4.5	36	146
Chemicals	39	430	340	37	90	898	37	5.2	36	156
Food	24	502	144	21	184	891	20	7.6	20(*)	135(*)
Const. mtls.	21	647	142	21	317	1,105	21	9.6	20	279
Paper	13	243	104	12	42	417	10	2.4	12	75
Wood pdts.	12	145	25	11	17	202	10	6.0	9	39
Textiles	5	170	175	5	41	386	5	1.9	5	104
Total	161	398	152	153	110	683	148	5.7	138(*)	152(*)

(*) A case of land subsidy per worker of KD 26,012 (31 times larger than the case which just preceded it) has been excluded from the calculations because of the distorting effect which it could have had by concealing some of the qualities of the data. Otherwise, the averages would have been KD 1,367 and 338, respectively.

beverages, and the chemicals sectors are heavy-electricity consumers, while the textiles, the wood products and the paper and printing sectors are low electricity consumers.

As regards water subsidy, it is seen from the Table that the construction materials, the food and beverages and the chemicals sectors' firms also benefit of, on average, the highest water subsidies. Again, the wood products, the textiles and the paper and printing industries' firms are the least beneficiaries of water subsidies.

In terms of fuel subsidy, it is seen that the chemicals sector benefits of, on average, the highest fuel subsidy per worker, hence these firms consume the highest share of fuel. Also high fuel consumers are found to be firms in the textiles, food and beverages, and construction materials sectors.

Moreover, it has been found that the construction materials, the chemicals and the food and beverages sectors are, on average, amongst the highest beneficiaries of total utilities subsidies. On the contrary, the wood products, the textiles, the paper and printing and the metallic products sectors' firms are amongst the lowest beneficiaries of total utilities subsidies.

However, as regards total utilities subsidies as a percentage of total capital employed, the highest such

shares are seen to be those of the construction materials, food and beverages, wood products and chemicals sectors' firms. While on the contrary, the lowest such shares are those of the textiles and paper and printing sectors.

Finally, the construction materials firms are seen to have, on average, the highest land subsidy per worker. This is followed by the chemicals, the metallic products and the food and beverages sectors. Firms in the wood products and paper and printing sectors are seen to have the lowest shares of land subsidy per worker.

Table 6.12 shows the relationship between the industrial sectors and total utilities subsidies per worker distribution of the respondent firms. It is noted from the Table that 58 per cent and 55 per cent of the firms in the paper and printing and the wood products sectors fall in the lowest total utilities subsidies per worker of KD 60-200, respectively.

In the meantime, 76 per cent of the firms in each of the food and beverages and the construction materials sectors and 57 per cent of the firms in the chemicals sector benefit of more than KD 500 in total utilities subsidies.

Table 6.13 illustrates the relationship between the industrial sectors and total capital employed per worker, total labour, total labour average and compound growth

Table 6.12 Relationship between industrial sectors and total utilities subsidies per worker (KD)

Industry		Subsidy 60-200	201-500	501-1,000	1,001-7,700	Total
Metallic pdts.	No.	15	18	7	6	46
	%	32.6	39.1	15.3	13.0	100.0
Chemicals	No.	6	10	13	8	37
	%	16.3	27.0	35.1	21.6	100.0
Food	No.	-	5	12	4	21
	%	-	23.8	57.1	19.1	100.0
Const.mtls.	No.	1	4	7	9	21
	%	4.8	19.0	33.3	42.9	100.0
Paper	No.	7	3	1	1	12
	%	58.4	25.0	8.3	8.3	100.0
Wood pdts.	No.	6	4	1	-	11
	%	54.5	36.4	9.1	-	100.0
Textiles	No.	1	2	2	-	5
	%	20.0	40.0	40.0	-	100.0
Total	No.	36	46	43	28	153

rate. It is seen from the Table that the highest total capital employed per worker concentration is in the textiles sector firms followed by the firms in the construction materials and the chemicals sectors. On the other hand, the least total capital employed per worker concentration is found to be in the wood products sector firms. This is followed by the metallic products sector. Of course total capital employed per worker may be used as

Table 6.13 Industrial sectors by total capital employed per worker, total labour, total labour average and compound growth rate

Industry	Total capital/ worker		Total labour			Compound growth rate	
	No.of firms	Average KD	No.of firms	Total	Average	No.of firms	Average
Metallic pdts.	46	17.8	47	5,540	118	44	27.3
Chemicals	39	28.5	39	2,899	74	33	31.5
Food	22	22.8	24	4,263	178	19	17.3
Const. mtls.	21	29.2	21	2,719	130	20	24.5
Paper	11	20.7	13	2,440	188	10	62.5
Wood pdts.	11	6.7	12	1,670	139	10	25.8
Textiles	5	35.1	5	221	44	3	120.8
Total/Average	155	22.7	161	19,752	123	139	31.0

a measure of capital intensity. Thus, those firms with the higher total capital per worker shares may be considered to be the most capital intensive, and vice versa.

It is also seen from the Table that firms in the paper and printing and the food and beverages sectors employ, on average, the highest numbers of workers. These are followed by firms in the wood products, construction materials and metallic products sectors. On the other hand, firms in the textiles and the chemicals sectors employ, on average, the least numbers of workers.

In terms of compound growth rates, it is seen from the Table that the textiles sector firms have had, on average, the highest compound growth rates. This is followed by the paper and printing sector firms. Firms in the chemicals, metallic products, wood products and construction and materials products sectors also witnessed, on average, relatively high compound growth rates. Firms in the food and beverages sector, on the other hand, witnessed, on average, the lowest compound growth rates.

Table 6.14 illustrates the relationship between the industrial sectors and the year of establishment of the projects. It is seen from the Table that all the textiles sector firms were established in the 1980-83 period. Also 12 firms in the chemicals sector were established in 1980-83 as compared to 8 firms in 1975-79. Otherwise,

Table 6.14 Relationship between industrial sectors and years of establishment of projects

Industry		Year 1940-1964	1965-1974	1975-1979	1980-1983	Total
Metallic pdts.	No.	3	17	19	7	46
	%	6.5	37.0	41.3	15.2	100.0
Chemicals	No.	2	16	8	12	38
	%	5.3	42.1	21.0	31.6	100.0
Food	No.	5	6	8	5	24
	%	20.8	25.0	33.4	20.8	100.0
Const. mtls.	No.	3	3	8	7	21
	%	14.3	14.3	38.1	33.3	100.0
Paper	No.	3	5	2	3	13
	%	23.1	38.5	15.3	23.1	100.0
Wood pdts.	No.	6	3	2	2	13
	%	46.2	23.0	15.4	15.4	100.0
Textiles	No.	-	-	-	5	5
	%	-	-	-	100.0	100.0
Total	No.	22	50	47	41	160

the increases in each sector correspond with the overall increases in the number of firms which have been established in the recent years as compared to the preceding periods, as discussed earlier in this chapter.

Conclusion

In conclusion, it has been found that about half of the Kuwaiti firms are in the metallic and chemicals

sectors. While about a third of the Kuwaiti firms are in the food and beverages and the construction materials sectors.

As regards subsidies, it has been found out that the construction materials sector is the most electricity-intensive and uses the highest shares of water subsidies. This sector is also found to benefit of the highest total utilities subsidies. In addition, this sector's firms have the highest percentages of total utilities subsidies when related to total capital employed per worker. Moreover, this sector's firms are found to have the largest land subsidies per worker. While firms in the construction materials sector have been found to be the second most capital-intensive group and they have had average compound growth rates.

The food and beverages sector have been found to have the second highest electricity subsidy per worker, the second highest water subsidy per worker, the third fuel subsidy per worker, and all in all, the third highest total subsidies per worker. Firms in this sector have also had the second highest total utilities subsidies as a percentage of their total capital. However, the food and beverages firms have been found to be amongst the lower capital-intensive firms group and to have the lowest values of compound growth rates.

The chemicals sector have been found to have one of the highest electricity subsidy per worker and water subsidy per worker, the highest fuel subsidy per worker, and all in all, the third highest total utilities subsidies per worker. This sector's firms have been found to be amongst the most capital-intensive firms, and having relatively high average compound growth rates.

Firms producing metallic products have been found to have average total utilities subsidies per worker and total utilities subsidies as a percentage of their total capital. These firms have also been found to be more labour-intensive than the previously discussed sectors.

The wood products sector's firms have been amongst those benefiting of the least total utilities subsidies per worker, although the share of these total utilities subsidies as a percentage of total capital employed are the second highest. The wood products firms also benefit of, on average, the lowest shares of land subsidies per worker. Moreover, these firms are extremely labour-intensive and have experienced average compound growth rates.

The paper and printing sector's firms have been found to be amongst the firms which benefit of low total utilities subsidies than firms in the other sectors. However, these firms have experienced the second highest

average compound growth rates.

Finally, as regards the textiles sector, it has been found that the firms in this sector benefit of the least total utilities subsidies as a percentage of their total capital employed. However, these firms are the most capital-intensive having the lowest average total employment. In addition, they have experienced the highest compound growth rates. Moreover, all the textiles sector firms were established in the 1980-83 period in what may be considered as a result of more recent increases in demand for textiles products.

Section 6

Exports

The exporting activities of Kuwaiti firms are considered by many authorities to be of major importance because having a sound domestic manufacturing industry, which should generate foreign exchange in the post-oil era in Kuwait, is a repeatedly stated aim of the Kuwaiti Government as well as by many local independent agencies, which have reported on the development of the domestic manufacturing sector.

Table 6.15 illustrates the exports structure of the respondent firms. As seen from the Table, about one-quarter of the respondent firms produce solely for the local market and about a half of the establishments export quantities of 1-25 per cent of their products; while about 13 per cent of the firms export between 26-50 per cent of their output. Another 13 per cent of the firms export more than half of their output some of which produce totally for export markets.

If one considers firms exporting up to 10 per cent of their output as firms producing primarily for local market purposes, we will note that about 50 per cent of the total number of firms fall into this category. Thus, about half of the industrial establishments do not fulfil

Table 6.15 Frequency distribution of exports structure

Exports	No. of firms	%	Cumulative %
Zero %	36	22.6	22.6
1 - 10%	44	27.7	50.3
11 - 25%	38	23.9	74.2
26 - 50%	20	12.6	86.8
51 - 100%	21	13.2	100.0
Total	159	100.0	-

the declared objective of building an industry directed to export markets for the purpose of earning foreign currencies in the absence of oil income as mentioned earlier. From this point of view, only about 13 per cent of the firms have exports of between 51-100 per cent of their output.

Table 6.16 illustrates the relationship between the exports structure and total capital employed per worker, total labour average, firms which suggested the subsidisation of exports and those which reported exporting as an important difficulty facing them.

It is seen from the Table that the labour-intensive firms do not export at all and that they produce wholly for the local market. While firms of all the exporting

Table 6.16 Exports structure and total capital employed per worker, total labour average, firms which suggested the subsidisation of exports and those which reported exporting as a difficulty

Exports	Total capital per worker		Total labour		Exporting, suggested		Exporting, difficulty	
	No.	Average	No.	Average	No.	%	No.	%
Zero %	34	14.8	36	97	11	12.4	4	12.2
1 - 10	42	25.5	44	104	27	30.3	10	30.3
11 - 25	38	25.0	38	129	22	24.7	9	27.3
26 - 50	18	22.5	20	142	13	14.6	5	15.2
51 - 100	21	23.3	21	185	16	18.0	5	15.2
Total (Average & %)	153	22.3	159	124	89	100.0	33	100.0

categories seem to have relatively similar degrees of capital intensity, although smaller exports are slightly more capital-intensive than those which are larger exporters.

As regards total labour average, it is noted that while the firms which totally produce for the local market are, on average, of the smaller size, firms which export low percentages are of a larger size and those which export larger proportions of their total production are even larger.

It is noted from the Table that most of the firms which suggested that the State should offer assistance and subsidies to exports were of those which exported lower proportions of their total production.

Moreover, most of the respondents which stated that exporting is one of the major difficulties that faces manufacturing industry in Kuwait were firms which export lower proportions of their total production.

Table 6.17 shows the relationship between the industrial sectors and exports structure. It is seen from the Table that 44 per cent of the firms in the food and beverages sector produce wholly for the local market. In the meantime, 33 per cent of the firms in the construction materials sector also produce wholly for the local market.

In numbers of firms, it is seen that 6 firms in the

Table 6.17 Industrial sectors by exports structure

Industry		Exports Zero %	1-25%	26-50%	51-100%	Total
Metallic pdts.	No.	10	23	8	6	47
	%	21.3	48.9	17.0	12.8	100.0
Chemicals	No.	4	22	6	7	39
	%	10.3	56.4	15.4	17.9	100.0
Food	No.	10	12	-	1	23
	%	43.5	52.2	-	4.3	100.0
Const. mtls.	No.	7	12	1	1	21
	%	33.3	57.1	4.8	4.8	100.0
Paper	No.	1	5	3	3	12
	%	8.3	41.7	25.0	25.0	100.0
Wood pdts.	No.	3	5	1	3	12
	%	25.0	41.7	8.3	25.0	100.0
Textiles	No.	1	3	1	-	5
	%	20.0	60.0	20.0	-	100.0
Total	No.	36	82	20	21	159

metallic products sector and 7 firms in the chemicals sector are primary exporters. Also, 25 per cent of the firms in the paper and printing and wood products sectors are primary exporters.

It is also noted that 13 firms, 62 per cent of the total number of the firms which are primary exporters

belong to the metallic products and chemicals sectors. Moreover, 14 firms, 70 per cent of the total number of firms which are high exporters (between 26-50%) also belong to the same industrial sectors.

It is noted that while 42 per cent of the firms in the paper and printing sector export between 1-25%, the other 50 per cent export more than 25%.

Section 7

Industrial areas

As previously discussed in Chapter 3, Shuaiba is the only well-organised and administered industrial area. However, it is mainly occupied by government-owned industries.

Table 6.18 shows the frequency distribution of the respondent firms by location. It is noted that the total number is 178 establishments, i.e. including the total number of the 161 respondent firms. The reason for the excessive number of firms is that 17 firms reported two locations each.

It is seen from the Table that the highest concentration of industry is found in Shuwaikh where 73 establishments are located, i.e. 41 per cent of the total. The second highest concentration is seen in Sabhan with 63 establishments counting for about 35 per cent of the total. The remaining 42 establishments, 24 per cent of the total, are distributed between the other industrial areas. The "other" areas, mentioned in the Table, include Messilah, Sharq, Fahaheel, Major Contractors and Shagaya industrial areas. In total, 9 establishments were found to be located in these areas.

Table 6.18 Locational frequency distribution

Location	No. of firms	%
Shuwaikh	73	41.0
Sulaibiya	7	3.9
Sabhan	63	35.4
Shuaiba	18	10.1
Ahmadi	8	4.5
Others	9	5.1
Total	178	100.0

It is seen from the Table that the areas with the least numbers of firms located in them are Sulaibiya, Shuaiba and Ahmadi. While the first two have been designated for heavy-industries, the latter is home for a variety of light-, medium-, and heavy-scale industries. Generally speaking, heavy-industries require large plots of land, while light industries involve plot areas of a smaller scale. This is the main reason explaining why there are more firms concentrated in the relatively light- and medium-scale industries in the Shuwaikh-Sabhan areas as compared to Shuaiba and Sulaibiya.

Table 6.19 shows the industrial activities found in each industrial area. It is seen that a large number of

the establishments located in Shuwaikh are involved in metallic products activities. Also, large numbers of establishments producing chemicals, food and beverages, paper and printing and wood products are also located in Shuwaikh. Therefore, Shuwaikh industrial area does not specialise in any specific activity it is occupied by heavy-industries activities as well as light-industries.

Sulaibiya is occupied mostly by metallic products industries. Sabhan, on the other hand, is occupied by establishments involved mostly in chemicals and metallic products activities. Although a considerable number of the establishments in the Sabhan area are also involved in food and beverages processing and production of construction materials.

The majority of establishments located in Shuaiba are involved in chemicals, metallic products and construction materials production. While Ahmadi is occupied by establishments producing metallic products, chemicals and food and beverages.

Accordingly, while most of the light-industries are located in Shuwaikh and Sabhan, these areas are also occupied largely by heavy-industries. Speciality is found in Sulaibiya and Shuaiba which are occupied by heavy-industries only.

Table 6.19 Relationship between industrial areas and industrial sectors

Industrial area		Metallic pdts.	Chemicals	Food	Const. mtls.	Paper	Wood	Textiles	Total
									Sectors
Shuwaikh	No.	25	14	11	5	9	9	-	73
	%	34.2	19.2	15.1	6.9	12.3	12.3	-	100.0
Sulaibiya	No.	5	-	-	2	-	-	-	7
	%	71.4	-	-	28.6	-	-	-	100.0
Sabhan	No.	12	20	8	8	4	5	5	62
	%	19.4	32.2	12.9	12.9	6.4	8.1	8.1	100.0
Shuaiba	No.	4	7	1	4	2	-	-	18
	%	22.2	38.9	5.6	22.2	11.1	-	-	100.0
Ahmadi	No.	3	2	2	1	-	-	-	8
	%	37.5	25.0	25.0	12.5	-	-	-	100.0
Others	No.	-	-	3	3	1	2	-	9
	%	-	-	33.3	33.3	11.1	22.2	-	99.9
Total	No.	49	43	25	23	16	16	5	177

Sulaibiya and Shuaiba have been designed to home heavy-industries, as mentioned in Chapter 3. But Sabhan was supposed to be occupied by light industries. While Shuwaikh has never been really organised, and therefore, is occupied by a variety of industrial as well as other non-industrial activities.

The relationship between the industrial areas and the firms' total capital employed and average employment are shown in Table 6.20. It is noted from the Table that most of the establishments located in Shuwaikh are of the smaller total capital employed size, although there are also many larger establishments in this area. Sulaibiya, Shuaiba and Ahmadi, on the other hand, are mostly occupied by larger establishments. Sabhan is occupied largely by smaller establishments, as 80 per cent of the 59 establishments which are located in this area are of the KD 1,000-1,000,000 total capital employed size category.

In terms of employment size distribution, it is seen that the largest establishments are located in Shuaiba, Shuwaikh and Sulaibiya. While the smaller establishments are located in Sabhan and Ahmadi.

Table 6.21 illustrates the relationship between the industrial areas and the total area of industrial land. It is seen from the Table that the majority of the lands

Table 6.20 Relationship between industrial areas and total capital employed and average total labour (KD thousand)

Industrial area		Capital 1-500	501-1,000	1,001-5,000	Over 5,000	Total	Labour(*) (Average)
Shuwaikh	No.	28	11	23	5	67	140
	%	41.8	16.4	34.3	7.5	100.0	-
Sulaibiya	No.	1	-	5	1	7	110
	%	14.3	-	71.4	14.3	100.0	-
Sabhan	No.	21	19	9	1	50	59
	%	42.0	38.0	18.0	2.0	100.0	-
Shuaiba	No.	1	1	4	10	16	281
	%	6.3	6.3	25.0	62.4	100.0	-
Ahmadi	No.	1	-	7	-	8	69
	%	12.5	-	87.5	-	100.0	-
Others	No.	4	-	3	1	8	112
	%	50.0	-	37.5	12.5	100.0	-
Total	No.	56	31	51	18	156	123

(*) The total numbers of firms of this column do not correspond with those of the previous column in all cases. However, the aggregate averages is not expected to differ significantly in both cases.

Table 6.21 Relationship between industrial areas and total areas of industrial lands (Square metres)

Industrial area		Size of land: 900-2,000	2,001-5,000	5,001-10,000	Over 10,000	Total	Total[1] area(Average)
Shuwaikh	No.	13	22	9	9	53	12,695
	%	24.5	41.5	17.0	17.0	100.0	-
Shlaibiya	No.	-	-	1	5	6	33,286
	%	-	-	16.7	83.3	100.0	-
Sabhan	No.	22	20	11	10	63	6,095
	%	34.9	31.7	17.5	15.9	100.0	-
Shuaiba	No.	-	1	3	14	18	71,678
	%	-	5.5	16.7	77.8	100.0	-
Ahmadi	No.	-	3	3	1	7	6,429
	%	-	42.9	42.9	14.2	100.0	-
Others	No.	2	-	3	3	8	12,000[2]
	%	25.0	-	37.5	37.5	100.0	-
Total	No.	37	46	30	42	155	18,443[2]

(1) The total numbers of firms in this column do not correspond with those of the previous column in all cases. However, the aggregate averages are not expected to differ significantly in both cases.

(2) A case of total land area of 8,740,000 square metres has been excluded from the average calculations because of the distorting effect which it would have had by concealing some of the qualities of the data. Otherwise the averages would have been 1,466,667 square metres and 81,642 square metres, respectively.

in Shuwaikh and Sabhan industrial areas are of the smaller size, while those of the Sulaibiya and Shuaiba are of the larger size. This observation is also noted from the average sizes of industrial land where the overall averages for land areas in Shuwaikh and Sabhan are found to be 12,695 sq.m. and 6,095 sq.m., respectively. In the meantime, land areas in Sulaibiya and Shuaiba are found to be 33,286 sq.m. and 71,678 sq.m., respectively.

The questionnaire contained some questions which aimed at finding out some of the qualities of land subsidies. Although the replies to these questions will be analysed in the next chapter, however, those elements which may be relevant to the issues of industrial areas are illustrated in Table 6.22.

It is seen from the Table that the majority of the respondent firms are dissatisfied with their land areas. Although the rate of this dissatisfaction is variable between the different industrial areas. It is seen that all Sulaibiya firms and two thirds of the Shuwaikh and Ahmadi firms are dissatisfied. However, less firms, about half of the total, in the Sabhan and Shuaiba industrial areas are dissatisfied with their land areas.

In terms of adjacent vacancies, it is seen that Shuaiba firms are in a more advantageous position than firms

Table 6.22 Relationship between industrial areas and opinions about area of plots, availability, of adjacent vacancies and whether an allocated extension is next to the original plant

Industrial area	Enough area			Adjacent vacancy			Ext. next to original		
	Yes	No	No % total	Yes	No	No % total	Yes	No	No % total
Shuwaikh	21	47	69.1	6	62	91.2	5	11	68.8
Sulaibiya	-	6	100.0	3	3	50.0	2	-	0
Sabhan	24	28	53.8	24	27	52.9	18	7	28.0
Shuaiba	10	7	41.2	12	5	29.4	13	-	0
Ahmadi	2	6	75.0	2	6	75.0	2	1	33.3
Others	4	4	50.0	5	3	37.5	3	2	40.0
Total	61	98	61.6	56	107	65.6	43	21	32.8

in other areas. Firms in the Shuwaikh industrial areas, on the other hand, are in a less advantageous position than firms in the other areas, this is followed by firms in Ahmadi. In the meanwhile, half of the firms in each of Sulaibiya and Sabhan reported that there were no adjacent vacancies to their industrial lands.

Firms which had requested expansions to their industrial lands were required to report whether these extensions were adjacent to their plant location. It is seen from the Table that two thirds of the Shuwaikh area firms were granted extensions which were not adjacent to their original plants. The main reason for this could be Government's plans to change Shuwaikh from an industrial to a residential area.

However, one third of the firms in each of Sabhan and Ahmadi reported that they have been granted extensions which were not next to their original plants. In the meantime, all firms in Sulaibiya and Shuaiba which were granted extensions reported that these extensions have been next to their original plants.

Accordingly, firms located in Shuwaikh, in general, are most disadvantaged in terms of land area, adjacent vacancies for any future expansions and in that extensions are not next to their original plants. On the other hand, firms located in Shuaiba are, in general, the most

advantageous in these terms of industrial land characteristics.

Conclusion

In conclusion it has been found that Shuwaikh and Sabhan industrial areas are the two mostly occupied industrial areas. Also, these two areas are occupied by most of the small-scale light industries. In addition, industrial land areas of establishments in Shuwaikh and Sabhan were found to be of smaller sizes than those located in other areas. However, as regards some of the conditions of the lands, Shuwaikh and Sabhan differ. While firms located in Shuwaikh have been found to be most disadvantaged in terms of land area, adjacent vacancies and that the extension granted to firms located in this area were not next to their original plants; firms located in Sabhan reported slightly better conditions.

On the other hand, Sulaibiya, Shuaiba and to some extent Ahmadi industrial areas have been found to be occupied by most of the large-scale heavy industries. Moreover, industrial land areas of establishments in these areas were found to be of larger sizes than those located in the previous areas. However, as regards some of the conditions of the lands, the three areas differed. Establishments located in Shuaiba were found

to be in a better position than those located in the other two areas.

Notes

Chapter Six

Structural characteristics of the sample firms

(1) Askar, K.; "The establishment and development environment of industrial projects in Kuwait", (Kuwait: Arab Planning Institute, 1982 - Arabic), p.37.

(2) Ministry of Commerce and Industry; "Industry in Kuwait: aims, types, criteria for the establishment of its projects - methods for its subsidisation and encouragement", (Kuwait: Industrial Development Committee, Dec. 1981 - Arabic), pp. 7-8.

(3) The Guardian, 25 February 1972.

(4) Ministry of Commerce and Industry, op. cit., pp. 17-18.

CHAPTER SEVEN

NON-MEASURABLE SUBSIDIES

Introduction

This chapter will study the non-measurable subsidy forms which are provided by the State of Kuwait to the manufacturing firms. Respondent firms were asked some questions which provided the data upon which our evaluation and analysis of these subsidies will be based.

To be studied in this chapter are the characteristics of the land subsidy, financial subsidies, customs duty protection, and government purchases. One issue is not included in the discussions of this chapter, that is exemptions from paying customs duties, since this matter was discussed earlier in Chapter 3. This subject was excluded from the questionnaire survey because it was found from the pilot tests that data regarding it were not readily available.

Two other issues are discussed in this chapter in in addition to the above matters. These are the respondents' opinions as regards subsidies in general and the new forms of subsidies which they wanted to see introduced, and the difficulties which they thought faced the manufacturing sector in general.

Section 1

Conditions of the industrial land (plot)

Industrial land subsidy is considered to be one of the most important subsidies in Kuwait. Therefore, the conditions of this subsidy will be discussed in a more detailed manner than the others.

Table 7.1 illustrates the initial size of the industrial land areas. If we assume that 3,000 sq.m. (about 10,000 sq. ft.) is the upper limit for small size plots, and 10,000 sq. m. (about 33,000 sq.ft.) is the upper limit for middle size plots. Then 64 firms, 47 per cent of the total may be considered as having small sized plots. Also, 45 firms, 32 per cent of the total may be considered to have middle sized plots, while some 29 firms, 21 per cent of the total, have large plots. Thus, most of the firms often start-off with relatively small sized plots.

We have seen in chapter 3 that most of the firms in Kuwait request that their industrial plots be extended. Table 7.2 illustrates the extension area of plots. It is noted from the Table that 24 firms, 41 per cent of the total, have been granted extension areas between 500-2,000 sq.m. Moreover, 13 firms, 22 per cent of the total, have been granted extension areas of between 2,001-5,000 sq.m. In the meantime, 32 firms, 37 per cent of the total have been

Table 7.1 Initial area of plots

Initial area (Sq.m.)	No. of firms	%	Cumulative %
500-1,000	19	13.7	13.7
1,001-2,000	25	18.0	31.7
2,001-3,000	21	15.1	46.8
3,001-5,000	27	19.4	66.2
5,001-10,000	18	13.0	79.2
10,001-50,000	23	16.5	95.7
Over 50,000	6	4.3	100.0
Total	139	100.0	-
Mean	13,710.5 sq.m.		
Median	3,987.5 sq.m.		

granted extension areas of more than 5,000 sq.m. Therefore, a large number of firms are often allocated extension areas of the large size.

Table 7.3 illustrates the extension area of the industrial plots as a percentage of their initial areas. it is noted from the Table that all extensions are equal to or exceed 20% of the initial areas of plots. Out of the total number of firms, 81 per cent reported extension areas of more than 50% of their initial plot areas.

Accordingly, most of the firms are allocated with

Table 7.2 Extension area of plots

Extension area (Sq.m.)	No.of firms	%	Cumulative %
500-1,000	14	23.7	23.7
1,001-2,000	10	16.9	40.7
2,001-5,000	13	22.0	62.7
5,001-15,000	10	16.9	79.7
15,001-40,000	9	15.3	94.9
130,000-2,300,000	3	5.2	100.0
Total	59	100.0	-
Mean	54,515.8 sq.m.		
Median	3,080 sq.m.		

extension areas exceeding 50 per cent of their initial plot areas.

Table 7.4 illustrates the total area of plots after having been extended. It is noted from the Table that 51 firms, 37 per cent of the total number of respondents, have total areas of the "small size" category. This compares to 47 per cent in the initial area situation which was discussed earlier. Moreover, 35 per cent of the firms are found to have total areas of the "middle size" category. This compares with 32 per cent in the initial area situation. In addition, 28 per cent of the total, have large size plots

Table 7.3 Extension area as a percentage of initial area

Percentage	No. of firms	%	Cumulative %
20-50%	11	19.0	19.0
51-80%	19	32.8	51.7
81-100%	22	37.9	89.7
101- 300%	6	10.3	100.0
Total	58	100.0	-
Mean	86.3%		
Median	76.2%		

as compared with 21 per cent in the initial area case.

It is noted from the above figures that the major changes were in the small size and large plots. Where the former decreased from 47 per cent of the total to 37 per cent; and the latter increased from 21 per cent of the total to 28 per cent.

Furthermore, it is seen from Table 7.4 that the more capital-intensive firms have benefited of, on average, larger total plot areas than did the less capital-intensive firms.

A total of 18 firms reported that they had been refused the allocation of industrial plots by the Ministry of Commerce and Industry. In fact, a number of respondents said that they were only granted industrial licences on the condition that they did not request industrial plots.

Table 7.4 Relationship between total area of plots by total capital employed per worker (KD thousand)

Total area (Sq.m.)	No. of firms	%	Cumulative %	Total capital per worker	
				No. of firms	Average
900-1,000	12	8.6	8.6	11	10.5
1,001-2,000	23	16.6	25.2	22	19.1
2,001-3,000	16	11.5	36.7	16	19.0
3,001-5,000	26	18.7	55.4	25.	19.3
5,001-10,000	23	16.6	72.0	22	26.1
10,001-20,000	12	8.6	80.6	11	23.8
20,001-50,000	16	11.5	92.1	15	38.3
Over 50,000	11	7.9	100.0	11	39.4
Total	139	100.0	-	133	23.8
Mean	80,565 sq.m.				
Median	5,000 sq.m.				

As shown in Table 7.5, ten firms reported that they have utilized plots which were previously owned by the entrepreneurs themselves, or that they actually purchased the land for the purposes of the project. Another eight firms reported that they had utilized plots for which the entrepreneurs had been previously allocated by the municipality of Kuwait to be used for commercial and

Table 7.5 Privately Owned land

Land ownership	No.of firms	%
Private	10	55.6
State	8	44.4

Table 7.6 Privately Owned land area (Sq.m.)

Area (Sq.m.)	No.of firms	%	Cumulative %
500-2,000	9	52.9	52.9
2,001-5,000	5	29.4	82.4
5,001-20,000	3	17.7	100.0
Total	17	100.0	-
Mean	4,109 sq.m.		
Median	2,025 sq.m.		

Table 7.7 Relationship between privately owned land and privately owned land area (Sq.m.)

Ownership	500-2,000		2,001-5,000		10,000-20,000		Total	
	No.	%	No.	%	No.	%	No.	%
Private	4	40	3	30	3	30	10	100
State	5	72	2	29	-	-	7	100
Total	9	52.9	5	29.4	3	17.7	17	100

warehousing purposes.

Table 7.6 illustrates the privately owned land areas. It is noted that 82 per cent of the plots are of the small size type. In addition, Table 7.7 illustrates the relationship between the ownership structure and the plot areas. It is noted that all the large plots are totally privately-owned. In the meantime, while 72 per cent of the originally state-owned plots are of the small size category, only 40 per cent of the totally privately-owned plots are of the same category.

In view of the fact that industrial plots are allocated on a negotiation basis between the Ministry of Commerce and Industry officials and the entrepreneurs, and the fact that industrial plots are of a fixed long-term investment; studying the conditions of the industrial plots which are allocated to the industrial firms from the point of view of those receiving such lands is extremely worthwhile.

Table 7.8 illustrates three conditions of the industrial plots together with data regarding industrial plot extension issues. It is noted from the Table that 62 per cent of the respondents feel that their industrial plots are not large enough for the firms' purposes. It is also noted that 67 per cent of the resppndent firms do not have any adjacent land vacancies which may be utilized in their future expansion activities. Moreover, 68 per cent of the

Table 7.8 Relationship between industrial land condition and extension issues

Issues	Yes		No		Total	
	No.	Row%	No.	Row%	No.	Row%
Enough area	61	38.4	98	61.6	159	100.0
Adjacent vacancy	53	33.5	107	66.5	160	100.0
Bear expansion	50	31.6	108	68.4	158	100.0
Extension requested	97	61.8	60	38.2	157	100.0
Extension granted	60	61.9	37	38.1	97	100.0
Extension next	43	67.2	21	32.8	64	100.0

respondents reported that their present industrial areas do not have any capabilities for any expansion plans which the firms may have.

Accordingly, the industrial plots from the size point of view are in a poor condition.

Furthermore, 62 per cent of the respondent firms reported that they have requested extensions of their industrial plots. Out of those which requested extensions, 62 per cent were approved. Also, 21 firms, 33 per cent of the firms which were granted extensions reported that the extensions which they were granted were not next to their original plot. Indeed, a high percentage for such an important issue. These extensions are mostly for the installation of new plants as a result of growth in production or diversification of

products. Obviously, having separate plant locations for integrated production requires extra transport, excessive managerial effort and involves extra costs to say the least.

Tables 7.9 and 7.10 illustrate the relationship between the respondents' opinion of whether the areas of their firms' industrial lands are enough or not and whether there are adjacent vacancies to their present plant locations and whether their firms have been allocated extension areas, respectively.

It is noted from Table 7.9 that 64 firms, 66 per cent of the respondent firms which reported that their present plot areas were not large enough for their purposes, also reported that there were no adjacent vacancies to their plants.

Moreover, 40 firms, 67 per cent of the respondent firms which reported that their present plot areas were enough for their purposes, reported that there were no adjacent vacancies to their plants.

It is seen from Table 7.10 that the majority of respondent firms, 96 per cent, which reported that they have been allocated with extension areas that the total areas of their plots were enough for the purposes of their firms. However, 38 firms reported that even with the extension areas which they had been allocated the total land areas of their plot areas were not enough for the purposes of their firms'

Table 7.9 Enough area by adjacent vacancy

Enough area	Adjacent vacancy: Yes		No		Total	
	No.	%	No.	%	No.	%
Yes	20	33.3	40	66.7	60	100.0
No	33	34.0	64	66.0	97	100.0

Table 7.10 Enough area and whether extension has been allocated

Enough area	Allocation of extension: Yes		No		Total	
	No.	%	No.	%	No.	%
Yes	22	95.7	1	4.3	23	100.0
No	38	51.4	36	48.6	74	100.0

activities, i.e. about twice as many as the firms which replied with "yes" answers.

Accordingly, the method of allocation of extension areas if apparently inefficient and ineffective.

Table 7.11 illustrates the relationship between year of establishment, and the industrial land conditions and the extension issues. It is noted from the Table that the 1975-79 period was the worst from the point of view of the area of the plot not being large enough for firms' activities. It seems that there was some improvement over the 1980-83

Table 7.11 Relationship between years of establishment and industrial land condition and extension issues

Issues

Years		Enough area		Adj.vacancy		Bear expansion		Ext. requested		Ext. granted		Ext. next	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1940-64	No.	8	14	2	20	6	16	13	9	5	8	2	3
	%	36.4	63.6	9.1	90.9	27.3	72.7	59.1	40.9	38.5	61.5	40.0	60.0
1965-74	No.	20	29	13	36	14	34	28	20	16	12	7	10
	%	40.8	59.2	26.5	73.5	29.2	70.8	58.3	41.7	57.1	42.9	41.2	58.8
1975-79	No.	14	33	21	24	15	32	29	17	18	11	14	6
	%	29.8	70.2	46.7	53.3	31.9	68.1	63.0	37.0	62.1	37.9	70.0	30.0
1980-83	No.	19	22	17	24	15	26	27	14	21	6	20	2
	%	46.3	53.7	41.5	58.5	36.6	63.4	65.9	34.1	77.8	22.2	90.9	9.1

period when dissatisfaction decreased from 70 per cent in the previous period to 54 per cent in the latter.

However, the noted improvement should not make us very optimistic, since another decrease is noted for the 1965-74 period. The decrease was from 64 per cent in 1940-64 to 59 per cent in 1965-74. Although this decrease was not as fast as the 1980-83 period.

In terms of adjacent vacancies, it seems from the Table that there have been some improvement over the period. The "no" answers dropped from 91 per cent in the first period to 59 per cent in the 1980-83 period.

In terms of whether the industrial plot is capable of bearing the extension plans of the firm, it seems from the Table that there has been a slight improvement over the study period. The "no" answers decreased in percentage terms from 73 per cent in the first period to 63 per cent in the last period.

Extension requests, generally speaking and as mentioned earlier, reflect dissatisfaction with present plot areas. In percentage terms, requests decreased from 41 per cent in 1940-64 period to 34 per cent in the 1980-83 period.

The provision of extension areas may be said to have increased over the study period. In percentage terms, while only 39 per cent of the requests were accepted in the first period, 78 per cent of the requests in the 1980-83 period

were accepted.

Granting extensions next to the original plants also improved to a great degree. Where only 40 per cent of the extensions were next to the original plants in the 1940-64 period, this share increased to 91 per cent in the 1980-83 period.

Many firms reported that they lease land at commercial rates mainly for warehousing purposes and because the industrial land granted to them was insufficient for their purposes. Table 7.12 illustrates the areas which are leased by the respondent firms.

It is noted from the Table that 25 firms, 45 per cent of the total, lease areas of between 100-1,000 sq.m. In the meantime, 21 firms, 37 per cent of the total, reported that they lease areas of between 1,001-5,000 sq.m. While ten firms, 18 per cent of the total, lease areas of between 5,001-25,000 sq.m.

The total number of firms which lease land is 56 firms, i.e. 40 per cent of all the 139 firms which reported that they had obtained industrial plots from the Ministry of Commerce and Industry. The fact that these firms are paying market prices for the lease of these areas reflects their actual need for such land. At the same time, it means that the Ministry has not been very successful in granting these firms the industrial area which is sufficient for their

Table 7.12 Leased plot areas (Sq.m.)

Leased area (sq.m.)	No.of firms	%	Cumulative %
100-500	8	14.3	14.3
501-1,000	17	30.4	44.6
1,001-2,000	11	19.6	64.3
2,001-5,000	10	17.8	82.1
5,001-10,000	7	12.5	94.6
10,001-25,000	3	5.4	100.0
Total	56	100.0	-
Mean	3,572 sq.m.		
Median	1,992.2 sq.m.		

purposes.

Table 7.13 illustrates the leased areas as a percentage of the total plot areas of the respondent firms. It is noted that 67 per cent of the respondents lease areas of more than 2% of their total areas. And 28 per cent lease between 7-10% of their total areas.

Table 7.14 illustrates the total rents which were paid by the respondent firms in 1982. These figures include rents for area leases, showrooms, and sometimes homes for workers. It is noted from the Table that 12 per cent of the respondents pay rents of between KD 51,000-200,000. However, the majority, 45 per cent of the firms pay annual

Table 7.13 Leased plot area as a percentage of the total land area

Percentage	No. of firms	%	Cumulative %
1-2%	12	33.3	33.3
3-6%	9	25.0	58.3
7-10%	10	27.8	86.1
11-30%	5	13.9	100.0
Total	36	100.0	-
Mean	6.5%		
Median	6.7%		

rents of between KD 1,000-10,000. While 31 per cent of the firms pay annual rents of between KD 10,001-30,000.

It is also noted from Table 7.15 that a large number of firms which have been established during the period understudy leased plot areas of different sizes. One may infer from this fact that these firms have not been granted areas of land sufficient for their activities and/or their requests for extensions have been rejected, or that extensions where granted have been smaller than needed by these firms.

Table 7.14 Total Payable rents (KD thousand)

Rents (KD th.)	No.of firms	%	Cumulative %
1-10	30	44.9	44.9
11-30	21	31.3	76.2
31-50	8	11.9	88.1
51-200	8	11.9	100.0
Total	67	100.0	-
Mean	25.9 KD thousand		
Median	11.9 KD thousand		

Table 7.16 illustrates the relationship between the leased plot areas of the respondent firms and whether the present plot is capable of bearing any future expansions in the firms' activities. It is seen from the Table that a large number of the firms which reported that their present industrial land areas were not capable of bearing any future expansion activities were in fact leasing plots of various areas at the prevailing "high" market rates. Indeed 14 firms were leasing plot areas of between 500-1,000 sq.m. and 17 firms were leasing plot areas of between 1,001-5,000 sq.m., while yet another group of 7 firms leased areas of more than 5,000 sq.m. In addition, 14 of the firms reported that their plot areas were capable of bearing any of their future

Table 7.15 Relationship between production year and leased plot areas (Sq.m.)

Area

Year	100-1,000		1,001-5,000		5,001-25,000		Total	
	No.	Row%	No.	Row%	No.	Row%	No.	%
1940-64	-	-	3	50.0	3	50.0	6	100.0
1965-74	8	44.4	7	38.9	3	16.7	18	100.0
1975-79	11	57.9	6	31.6	2	10.5	19	100.0
1980-83	6	50.0	4	33.3	2	16.7	12	100.0
Total	25	-	20	-	10	-	55	-

expansion activities were also leasing plot areas of various sizes, although at lower proportions than the previous group of firms.

The above observation indicates that the opinions of the concerned respondents are very realistic as regards the insufficiency of their firms' plot areas for undertaking their relevant activities and the relatively large plot areas which these firms lease at market prices is evidence to this point.

To further illustrate the above point we will study Table 7.17 which shows the relationship between the total payable rents of the respondent firms and whether the present plot areas were capable of bearing any future expansions in the firms' activities. As in the case of the

Table 7.16 Leased plot areas and whether present plot areas are too small (Sq.m.)

Leased area (sq.m.)	Sufficiency of plot area			
	Yes		No	
	No.	%	No.	%
100-500	5	35.8	3	7.3
501-1,000	3	21.4	14	34.1
1,001-5,000	3	21.4	17	41.5
Over 5,000	3	21.4	7	17.1
Total	14	100.0	41	100.0

leased plot areas, it is seen from Table 7.17 that a large number of the firms which reported that their present industrial land areas were too small were in fact paying market rents for various plots which they leased. Although, there are some firms which replied with "yes" answers that rent such plots. It is seen from the Table that 28 firms paid rents of between KD 11-100 thousand.

Table 7.18 shows the relationship between the leased plot areas as a percentage of land areas and whether the respondent firms have been allocated with extension areas. It is seen from the Table that many of the firms which had been allocated extension areas still lease plots at the prevailing commercial market rates and in relatively large proportions of the total

Table 7.17 Payable rents and whether present plot areas are too small (KD Thousand)

Rents (KD th.)	Sufficiency of plot areas			
	Yes		No	
	No.	%	No.	%
1-10	10	55.5	20	41.7
11-30	3	16.7	18	37.5
31-50	3	16.7	4	8.3
51-100	2	11.1	6	12.5
Total	18	100.0	48	100.0

areas which have been allocated to them by the Ministry of Commerce and Industry.

Accordingly, the allocation of extension areas by the Industrial Development Committee (at the Ministry of Commerce and Industry) is still, in many cases, not totally effective in providing the concerned firms with the industrial land area they require.

Furthermore, it is seen from the Table that 8 of the firms whose request for an extension had been rejected leased plots from the commercial market. Out of which 5 firms lease plot areas of between 7-30% of the total plot areas allocated to them by the Industrial Development Committee. This observation only confirms the conclusion

Table 7.18 Leased plot areas as a percentage of total land areas and whether firms have been allocated with extension areas

Leased area % total area	Allocation of extension: Yes		No	
	No.	%	No.	%
1-2%	6	33.3	2	25.0
3-6%	6	33.3	1	12.5
7-10	5	27.8	2	25.0
11-30	1	5.6	3	37.5
Total	18	100.0	8	100.0

Table 7.19 Total payable rents as a percentage of total capital employed and whether firms have been allocated with extension areas

Rents % total capital	Allocation of extension: Yes		No	
	No.	%	No.	%
1%	11	44.0	4	28.6
2-3	13	52.0	5	35.7
4-10	-	-	5	35.7
11-50	1	4.0	-	-
Total	25	100.0	14	100.0

reached above. However, there are in total more than twice as many firms which lease plot areas that have been allocated extension plots as there are firms which have not been allocated extension areas. But there are 3 firms as opposed to 1 firm which lease between 11 and 30% of their total plot areas of those which have not been allocated with extensions as compared to those which have, respectively.

Table 7.19 illustrates the relationship between the total payable rents as a percentage of total capital employed and whether the respondent firms have been allocated with extension areas. It is seen from the Table that there are 5 firms which pay total rents of between 4 and 10% of their total capital employed and still their request for extension areas have been rejected. It is also noted that 13 firms which have been allocated with extension areas are still leasing plot areas and are paying total rents of between 2 and 3% of their total capital employed.

Table 7.20 illustrates the relationship between the ownership structure of the respondent firms and whether these firms have been allocated extension areas. It is seen from the Table that while 41 per cent of the private sector firms had not been granted the extension areas which they had requested, only 13 per cent of the mixed sector firms had not been granted requested extension area.

It is also seen from Table 7.21 that while 35 per cent

Table 7.20 Ownership structure and whether extension areas have been allocated

Ownership	Allocation of extension: Yes		No		Total	
	No.	%	No.	%	No.	%
Private	53	58.9	36	41.1	90	100.0
Mixed	7	87.5	1	12.5	8	100.0

Table 7.21 Ownership structure and whether extension areas are next to the original plants

Ownership	Adjaency of extension: Yes		No		Total	
	No.	%	No.	%	No.	%
Private	37	64.9	20	35.1	57	100.0
Mixed	6	85.7	1	14.3	7	100.0

of the extension areas of the private sector firms have not been next to the original plants of these firms, only 14 per cent of the mixed sector firms' extension areas were not next to their original plants.

Accordingly, mixed sector firms enjoy, in general, a better treatment than the private sector firms.

Table 7.22 illustrates the relationship between the employment structure of the respondent firms and total plot areas, leased plot area as a percentage of total plot areas

Table 7.22 Relationship between size of firm and total plot and leased areas and rents indicators

Size of labour force	Total areas		Leased % total area		Rent % total capital	
	No.	Average Sq.m.	No.	Average	No.	Average
8-50	63	4,733	15	7.6	25	5.8
51-100	26	10,185	10	9.6	13	4.7
101-200	25	15,048	9	3.9	12	1.3
201-1,000	24	25,545	11	4.4	14	1.1

Table 7.23 Industrial land condition and average employment structure

Reply	Enough area		Bear expansion		Adj. vacancy		Ext. granted		Ext. next	
	No.	Av.empt.	No.	Av.empt.	No.	Av.empt.	No.	Av.empt.	No.	Av.empt.
Yes	61	148	50	124	53	126	60	152	43	149
No	98	109	108	111	105	122	37	85	21	137

total payable rents as a percentage of total capital employed. It is seen from the Table that smaller firms are allocated with, on average, smaller total plot areas than are the larger firms. While the 8-50 persons category size firms are allocated with, on average, total plot areas of 4,733 sq.m., the 201-1,000 persons category size firms are allocated with, on average, total plot areas of 25,545 sq.m.

In terms of leased plot areas as a percentage of total plot areas, it is noted that smaller firms lease higher percentages than do the larger firms. It is seen that the 8-50 persons and the 51-100 persons category size firms lease plot areas of 7.6 per cent and 9.6 per cent of their total plot areas, respectively. In the meanwhile, the 101-200 persons and the 201-1,000 persons category size firms lease plot areas of between 3.9 per cent and 4.4 per cent of their total plot areas, respectively.

Likewise, smaller firms are found to pay higher total rents as a percentage of their total capital employed than do the larger firms. It is seen that while the 8-50 persons category size firms pay total rents as a percentage of their total capital employed of, on average, 5.8 per cent, the 201-1,000 persons category size firms pay, on average, 1.1 per cent, i.e. a ratio of 5.3:1, respectively. The 51-100 persons category size firms are also found to pay, on average, large total rents as a percentage of their total capital

employed.

Accordingly, smaller firms are allocated with smaller total plot areas and lease plot areas of larger proportions of their total plot areas than do the larger firms. Smaller firms have also been found to pay higher total rents as a percentage of their total capital employed than do the larger firms. Therefore, it may be said that, from the point of view of the industrial plot areas, larger firms are more advantaged than smaller ones.

Table 7.23 illustrates the relationship between the various characteristics of the industrial land subsidy from the respondent firms' points of view and the average employment size of the concerned firms. It is seen from the Table that, on average, the larger firms are allocated with plot areas which are more sufficient for the purposes of the activities of their firms as compared to the smaller firms. This is evidenced from the fact that firms which replied with a "yes" answer employed, on average, 148 persons, while firms which replied with a "no" answer employed, on average, 109 persons.

Moreover, firms which reported that their plot areas do have the capability of meeting any of their future expansion activities are found to have an employment size of, on average, 124 persons as compared to 111 persons for the firms which reported "no" replies.

Therefore, larger firms are more advantaged in the sense that their plot areas are more capable of meeting any of their future expansion activities as compared to the smaller firms.

Furthermore, firms which reported that they have been allocated with extension areas are found to have an employment size of, on average, 152 persons as compared to 85 persons for the firms which reported that they have not been allocated with extension areas.

Thus, larger firms are in a more advantageous position than the smaller ones as regards the issue of the allocation of extension areas.

Table 7.24 summarises the relationship between the various characteristics of the industrial land subsidy from the respondent firms' points of view and the average total capital employed per worker. It should be pointed out at this stage that total capital employed per worker element is used as a measure of the degree of capital intensity of the concerned firms.

It is noted from Table 7.24 that firms which reported that their present plot areas are enough for the purposes of their activities have total capital employed per worker of, on average, KD 28,5000. On the other hand, firms which reported that their present plot areas are not enough for the purposes of their activities have total capital employed

per worker of, on average, KD 19,200.

Accordingly, the more capital-intensive firms are found to be more advantageous than the less capital-intensive firms from the point of view of the size of their plots being sufficient for their specific activities.

It is also seen from Table 7.24 that firms which reported that their present plot areas are capable of meeting any of their future expansion activities have total capital employed per worker of, on average, KD 26,800. On the other hand, firms which reported that their present plot areas are not capable of meeting any of their future expansion activities have total capital employed per worker of, on average, KD 21,200.

Therefore, the more capital-intensive firms are found to be more advantageous than the less capital-intensive firms from the point of view of the size of the land being capable of meeting these firms' future expansion activities.

Furthermore, it is noted from the Table that firms which reported that they have been allocated an extension to their initial plot areas have total capital employed per worker of, on average, KD 30,700. On the other hand, firms which reported that their requests for extension areas had been rejected have total capital employed per worker of, on average, KD 18,200.

Thus, the more capital-intensive firms are found to

Table 7.24 Industrial land condition and average total capital employed per worker worker (KD thousand)

Reply	Enough area		Bear expansion		Adj. vacancy		Ext. granted		Ext. next	
	No.	Av.capital	No.	Av.capital	No.	Av.capital	No.	Av.capital	No.	Av.capital
Yes	61	28.5	48	26.8	50	32.9	57	30.7	41	31.6
No	92	19.2	104	21.2	102	18.2	35	15.4	20	23.7

Table 7.25 Industrial land issues and whether an extension area has been allocated

Reply	Initial area (Sq.m.)		Total area (Sq.m.)		Leased area % total area		Rent % total capital	
	No.	Average	No.	Average	No.	Average	No.	Average
Yes	58	14,506	58	24,117	22	5.2	26	1.5
No	32	7,847	32	7,847	11	10.3	14	2.9

be more advantageous than the less capital-intensive firms from the point of view of the allocation of extension areas.

A similar trend is also noted in the case of whether extension areas have been allocated next to the original plant location. It is seen from the Table that firms which reported that they have been allocated with extension areas next to their original plant locations have total capital employed per worker of, on average, KD 31,600. On the other hand, firms which reported that they have been allocated with extension areas not next to their original plant locations have total capital employed per worker of, on average, KD 23,700.

Then, the more capital-intensive firms are found to be more advantageous than the less capital-intensive firms from the point of view of the allocated extension area being next to the original plant locations of the concerned firms.

Table 7.25 shows the relationship between some industrial land issues and whether extension areas has been allocated. It is seen from the Table that firms which have been allocated with extension areas had initial areas of, on average, 14,506 sq.m. On the other hand, firms which had not been granted the allocation of an extension area had initial areas of, on average, 7,847 sq.m.

Accordingly, firms which had larger initial areas have been more advantageously treated in being allocated

extension areas as compared with those firms which had smaller initial areas.

Moreover, it is noted from the Table that firms which have been allocated extension areas have leased plot areas as a percentage of their total plot areas of, on average, 5.2 per cent. On the other hand, firms which have not been granted an extension area have leased plot areas as a percentage of their total plot areas of, on average, 10.3 per cent (about twice that of the former). Thus, the land allocation system sends firms to market if they wish to grow.

Therefore, firms which have lower leased plot areas as a percentage of their total plot areas have been more advantageously treated in being allocated extension areas as compared with those firms which have higher leased plot areas as a percentage of their total plot areas.

It is also noted from the Table that firms which have been allocated with extension areas have total payable rents as a percentage of their total capital employed of, on average, 1.5 per cent. On the other hand, firms which have not been allocated an extension area have total payable rents as a percentage of their total capital employed of, on average, 2.9 per cent (about twice that of the former).

Thus, firms which have lower total payable rents as a percentage of their total capital employed have been more advantageously treated in being allocated extension areas

as compared with those firms which have higher total payable rents as a percentage of their total capital employed.

Conclusion

It has been found out that most of the firms have often started-off with relatively small size plots. Also, most of the firms are found to have been allocated initial plot areas of smaller size than they actually thought they needed. Therefore, often these firms were allocated with extension areas which are found to be of the relatively large size plot. Moreover, most of the extension areas which were allocated to the concerned firms exceeded half the initial plot areas granted to them by the Department of Industrial Affairs.

It has also been found that the more capital-intensive firms have benefited of, on average, larger total plot areas than did the less capital-intensive firms.

Many firms in the totally private sector have been found to use plot areas which are owned by the entrepreneurs themselves because they have not been allocated industrial land by the State. This deficiency in the system of allocating industrial plots was repeated in the case of 18 firms, i.e. 11.5 per cent of the total number of the respondent firms. Indeed, a high percentage and a cause of concern.

The questionnaire data also revealed that about two

thirds of the respondents felt that the area of the industrial plots provided to them by the State were inadequate for their firms' activities. Another two thirds of the respondents reported that there were no adjacent land vacancies to their original plant locations which could be annexed to their plots if needed to expand their activities. In the meantime, about two thirds of the respondents reported that their firms' plot areas were not large enough to allow future expansion.

Furthermore, about two thirds of the respondent firms reported that they had requested extension areas to their original plots of land. This indicates the firms' dissatisfaction with their plot areas and that their original plot areas were not sufficient for their firms' activities and growth, as noted from a previous question. However, only about 60 per cent of these requests were met, i.e. about 40 per cent of the firms which thought that their plot areas were not sufficient for their firms' activities had their request rejected. Indeed, 40 per cent is a high ratio and does call for further investigation in order to identify the exact reasons behind this industrial land system "failure".

In addition, while two thirds of the firms which were allocated extension areas next to their original plants, about one third of the firms were allocated with extension areas elsewhere. Of course, having separate plant

locations for integrated production requires extra transport, excessive managerial efforts and involves extra costs, only to mention some disadvantages.

Moreover, about two thirds of the firms which reported that their present plot areas were not enough for their purposes, also reported that there were no adjacent vacancies to their plants. This means that if these firms did in future need extension areas and if they were in fact to be allocated with such extensions, they will have to be in locations away from their original plants.

In addition, about two thirds of the firms which reported that they had been allocated with extension areas felt their plot areas were still not enough for the purposes of the activities of their firms.

Therefore, the allocation of extension areas has been less than efficient. The allocation of initial areas has also been less than efficient.

In general, the conditions of the method of the allocation of industrial land in the period under study have not improved. On the contrary, more firms in recent years have reported dissatisfaction with their industrial land, but more firms have been established in recent years compared to previous periods.

In what may be considered to support the above conclusions concerning the poor characteristics of the land

subsidy, a total number of 56 firms, 40 per cent of the total number of the respondents, reported that they lease plots at the commercial market rates to supplement their original plot areas.

Furthermore, it has been found out that firms established in all time periods lease various size plots and it seems that, as noted above, the system of allocating industrial land areas sufficient for the requirements of the concerned firms, in general, has not improved to a noticeable degree.

It has been seen that larger firms have been found to be allocated with plot areas which are, on average, more sufficient for the purposes of their activities as compared to the smaller firms. Larger firms have also been found to be allocated with plot areas which have the capability of meeting any of their future expansion activities. Moreover, larger firms have been found to be in a more advantageous position than the smaller ones as regards the issue of the allocation of extension areas.

The more capital-intensive firms have been found to be in a better position as regards the conditions of their industrial land than the less capital-intensive firms from many prospects. First, their plot areas being sufficient for the specific activity purposes of their firms. Second, their plot areas being capable of meeting their future expansion activities. Third, being allocated with extension

areas. Finally, their extension areas being allocated next to their original plant locations.

Finally, it has been found that firms which have been allocated with extension areas had larger initial areas than those firms whose application for extension areas were rejected. Also, the former group of firms had lower leased plot areas as a percentage of their total plot areas as compared with the latter group. Moreover, the former had lower total payable rents as a percentage of their total capital employed as opposed to the latter.

Accordingly, although one would expect the firms which are leasing larger plot areas as a percentage of their total plot areas and the firms which are paying higher total rents as a percentage of their total capital employed to be the group of firms which have been alloated extension areas, because of their "greater" need for these extensions; the case is found to be to the contrary. This may indicate some deficiency in the system of allocating extension plots to the concerned firms.

Section 2

Financial subsidies

One of the main characteristics of the Kuwaiti economy is that it is capital abundant. Indeed, an often cited problem in Kuwait, like the other Gulf oil-rich economies, is the limited absorptive capacity of the national economy. A general impression which one would hold as a result of the above situation is that capital would be relatively easily and cheaply available for economic activities. Our objective at this stage is to see whether capital is also relatively easily available for manufacturing industry.

Table 7.26 illustrates whether the respondents face any difficulties in the securing of commercial loans. It is noted from the Table that 46 firms, 29 per cent of the total, said that they faced difficulties in the obtaining of loans in general.

Accordingly, about one-third of the respondents face difficulties in obtaining commercial loans. Of course, the reasons could be that these firms are not actually or potentially profitable or economic enough. However, this percentage of firms facing financial difficulties is, indeed, high.

It is worth mentioning that while 27 per cent of the private sector firms reported that they face difficulties in

Table 7.26 Relationship between ownership structure and loan difficulties

Ownership	Loan difficulties: Yes		Loan difficulties: No	
	No.	Row %	No.	Row %
Private	40	26.7	110	73.3
Mixed	6	54.5	5	45.5
Total	46	-	115	-

obtaining loans, 55 per cent of the more advantaged mixed sector firms reported the same, as noted in Table 7.26.

Table 7.28 illustrates the industrial bank's present loan size as a percentage of total capital employed frequency distribution. It should be noted that these figures do not represent the original size of the loans, as parts of many of these loans have already been paid-back to the industrial bank. However, these data will still be analysed as they still provide the basis of some insights.

It is noted from Table 7.28 that 20 firms, 27 per cent of the total have loan sizes of between 21-40 per cent of their total capital employed. In the meantime, 26 firms, 35 per cent of the total have loan sizes of between 41-63 per cent of their total capital employed. These percentages are in fact relatively high percentages and reflect the IBK's policy of, in general, granting "big" loans.

Table 7.29 illustrates the relationship between the

Table 7.27 Loan difficulties

Loan difficulties	No.of firms	%
Yes	46	28.6
No	115	71.4
Total	161	100.0

Table 7.28 The industrial bank present loan size as a percentage of firms' total capital employed

Loan size	No. of firms	%	Cumulative %
0-20%	28	37.8	37.8
21-40%	20	27.0	64.8
41-63%	26	35.2	100.0
Total	74	100.0	-
Mean	30.0		
Median	30.25		

Table 7.29 Loan difficulties and whether firms have obtained loans from the IBK

Loan difficulties	IBK loans		No IBK loans		Total	
	No.	%	No.	%	No.	%
Yes	25	54.3	21	45.7	46	100.0
No	49	42.6	66	57.4	115	100.0
Total	74	46.0	87	54.0	161	100.0

concerned firms from the point of view of whether they face difficulties in obtaining commercial loans and whether they do have current loans from the IBK. It is seen from the Table that the majority of the firms which reported that they did face difficulties in securing commercial loans were those which had current loans from the IBK. In the meantime, the majority of the firms which reported that they did not face difficulties in obtaining commercial loans did not have current loans from the IBK. Of course, one reason for this could be that the commercial banks may have been reluctant to grant fresh loans to firms which may still have large loan debts to "others"; in other words, their debt accounts showed "high" liabilities. However, we know that IBK grants loans only for new equipment purchases, etc., and not for working capital which a firm may need for its day-to-day operations.

The remaining part of this section concerns IBK loans and only those respondents which had benefited from such loans were required to participate in this part of the questionnaire. The reason for the emphasis on IBK is that state financial assistance to the manufacturing industry is chanelled through this mixed-sector specialised bank. It is worth mentioning at this stage that the IBK operates on a commercial basis but at the same time attempts to provide subsidised loans.

Table 7.30 Suitability of the IBK loans' interest rates

Suitability	No.of firms	%
Yes	53	60.9
No	34	39.1
Total	87	100.0

IBK interest rates

Table 7.30 illustrates the respondent firms' opinions of the suitability of the IBK interest rates. It is noted that the majority of the respondents think that the IBK interest rates are suitable or appropriate. However, 34 firms, 39 per cent of the total number of firms, feel that these rates are too high. It should be noted that the IBK interest rates range between 5 per cent and 7.5 per cent as mentioned earlier in chapter 3.

The respondents which said that the IBK interest rates are not suitable were required to suggest what they felt a more appropriate interest rate would be. The suggestions are reported in Table 7.31. It is noted from the Table that the majority of the respondents, 43 per cent of the total, feel that a 3% interest rate would be appropriate. Another major group, some 30 per cent of the firms feel that 4% would be an appropriate rate. It seems that these firms were trying to be seen to be realistic in proposing 3% and 4% as

Table 7.31 Relationship between suggested interest rates and respondents for the IBK loans

Suggestions	No.	%
Zero %	2	6.7
1-2%	5	16.7
3%	13	43.3
4%	9	30.0
5%	1	3.3
Total	30	100.0
Mean	3.0	
Median	3.12	

opposed to the few firms which reported between 0% and 2%.

Grace period

One of the main attractions of the IBK loans is that they offer a two year grace period in which no capital or interest is paid until after the new projects actually start operating. The objective at this stage is to find whether firms regard this two years period sufficient or too short.

Table 7.32 illustrates the respondents' opinion about the suitability of the grace period. It is noted that while 52 per cent of the respondents think that the IBK 2-year grace period is suitable, 48 per cent believe that it is too short.

The respondents which answered with a "no" reply were

Table 7.32 Suitability of the IBK loans' grace period

Suitability	No.of firms	%
Yes	45	51.7
No	42	48.3
Total	87	100.0

required to suggest the period which they thought was more suitable. Table 7.33 summarises the respondents' suggestions. It is noted from the Table that 28 per cent of the respondents think that a three year grace period would be suitable. Another group of firms, 30 per cent of the total, suggested five years as a suitable grace period.

Therefore, almost half of the firms which have obtained loans from the IBK feel that the grace period of the loans is not enough. Furthermore, a large number of these firms feel that grace periods of three or five years would be more helpful to them than the current 2-year grace period.

Loan nominal period

Table 7.34 illustrates the respondents' opinion of the IBK nominal loan period which was discussed in chapter 3. It is noted from the Table that the majority of the respondents, 69 per cent of the total feel that the IBK nominal loan period is sufficiently long. However, 27

Table 7.33 Relationship between suggested grace periods and respondents for the IBK loans

Suggestions (Years)	No. of firms	%
1-2	9	20.9
3	12	27.9
4	7	16.3
5	13	30.2
6-10	2	4.7
Total	43	100.0
Mean	3.7	
Median	3.6	

firms, 31 per cent of the total reported dissatisfaction with their IBK nominal loan periods.

Dissatisfied respondents were required to suggest the nominal loan periods which they thought are more suitable. These suggestions are summarised in Table 7.35. It is noted from the Table that 63 per cent of the respondents feel that nominal loan periods of 10 years would be the most suitable.

Table 7.34 Suitability of the IBK loans' nominal periods

Suitability	No.of firms	%
Yes	60	69.0
No	27	31.0
Total	87	100.0

Table 7.35 Suggested loan nominal periods by respondents for the IBK loans

Suggestions (years)	No. of firms	%
2-5	7	29.2
6-8	5	20.8
10	10	41.7
15-20	2	8.3
Total	24	100.0
Mean	8.3	
Median	8.5	

IBK rejection of requests for loans

A total number of twelve firms reported that their requests for loans had been rejected by the IBK. Obviously, this number is not very high and makes-up about 16 per cent of the 74 firms which reported that they had obtained loans from the IBK.

It is noted from Table 7.36 that 42 per cent of the rejections were on the basis of market-size, where the Bank felt that these firms did not have good market prospects. A sign of inefficiency is noted from the fact that three firms had not been given any reasons for the rejection of their loan applications. Two firms reported that the weak financial positions of their firms had been behind the rejection of their loan applications. It is also seen from the Table that one firm had been refused a loan from the IBK because it wanted to purchase used equipments and that the IBK grants loans for the purchase of new equipments only.

Table 7.37 illustrates the respondents' opinions of the IBK reasons for the rejection of their loan applications. It is seen that two firms agree with the IBK that their market prospects are poor. At the same time, three respondents think that the IBK judgements are unfair and that on the contrary their products do have good market prospects.

One firm reported that the IBK rejected its application for a loan on the basis that its estimated costs of production

Table 7.36 IBK reasons for loan rejection

Reasons	No.of firms	%
No market prospects	5	41.7
Weak financial position	2	16.7
Craft	1	8.3
Old equipments	1	8.3
No reason given	3	25.0
Total	12	100.0

Table 7.37 IBK reasons for loan rejection and respondents' opinion of the rejection reasons

Opinion / Reasons	Fair	Unfair	Reasonable
No market prospects	2	3	-
Weak financial position	-	-	2
Craft	-	1	-
Old equipments	-	-	1
Total	2	4	3

are too high, and thus, marketing will be difficult. The firms reported that from their view point this did not truly reflect their position. The respondent added that the Bank had this opinion because of the lack of detailed statistics on which it had to base its decision.

Another firm reported that the IBK rejected its application for a loan because of the limited size of the

domestic market. This firm said that it wanted to expand its production in order to penetrate export markets in the neighbouring countries.

One firm reported that IBK asked it to provide statistical data about the present size of the market for its products. The firm was not able to provide these data because the Ministry of Commerce and Industry and the Ministry of Planning do not provide these data while the firm's estimates of the market size were not accepted by the IBK. Therefore, IBK rejected the grant of a loan to this firm because it reported that the Bank could not rely on the firm's estimates solely.

Table 7.38 illustrates the relationship between the employment structure of the respondent firms and whether these firms face difficulties in obtaining commercial loans and IBK loan characteristics.

It is seen from the Table that the firms which thought the IBK interest rate structure was right employ, on average, 157 persons. At the same time, firms which reported dissatisfaction with the IBK interest rate structure were found to employ, on average, 111 persons.

Therefore, larger firms may be said to be more satisfied with the IBK interest rate structure than the smaller firms.

It is also noted from the Table the firms which reported that the grace period of the IBK loans was about right

employed, on average, 179 persons. In the meantime, the firms which reported dissatisfaction with the grace period of the IBK loans employed, on average, 96 persons.

Then, larger firms seem to be more satisfied with the grace period of the IBK loans than seem the smaller ones.

Also, firms which reported that they believed the IBK's nominal loan period was correct had an employment size of , on average, 148 persons. In the meanwhile, it is seen that firms which reported that they believed the IBK's nominal loan period was too short had an employment size of, on average, 118 persons.

Thus, larger firms are seen to be more satisfied with the IBK's nominal loan periods than are the smaller firms.

Table 7.39 summarises the relationship between the characteristics of the IBK's loans from the respondent firms' points of view and the average total capital employed per worker. As earlier, the total capital employed per worker element will be used as a measure of the degree of capital intensity of the concerned firms.

It is seen from the Table that firms which reported that they face difficulties in obtaining commercial loans have a capital per worker of, on average, KD 22,100. On the other thand, firms which reported that they do not face difficulties in obtaining commercial loans have a capital intensity of, on average, KD 23,000.

Table 7.38 Size of firm by loan difficulties and IBK loan characteristics

Reply	Loan difficulties		Interest rate proper		Grace period proper		Loan period enough	
	No.	Av.empt.	No.	Av.empt.	No.	Av.empt.	No.	Av.empt.
Yes	46	104	53	157	45	179	60	148
No	115	130	34	111	42	96	27	118
Total	161	123	87	139	87	139	87	139

Table 7.39 Average total capital employed per worker by loan difficulties and IBK loan characteristics (KD Thousand)

Reply	Loan difficulties		Interest rate proper		Grace period proper		Loan period enough	
	No.	Av.capital	No.	Av.capital	No.	Av.empt.	No.	Av.empt.
Yes	45	22.1	49	32.5	41	31.8	56	31.7
No	110	23.0	34	26.0	42	27.8	27	25.8
Total	155	22.7	83	29.8	83	29.8	83	29.8

Thus, it appears that both groups employed approximately the same level of capital per worker.

Moreover, it is seen from the Table that the firms which thought that the IBK interest rate structure was appropriate had total capital employed per worker of, on average, KD 32,500. At the same time, firms which reported dissatisfaction with the IBK interest rate structure had an average total capital employed per worker of KD 27,800.

Therefore, the more capital-intensive firms may be said to be more satisfied with the IBK interest rate structure than are the less capital-intensive firms.

It is also noted from the Table that the firms which reported that the grace period of the IBK loans was about right had an average capital per worker of KD 31,800. In the meantime, the firms which reported dissatisfaction with the grace period of the IBK loans had an average total capital employed per worker of KD 27,800.

Thus, the more capital-intensive firms are found to be more satisfied with the grace period of the IBK loans than are the less capital-intensive firms.

Furthermore, firms which reported that they believed the IBK's nominal loan period was correct had total capital employed per worker of, on average, KD 31,700. In the meanwhile, it is seen that firms which reported that they believed the IBK's nominal loan period was too short had

total capital employed per worker of, on average, KD 25,800.

Thus, the more capital-intensive firms are found to be more satisfied with the IBK's nominal loan period than are the less capital-intensive firms.

Conclusion

In conclusion, about one third of the respondent firms reported that they face difficulties in obtaining commercial loans. In this about half of the mixed sector firms were also included. Therefore, the abundantly available capital in Kuwait may not be so abundantly available after all.

Also, more than one third of the respondents reported that they considered that the IBK interest rate structure was not suitable and that the rates are too high. The majority of these respondent firms suggested an interest rate of 3%. Another major group of firms proposed an interest rate of 4%.

In the meantime, about half of the respondents reported that they believed that the grace period of the IBK loans was too short. The majority of these respondent firms suggested a grace period of 5 years. Another major group of firms proposed a grace period of 3 years.

Moreover, about one third of the respondents reported that they thought that the IBK nominal loan period was not

suitable and that these periods were too short. The majority of these respondent firms suggested a nominal loan period of 10 years.

More smaller firms have been found to face loan difficulties than do larger firms. Smaller firms are also found to be less satisfied with the IBK's interest rate structures, loan grace and nominal periods. On the contrary, larger firms were found to be more satisfied.

Furthermore, it has been found that the more capital-intensive firms were more satisfied with the IBK's interest rate structures, loan grace and nominal periods than were the less capital-intensive firms.

Section 3

Customs duty protection

Protection through customs duties is considered to be one of the most important forms of state assistance for manufacturing industry in Kuwait. The open nature of the Kuwaiti market makes the need for such an assistance more clear if local manufacturers are to survive open competition. Added to this is the fact that most of the manufacturing firms (and thus manufacturing industry as a whole) are in the "infancy stage".

It is clear from the previous discussions of chapter 3 that the Kuwaiti government is not too keen in providing customs duty protection. And it applies a very strict system before granting customs duty protection and particularly where such protection has already been cancelled.

It is worth re-calling at this stage that 121 firms, 75 per cent of the total number of the firms which responded to the questionnaire considered customs protection to be one of the most important types of subsidy which they would like the government to offer. Moreover, 122 firms, 76 per cent of the total number of respondents, mentioned severe foreign competition in the local market as one of the main difficulties that face Kuwaiti manufacturing firms. In addition, 97 firms, 60 per cent of the respondents, reported

that dumping practices by foreign competitors in the domestic market is a very serious problem facing them. Accordingly, customs protection may be considered as one of the major forms of state assistance for local manufacturers.

Table 7.40 shows the frequency distribution of the respondent firms which do not enjoy customs duty protection and whether they have applied for such protection. It is noted from the Table that 70 firms, 46 per cent of the total, have requested customs duty protection, To be added to this are the 8 firms, 5 per cent of the total, who once they complete the first production year are allowed by the Industrial Law of 1965 to apply for customs duty protection. Therefore, the total number of duty protection requests may be considered to be 52 per cent of the total number of the respondents.

Table 7.41 shows the customs duty protection period requested. This may be defined as the period which has elapsed between the time when the concerned firms applied for customs duty protection and the time of filling-in this study's questionnaire (late 1983 and early 1984). It is seen from the Table that often long time periods elapse before the Ministry of Commerce and Industry gives any reply. Some 41 firms, 82 per cent of the respondents, reported that between 6 months and 12 months elapsed before any reply. Furthermore, 10 firms reported that between

Table 7.40 Customs duty protection request

Request	No. of firms	%
Yes	70	46.4
No	73	48.3
Will request	8	5.3
Total	151	100.0

Table 7.41 Customs duty protection period between requesting and receiving reply

Period (Months)	No.of firms	%
1 - 6	9	18.0
7 - 12	6	12.0
13 - 36	25	50.0
37 - 144 (3-12 years)	10	20.0
Total	50	100.0
Mean	32.5 months	
Median	24.1 months	

3 years and 12 years have passed since they had requested customs duty protection.

Table 7.42 illustrates the results of requests for customs protection. It is noted that 17 requests were rejected. At the same time, 34 firms reported that their requests were under-study.

Table 7.43 summarises the relationship between the customs duty protection requests and customs duty protection

Table 7.42 Customs protection request result

Result	No.of firms	%
Rejection	17	29.3
Delay	5	8.6
Under-study	34	58.6
Ministry not replies	2	3.5
Total	58	100.0

Table 7.43 Customs protection request by customs protection request period for the respondents which have requested protection

Request period

Result	1-12 mths		13-36 mths		37-144 mths.		Total	
	No.	Row%	No.	Row%	No.	Row%	No.	Row%
Rejection	3	23.0	5	38.5	5	38.5	13	100.0
Delay	2	50.0	2	50.0	-	-	4	100.0
Under-study	9	32.1	15	53.6	4	14.3	28	100.0
Ministry not replied	-	-	1	50.0	1	50.0	2	100.0

request periods. It is noted that 19 requests have been under-study at the Ministry of Commerce and Industry for periods of 1-12 years. Decision regarding two cases have been delayed by the Ministry for periods of between one and three years. Another two cases have not received any replies from the Ministry for periods of 1-12 years.

These results appear to indicate that there are some administrative deficiencies in the customs duty protection system of the Ministry of Commerce and Industry in that action appears to take a long period of time. However, it may be that time will see issues change or disappear thereby reducing the political disadvantage of a quick decision.

Market shares and customs duties

A number of questions were included in the questionnaire concerning the respondents' estimates regarding their products' market share. Each one of these questions was followed by a set of replies of which the respondent was required to tick the appropriate one. The replies to these questions are summarised and analysed in tables in this section.

Table 7.44 illustrates the relationship between the respondent firms' current market share, their expected market shares at the customs duties which they specified and their estimates of what they thought their market shares would become at the hypothetically set 50% customs duty level. It is seen from the Table that almost all respondents expected that their market shares would greatly improve with customs duty protection.

It is noted from the Table that 51 firms, 44 per cent of the total, have current market shares of less than 20%.

Table 7.44 Current market shares as compared to expected market shares and estimated market shares at a 50% customs duty level

Share	Current share	Expected share	Estimated share at 50% duty
1 - 10%	21	7	5
11 - 20%	30	8	8
21 - 40	28	23	16
41 - 60	19	20	22
61 - 80	11	23	20
Over 80	6	23	34
Total	115	104	105

In the meantime, 28 firms, 24 per cent of the total, have current market shares of between 21 and 40%. While 36 firms, 31 per cent of the respondents have market shares of over 40%.

In the United Kingdom, a market share of 25% is considered to be a dominant position. However, considering the small size of the market in Kuwait which had a total population of about 1.6 million in 1984, we may regard 20% as an upper limit of, on average, a "low" market share, 40% as an upper limit for a "middle" size market share, and over 40% to be considered "large" market share. Of course, it should be noted that the activities and products of the concerned firms vary greatly; for example, where a 20%

market share for a brick producing firm may be considered very high, a similar market share for an air cooling systems producing firm may be considered too low. We will disregard the differences and try to draw broad conclusions.

According to Table 7.44, we may conclude that, in general, about half of the Kuwaiti firms have low market shares, a quarter have a "middle" range market share, and another quarter of the firms have high market shares.

Respondents were required to suggest a customs duty which they thought would be most effectively useful in protecting their industries from imports. The responses are summarised in Table 7.46 and will be discussed shortly.

It is seen from Table 7.44 that the current market shares of the respondent firms, as compared to what they expect their market shares to become at the customs duties which they proposed, are claimed to dramatically improve if their requested protection was granted. Though one would expect firms to exaggerate the potential changes in an attempt to impress outsiders and to influence the policy-makers. However, the changes are claimed by a very large number of respondents to the point that it may be taken seriously as an indication of the direction and size of the change. It is also noted from the Table that while 51 firms had market shares of less than 20%, only 15 thought that their market positions would not change and that they

Table 7.45 Current market shares by expected market shares between the 20% and the 30% suggested customs duty protection

Expected share

Current share	1-10%		11-20%		21-40%		41-60%		Over 60%		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1 - 10%	6	54.5	2	18.2	1	9	2	18.2	-	-	11	100.0
11 - 20%	-	-	4	20.0	11	55.0	1	5.0	4	20.0	20	100.0
21 - 40%	-	-	-	-	3	23.1	8	61.5	2	15.4	13	100.0
41 - 60%	-	-	-	-	-	-	2	16.7	10	83.3	12	100.0
Over 60%	-	-	-	-	-	-	-	-	12	100.0	12	100.0
Total	6	-	6	-	15	-	13	-	28	-	68	-

Table 7.46 Suggested customs duties and the required duties for a 40% market share

Rates	Suggested duties	Required duties (1)
10%	5	2
20	28	10
30	44	20
40	11	8
50	5	11
60	4	2
Over 60	11	9
Total	108	62

(1) It should be noted that 36 firms have indicated, as shown in Table 7.48, that their market shares already exceed 40%, and therefore, they are not included in this list.

will still be in the same market share group. Of course, there could be some changes within a group but not as large as to change positions sufficiently to be seen in our categorisation.

In the meantime, while 36 firms had market shares of more than 40%, the number of firms which thought that their market shares would exceed 40% increased to 66 firms, i.e. about twice as many as in the current market position if the customs duties on imports of products similar to their production lines were raised to the duty rates which they suggested.

Table 7.45 summarises the relationship between the current and the expected market shares at the 20% and the 30% suggested customs duty rate. The other suggested customs protection duties have been disregarded because they were suggested by a few respondents only.

It is noted from Table 7.45 that 55 per cent of the respondents which have current market shares of less than 10% think that even with 20% to 30% customs duty protection their expected market share will not improve. Two main reasons for this could be that either competition is wholly amongst local producers, or that the market is so diverse and huge that it is impossible for one or few establishments to fulfil it.

With a 20% and 30% customs duty protection, 55 per cent of the respondents in the 11 to 20% current market share expect that their market share would increase between 21 and 40%. In addition, 62 per cent of the respondents in the 21 to 40% current market share category expect that their market share will increase to between 41 and 60%. Yet, 83 per cent of the respondents in the 41 to 60% current market share category believed that their expected market share would increase to over 60%.

A hypothetical customs duty protection rate of 50% was suggested and respondents were asked to estimate what they expected their market shares would become in that case.

The reason for choosing a fixed duty rate was to see its effect across all the firms.

It is noted from Table 7.44 that the number of firms having current market shares of less than 20% decreased from 51 firms to 15 firms if these firms were provided with customs duty protection at rates which they thought is needed. At the same time the number of firms decreased from 28 firms in the 21 to 40% current market share category to 23 firms in the expected market shares to 16 firms in the estimated market shares at the hypothetical 50% customs duties. In the meantime, the number increased from 30 firms to 43 firms and to 42 firms, respectively.

The improvements are seen to be substantial in the over 80% share category. While only 6 firms reported having current market share of more than 80%, 23 firms reported that they expected their market shares to increase to the same very high market share, while as many as 34 firms estimated that with a 50% customs duty their market shares would exceed 80%. However, it should be noted that a 50% rate of protection is considered to be very high by all standards. At the same time, it may not make for a very desirable market environment to have a few firms dominating the domestic market.

Whatever the case, a 50% customs duty protection is bound to improve the local market shares of the manufacturing

firms by substantial degrees.

Table 7.46 shows the frequency distribution of the customs duties that were proposed by the respondent firms to improve their market shares and the customs duties which they thought to be required to increase their market shares to 40%. The 40% market share level was chosen because the Ministry of Commerce and Industry (MCI) requires manufacturing firms to be able to supply at least 40% of the domestic market's needs of its types of products in order for it to apply for customs duty protection.

It is seen from the Table that a major group of 20 firms thought that they would need a 30% customs duty rate in order to be able to cover 40% of the local market needs in order to be able to apply for customs duty protection. Obviously, an odd situation. Other firms reported that they need protection rates of 50%, and some others reported 40%, etc. At the same time 10 firms reported that they needed 20% protection rates in order to be able to supply a 40% share of the local market.

Whatever the outcome, the salient point to notice here is that these 62 firms reported that they needed a high level of protection in order to be able to apply for protection. In other words, the MCI's stipulation means that these firms need protection to increase their market shares in order to be able to apply for protection which

should result in increasing their market shares. It is a vicious circle which means that firms will never get protection where they do not meet the market share criterion without protection.

Table 7.47 illustrates the relationship between current market shares and the required customs duty protection for the 40% market share criterion from the respondent firms' point of view. It is seen from the Table that 67 per cent of the less than 10% current market share category firms require 40% or more customs duty protection in order to be able to meet the 40% market share criterion. Furthermore, 61 per cent of the 11 to 20% current market share category firms require 30% customs duty protection in order to be able to meet the 40% market share criterion. The 21-40% current market share category firms reported various levels of customs protection duties, which they needed to help them meet the 40% market share criterion.

Some firms needed between 10 and 20% duties in order to tip the balance to their advantage, while others needed 40% customs duties or more in order to help them perhaps meet a vast market or fierce competition from imports.

One respondent explained its problems with obtaining customs duty protection. The case illustrates the difficulties. The respondent reported that the Ministry of Commerce and Industry had informed them that the market

Table 7.47 Current market shares and the required rate of customs duty protection for the 40% market share criterion

Current market share	Customs duties: 10 & 20%		30%		40 & 50%		60% & over		Total	
	No.of firms	%	No.of firms	%	No.of firms	%	No.of firms	%	No.of firms	%
1 - 10%	2	16.7	2	16.7	3	25.0	5	41.6	12	100.0
11 - 20%	-	-	11	61.1	4	22.2	3	16.7	18	100.0
21 - 40%	6	28.6	5	23.8	8	38.1	2	9.5	21	100.0
Total	8	15.7	18	35.3	15	29.4	10	19.6	51	100.0

requires 60 million units of its products. The firm said that it has the capacity to produce 40 million units and its only local competitor has the capacity to produce another 40 million units, and thus, together they could supply the whole of the domestic market. Moreover, the firm reported that the Ministry of Commerce and Industry required them to produce 50 per cent of market needs in order to obtain customs duty protection. The respondent said that this is not possible for it because it could not produce and store at any one time 50 per cent of the market needs because of financial limitations although they did have the capacity to do so. Thus, the respondent added, customs duty protection is required in order to secure 50% of the market size, and not vice versa.

Table 7.48 summarises the relationship between total capital employed per worker and respondent firms' current market share and their estimated market share at a 50% customs duty protection. It is noted from the Table that firms with current market shares of less than 10% category and firms with current market shares of between 11 to 20% category have total capital employed per worker of, on average, KD 20,000 and KD 16,200, respectively. At the same time, firms with current market shares of between 61 to 80% category and firms with current market shares of between 81 to 100% category have total capital employed per

Table 7.48 Total capital employed per worker by current market shares and estimated market shares at a 50% duty protection

Share	Current share		Estimated share at 50% duty	
	No.of firms	KD th. average	No.of firms	KD th. average
1 - 10%	20	20.0	5	15.3
11 - 20	30	16.2	7	9.0
21 - 40	27	28.9	16	15.7
41 - 60	19	28.0	22	18.3
61 - 80	11	35.6	20	30.5
81 - 100%	5	25.4	33	35.1
Total	112	24.3	103	24.9

worker of, on average, KD 35,600 and KD 25,400, respectively.

Accordingly, firms with lower market shares are often of less capital intensity than are firms with higher market shares. In other words, the more capital-intensive firms obtain larger shares of the domestic market than do the less capital-intensive firms.

It is also noted from the Table that firms in the estimated market shares of less than 10% category and firms in the estimated market shares of between 11 to 20% category have total capital employed per worker of, on average, KD 15,300 and KD 9,000,respectively. In addition, firms with estimated market shares of between 61 to 80% category

and firms with estimated market shares of between 81 to 100% category have total capital employed per worker of, on average KD 30,500 and KD 35,100, respectively.

Therefore, the more capital-intensive firms are more likely to obtain larger market shares than are the less capital-intensive firms as they estimated their market shares to be at the hypothetical 50% customs duty level.

Conclusion

The majority of the firms have been found to have applied for customs duty protection. It has been found that for a large number of firms, periods of between 1-12 years have elapsed between first applying for protection and being rejected. While a few companies reported that they never received a reply from the Ministry of Commerce and Industry to their protection applications, many firms which had submitted applications for periods of between 1-12 years are still waiting for replies because the MCI have told them that their applications were under study.

While 51 firms, about half of the respondents, were found to have relatively "low" market shares, 28 firms, about a quarter of the respondents had what may be considered to be "middle" size market shares, and another group of 36 firms, about another quarter of the total, were found to have dominant market positions. A large number of these

firms reported that with protection rates of 20% and 30% their market shares would improve substantially.

Some 62 firms reported that they needed protection in order to be able to meet the 40% of the domestic market criterion for qualifying for protection as laid down by the Ministry of Commerce and Industry.

Moreover, it has been found that the more capital-intensive firms obtain larger shares of the domestic market than do the less capital-intensive firms. Furthermore, the more capital-intensive firms seem to be able to gain higher market shares than can the less capital-intensive firms at the hypothetically assumed 50% customs duty protection level.

Section 4

Government purchases

Preference to local products in government purchases is considered to be one of the more important forms of subsidy. As often is the case, government agencies represent the most important single customer for many types of goods. In Kuwait, government purchase preference is given, in general, to locally produced goods.

The objective of this section is to see whether the above preference is in fact applied from the point of view of the firms participating in the survey. Respondents were asked to estimate the size of their annual sales to the government as a percentage of total government purchases of their products' types. They were provided with a number of specified percentages and were asked to tick the appropriate ones. Then, they were asked to provide the percentage of government purchases which they thought they could fulfill (referred to in the text as possible share of government purchases).

Table 7.49 illustrates the respondents' current share of government purchases. It is seen from the Table that 64 per cent of the respondents have a current share of government purchases of up to 10%. Another 14 per cent of the firms have current shares of government purchases of

Table 7.49 Current shares of government purchases

Share	No. of firms	%	Cumulative %
Zero %	6	6.3	6.3
1 - 5%	39	40.6	46.9
6 - 10%	16	16.7	63.6
11 - 20%	5	5.2	68.8
21 - 40%	8	8.3	77.1
41 - 60%	10	10.4	87.5
61 - 80%	4	4.2	91.7
Over 80%	8	8.3	100.0
Total	96	100.0	-

between 11 to 40%. Ten per cent of the firms have shares between 41 to 60%, and only 13 per cent of the respondents have shares of givernment purchases of more than 60%.

Of course, two points, amongst others, should be kept in mind while discussing these issues. One is the fact that there may be more than one local manufacturer competing to provide government agencies with the same products. Second is the fact that some products, by their very nature, are provided by many firms, such as building materials and paper tissues.

If considering 20% as the upper limit for a "small" category, we find that 69 per cent of the respondents fall into this category. Thus, most of the firms provide state

agencies with only small quantities of their needs. However, in order for this conclusion to be more accurate we need to probe the matter further.

Table 7.50 illustrates the respondents' estimates of the share of government purchases that they can provide. It is noted that 36 per cent of the respondents believe that they can supply government agencies with all their requirements. Another 32 per cent of the respondents think that they can supply between 51 and 90% of the state agencies' needs. In the meantime, 21 per cent of the respondents consider that they can supply between 10 and 30% of the state agencies' requirements.

Table 7.51 illustrates the relationship between the current and the possible share of government purchases that the respondent firms think could provide. It is seen from the Table that 80 per cent of the firms which do not sell to state agencies at all can in fact provide them with all their requirements. In addition 41 per cent of the firms which currently supply between 1 and 5% of state agencies' requirements can provide them with 10 to 30% of their needs. Another 26 per cent of the 15% category reported that they can provide all of the state agencies' requirements.

Likewise, of the 1 to 5% current share of government purchases category, 29 per cent of the respondents reported that they can supply between 40 and 50% of state agencies'

Table 7.50 Possible shares of government purchases

Share	No.of firms	%	Cumulative %
10 - 30%	15	20.8	20.8
40 - 50%	8	11.1	31.9
51 - 90%	23	32.0	63.9
100%	26	36.1	100.0
Total	72	100.0	-
Mean	67.7%		
Median	78.3%		

purchases; another 29 per cent said that they can supply between 60 and 90%; and yet another 29 per cent reported 100%. Furthermore, 64 per cent of the respondents which reported that they currently supply between 11 and 40% of government purchases, said that they could supply between 60 and 90 % of such requirements.

Accordingly, Kuwaiti firms are supplying currently only a very small fraction of state purchase while they believe that they can supply a substantial proportion of such purchases.

A point of interest is the degree of significance of government sales to the companies. However, we were not able to collect data concerning this issue because of the firms' reluctance to provide such information.

Also, a point of caution is that the presently "low"

Table 7.51 Relationship between current and possible shares of government purchases

Current \ Possible	10 - 30%		40 - 50%		60 - 90%		100%		Total	
	No.	Row%	No.	Row%	No.	Row%	No.	Row%	No.	Row%
Zero %	-	-	-	-	1	20.0	4	80.0	5	100.0
1 - 5%	11	40.8	3	11.1	6	22.2	7	25.9	27	100.0
6 - 10%	2	14.2	4	28.6	4	28.6	4	28.6	14	100.0
11 - 40%	1	9.1	1	9.1	7	63.6	2	18.2	11	100.0
41 - 60%	1	12.5	-	-	3	37.5	4	50.0	8	100.0
Over 60%	-	-	-	-	-	-	4	100.0	4	100.0
Total	15	-	8	-	21	-	25	-	69	-

percentage of the respondent firms' shares of government purchases of their products could be misleading because our presentation of data concerns each firm's share individually, where if firms' shares of government purchases were added together they may total to a higher percentage, and even may add to 100% in some instances. Therefore, caution in interpreting the presented data should always be observed.

In an attempt to define the reasons behind the very small shares of government purchases which are supplied by local manufacturers as compared by the ratios which they could provide, six main reasons were outlined in the questionnaire and the respondent was required to tick the three most important ones from their point of view.

Table 7.52 illustrates the respondents' replies to what they thought the most important reasons are for their "low" share of government purchases. The most important reasons seem to be inefficiencies in enforcing Government decisions to buy from local manufacturers so that both state agencies and contractors of state projects buy elsewhere.

An interesting point to note is that 58 firms are in fact saying that their prices are high, presumably as compared to the prices of their foreign goods.

One firm reported that the main difficulty in selling goods to the state is the absence of a specific and clear policy which is followed by the authorities. Thus firms

Table 7.52 Reasons for "low" government share

No.	Reason	No.of firms
1	Contractors not caring to purchase their requirements from local producers	84
2	Government agencies not caring to purchase their requirements from local producers	82
3	High Kuwaiti prices	58
4	Merchant class authority and influence	42
5	Required standards and specifications not present in locally produced goods	9
6	Produced quantities are less than what is required by government agencies	5

reported that sometimes the concerned authorities choose the better quality products even if they were more expensive than the alternatives, but at other times they choose the products which are lower priced even if they are of a lower quality. Therefore, the firm reported that it does not know which policy to follow.

Another reason which was given in the case of large projects was that the small local manufacturers were not able to meet the size of the orders. To overcome this problem, it was suggested that the tenders for such projects be divided into smaller parts where the small local manufacturers can compete and bid.

An example was mentioned in the case of the furnishing

of government buildings. One firm reported that state agencies comprise more than 80 per cent of the total market needs for its product type with the entire demand being imported. The firm claims that it could supply all the required quantities at lower prices and of a better quality. The firm reported that it had been applying for many years to supply the products at the lower prices, but its application gets rejected each time.

One firm reported that they had not registered for government tendering. The reason given was the procedure and requirements for registering were complicated.

Finally, one firm reported that they do not enter into tenders because they do not have the specialised staff to follow-up government tenders even though the government purchases and asked for tenders for their types of product.

Table 7.53 shows the relationship between total capital employed per worker and possible share of government purchases. It is seen from the Table that firms which reported that they could meet between 10 to 30% of government requirements for their types of products had total capital employed per worker of KD 17,500. At the same time, firms which reported that they could provide all of government purchases for their types of products had total capital employed per worker of KD 38,600.

Accordingly, the more capital-intensive firms are more

Table 7.53 Relationship between total capital employed per worker and possible shares of government purchases

Possible share	No. of firms	Total capital per worker (KD th. average)
10 - 30%	15	17.5
40 - 50	8	9.2
51 - 90	22	23.3
100	25	38.6
Total	70	25.9

capable of supplying larger proportions of government purchases than are the more labour-intensive firms.

Government tendering 10% purchase preference

As discussed earlier, by law, the government has granted a 10% preference on its purchases to local manufacturers. This is a price preference, where local products may still be preferred in government purchases even if their prices were up to 10% more than the prices of alternative products which are imported.

The objective in this section is to find out whether the local industrial firms think that the 10% purchasing and tendering preference is in fact applied. Also, whether this 10% is sufficient to be effective, and if not, the respondent was asked to suggest what he thought would be a

Table 7.54 Application of the government tendering preference of 10% for local firms

10% applied	No.of firms	%
Yes	40	39.6
No	61	60.4
Total	101	100.0

suitable rate.

Table 7.54 shows the respondents' opinion of the application of government tendering preference of 10% for local firms. It is seen from the Table that 60 per cent of the respondents think that the 10% preference is not applied. Thus, the majority of the respondent firms believe that the 10% preference is not in fact applied.

Table 7.55 illustrates the respondents' opinion as to whether the government tendering preference of 10% for local firms is sufficient. It is noted that 71 per cent of the respondents believe that the 10% preference is not enough to be effective. Thus, the overwhelming majority of the respondent firms believe that the 10% preference is not sufficient.

Table 7.56 summarises the percentage increases in government tendering preference for local firms which were suggested by the respondents. It is noted from the Table

Table 7.55 Sufficiency of the government tendering preference of 10% for local firms

10% enough	No.of firms	%
Yes	30	28.6
No	75	71.4
Total	105	100.0

Table 7.56 Suggested percentage increases in the government tendering preference for local firms

Suggestion	No. of firms	%	Cumulative %
15%	11	14.9	14.9
20	31	41.9	56.8
25	13	17.6	74.4
30	12	16.2	90.6
35 - 50	4	5.4	96.0
100	3	4.0	100.0
Total	74	100.0	-
Mean	51.4%		
Median	21.8%		

that 57 per cent of the respondents think that an increase to between 15 to 20% would be effective. Another group of respondents, 34 per cent of the total believe that an increase of between 25 to 30% would be needed in order to be effective.

Table 7.57 Application by appropriateness of the government tendering preference of 10% for local firms

Application	Appropriateness					
	Yes		No		Total	
	No.	Row%	No.	Row%	No.	Row%
Yes	8	20.0	32	80.0	40	100.0
No	18	31.6	39	68.4	57	100.0
Total	26	-	71	-	97	-

Table 7.57 illustrates the relationship between the respondents who believe that the 10% purchase preference is applied and those which believe that it is enough. It is noted from the Table that 80 per cent of the respondents who believe that it is applied think that it is applied but that it is not enough. Also, 68 per cent of those which believe that it is not applied think that it is not enough either.

Conclusion

It has been found out that, broadly speaking, the majority of the Kuwaiti firms supply relatively low shares of the overall government purchases of their types of goods. In addition, the majority of the respondents reported that they each can supply substantial proportions

of government purchases of their product types. Indeed, 26 firms said that they could supply the government with all its requirements of its type of product.

The majority of the firms reported that they believe the main reasons for their "low" shares of government purchases were that the contractors which carry out government orders do not care to purchase their requirements from local producers and also that government agencies do not care to purchase their needs from the local manufacturers. Another major group of firms reported that the high Kuwaiti prices are behind their "low" share of government purchases. Yet another major group of firms said that the merchants' class influence and authority was behind their "low" share of government purchases of their types of goods.

Obviously, improvements in the above mentioned conditions should improve the sales of local manufacturers to Government departments, agencies and corporations as well as Government's contracts.

It has been found that the more capital-intensive firms are more capable of supplying larger proportions of government purchases than are the more labour-intensive firms.

As regards the Government's tendering 10% purchase preference to local manufacturers, it was found that the

majority of the respondent firms believed that this 10% preference is not in fact applied. In addition, the overwhelming majority of the respondent firms said that the 10% purchase preference was not sufficient.

A major group of firms reported that a purchase preference of 20% for locally produced goods would be more appropriate. Other rates which were suggested by the respondent firms, put in order of the number of times that repeated, were 25%, 30% and 15%, respectively. However, the total number of firms which proposed rate increases of between 20% to 30% was 56, about 76 per cent of the total number of the respondents. Therefore, increases in Government purchase preference rates of between 20% to 30% would seem to be the most desirable from the firms' points of view.

Section 5

Subsidies in general

The subsidy measures which are provided by the state in Kuwait are not given in clear and precise forms. Therefore, many respondents reported that they do not receive any subsidies at all. Five statement-like questions were included in the questionnaire which the respondents were required to comment "yes" or "no" to. These statements reflecting how realistic they thought these statements were.

The statements, which are summarised in Table 7.58, asked about the effect of government subsidies on the establishments' performance. The first asked whether subsidies cover the costs which result from the difficulties that hamper industrialisation in Kuwait, the second asked whether subsidies encourage exports, the third whether subsidies were found to help increase firms' profitability, the fourth whether state subsidies help in increasing the firms' products share in the domestic market, and the fifth if subsidies were found to be sufficient to attract more private capital into the manufacturing sector.

Table 7.58 illustrates the responses to the above statements. It is noted from the Table that about three-quarters of the respondents feel negatively about state subsidies in general and that they did not greatly help

industry overcome its difficulties etc.

A list of 12 activities was provided and the respondents were asked to tick the five most important activities to be subsidised by the State. The replies are presented in Table 7.59.

It is noted from the Table that 121 establishments, 75 per cent of the total, thought that customs protection is the most important type of new subsidy. Some 51 per cent to 56 per cent of the respondents felt that export subsidies, exemption from paying customs duties, and financial subsidies are important. In the meantime, 45 per cent of the establishments reported the importance of subsidising the costs of raw materials.

The high percentage request for customs duty protection reflects many factors. Among others are the infant-industry nature of Kuwaiti manufacturing industry in general and the fact that the Kuwaiti domestic market is "widely-open" for imports without any real restrictions. The latter have resulted in severe competition as noted in Table 7.61.

The next three items on Table 7.59 reflect some interesting issues. The fact that 90 establishments thought that subsidising exports is an important matter highlights the difficulties faced by industry because of the limited size of the domestic market and the severe competition that if often prevalent in export markets. The latter is

Table 7.58 The general effects of subsidies

Effect of subsidies	Helpful		No as % of total
	Yes	No	
Industry difficulties	18	130	87.8%
Exports	36	115	76.2
Private capital	40	113	73.9
Increase profitability	41	111	73.0
Increase mkt. share	47	106	69.3
Average	36	115	76.2

Table 7.59 New subsidies suggested by respondents

New subsidies	No.of Yes Answers	Yes as % of total
Customs duty protection	121	75.2%
Exporting	90	55.9
Customs duty exemption	89	55.3
Finance	82	50.9
Raw materials costs	72	44.7
Research and development	58	36.0
Training	57	35.4
Importing costs	49	30.4
Marketing & advertising	45	28.0
Retail showrooms	42	26.1
Housing	40	24.8
Others	18	11.2
Assistance in use of experts	14	8.7

coupled with a lack of knowledge and expertise of the Kuwaiti entrepreneurs about potential export markets.

The fact that 89 establishments, 56 per cent of the total, feel that exemption from import duties is an important type of a new subsidy which is thought desirable to be introduced by the State is also interesting. Because this item has been included in the Industrial Law of 1965 as one of the permitted state subsidy forms. The high number of the respondents mentioning exemption from duties reflects the importance which is given to it by firms.

Eighty two establishments, 51 per cent of the total, mentioned financial subsidies to be important. This means that capital is not as easily available for manufacturing establishments as one would expect from a capital-surplus economy such as Kuwait. It is worth mentioning that the items were displayed with the assumption that they are not presently available and that they are seen to be desirable to be granted. Thus, 51 per cent of the respondents feel that financial subsidies are important, reflecting the need for such incentives.

Seventy two establishments, 45 per cent of the total, reported the importance of subsidising the prices of raw materials. The main reason for this is the extra costs of importing raw materials by Kuwaiti manufacturers as a result of transportation and insurance, etc., costs, as

compared to raw materials costs incurred by foreign manufacturers which may not have to incur such costs. A relevant item is the high costs of importing where 49 establishments, 30 per cent of the total, mentioned its importance.

Research and development was also mentioned as an important activity to be subsidised. Fifty eight companies, 36 per cent of the total, reported that this item was mainly mentioned for product promotion purposes. The Kuwaiti market being an open one characterised by a strong purchasing power, Kuwaiti-manufactured products will have to be promoted all the time in order to keep pace with the developments in the market.

The fact that 57 establishments, 35 per cent of the total, mentioned subsidising the training of labour as an important item reflects the difficulties which are encountered by the firms in this area. From a previous discussion it was found that most of the production processes in Kuwaiti establishments were more labour than capital-intensive. This was said to be mainly because of the "cheap" labour which is imported from Asian countries. One would expect that in general terms cheap labour is bound to be less-skilled. Therefore, the subsidising of training has been emphasised as an important form of subsidy.

To a somewhat lesser extent than the above, marketing activities were emphasised. Forty five establishments, 28 per cent of the total, and 42 firms, 26 per cent of the total, mentioned the subsidising of marketing and advertising activities and retail showrooms, respectively. These highlight the marketing difficulties which face the Kuwaiti manufacturing firms. Also, the high advertising costs which are not as easily bearable by Kuwaiti manufacturers as they may be by their merchant competitors as a result of the low economies of size of Kuwaiti producers. In the case of the foreign trading merchants, on many occasions, the costs of advertising in the local market are born by the foreign exporting firm which then claims them from its own government in the form of tax allowances. Retail showrooms are somewhat a rare commodity in Kuwait because of the high prevalent rents as will be shown later.

Forty establishments, 25 per cent of the total, mentioned housing as one of the five most important activities that deserve subsidisation by the Government. This issue reflects the high cost of housing in Kuwait in general for what is often referred to as the housing crisis. Rent for a modest two-bedroomed flat was in 1983, on average, KD 250 per month (about £625), i.e KD 3,000 per annum (about (£7,500). For a manufacturing firm which would have to house its many employees, as often is the case in Kuwait,

such rents are not easy to meet. Even if the firm did not have to house its labour, the high housing rents would have to be reflected somehow in the wages and salaries, an added burden.

Some of the establishments attempt to house their employees as groups in different premises. Often, this is done under poor housing conditions in order to save costs. This is bound to reflect itself in labour performance. One firm reported that it pays annually KD 18,000 (about £45,000) as housing rents for its labour.

As noted from Table 7.59, 18 establishments added new other forms of assistance and promotion measures which they thought were important. In addition, the questionnaire was concluded with an open-ended question asking the respondents to add any forms of assistance and subsidies which they thought were important and desirable. The responses for these two items are listed in Table 7.60. Together, a total of 120 items were proposed. Although most of the items were not repeated, a few were. A total of 315 replies were collected. In addition to the 18 establishments which replies to question 14's item "other" aims, another 129 firms answered question no. 16 proposing new forms of subsidies to be introduced by the State. A total of 132 firms answered both questions. Those replies have been integrated and whenever similar replies were reported for

Table 7.60 Detailed forms of subsidies suggested by respondents

No. of times repeated	Government-related issues
9	Encouragement and subsidisation of local industries.
3	The declaration of a clear state industrial strategy.
3	Review and coordination of commerce, industry, and immigration laws.
2	Easing of the import licences for new and more development equipments.
1	Tying of the AID programmes given to foreign countries to Kuwaiti produced goods.
1	Giving firms freedom to produce integrated production without any administrative constraints.
1	Scientific research assistance.
1	Subsidise unit prices.
1	Cancel subsidies on imported items similar to the firm's products.
1	Subsidise raw material prices (even if 50%).
1	Subsidise imported raw materials.
1	Government to attempt to provide raw materials locally.
1	Government assistance in the good selection of consultants.
1	Provision of showrooms at nominal rents.
1	Assistance in the vitalisation of the local market.

No. of times repeated	Government-related issues
1	Assistance in coordination between industries in the Gulf region.
1	Create a Gulf and an Arab common market similar to the European common market.
1	Create an industrial chamber concentrating efforts on the industrial sector only and to complete and up-to-date laws and regulations necessary for the promotion of the manufacturing sector.
1	Government not to give-in to merchants' interests.
1	Help to open new channels for the firm's products.
1	Subsidising of commercial articles such as office equipments.
1	Imposition of quality standards on imports in order to prevent dumping, thus the firm's products would have to compete with high quality foreign goods.
2	Specify quality standards.
1	Reduce customs and port duties.
4	Limit number of companies to prevent bad competition because of market saturation.
1	Better government supervision of violations of regulations.
1	Flexibility and speed in granting licences.
1	Allow firms to promote their industries.
1	Provision of all facilities which would help firms to promote their products.
3	Protection from the competing unlicenced workshops.

No. of times repeated	Government-related issues
1	Closing unlicensed industries.
1	Prevention of firms to import equipments to manufacture complementary products which are the main line of the firm's products.
1	Government agencies to care about national products.
5	Scrutinise cancellation of routine procedures in state ministries.
1	Organising licensing procedures in the Ministry of Commerce and Industry where monopoly is granted to some and excessive licences to others (e.g. furniture).
2	Creation of an industrial agency with clear aims.
1	Creating a technical and administrative agency more competent than the Ministry of Commerce and Industry to solve the difficulties that face industry in a practical and scientific manner.
	Government purchases
7	Priority preference to be given to the purchase of locally produced products.
4	Priority preference to be given to the purchase of local products without comparison with the foreign alternative.
15	Oblige government departments to purchase their requirements from local producers.
3	Increase the percentage preference (presently, 10% price increase over foreign alternatives) granted to local producers.
3	To allocate projects on a continual and periodic basis for the company's type of products.

No. of times repeated	Government purchases
3	Tenders to be negotiated directly with local firms after having allowed for a marginal profit.
2	Government to distribute sales amongst many local industries and to negotiate prices with them so that tenders do not always fall only on one industry.
2	Standardise requirements in government contracts.
2	Include the company's standards in government project standards.
5	Oblige contractors to use locally produced products in projects.
1	Prevent contractors from manufacturing their needs which are manufactured by the licenced local industries.
1	Improve the government's payments system for its projects.
	Export-related issues
6	Subsidising exports.
2	Subsidising exports with fixed percentages for items that are exported.
2	Encouragement and promotion assistance measures for exports.
2	Assistance in advertising for export purposes.
1	Assistance in the opening of new export outlets.
1	Assistance in easing of exporting processes to the Gulf region where enough information about the market is available.

No. of times repeated	Labour-related issues
2	Easing the immigration regulations for the purposes of importing labour.
1	A higher regard for Kuwaiti professionals and entrepreneurs as compared to the merchants.
1	Assistance in the training of labour and increasing their skills.
1	State to subsidise employing engineers and specialised technicians for short periods to raise efficiency.
2	Provision of housing for labour.
	Market-related issues
1	Subsidise industry in temporary depression periods.
1	Allow the firm to produce new products which are viable economically and are related to its line of production for market flexibility reasons.
2	Assistance in local and international marketing by the provision of information and data.
	Utilities and raw materials issues
4	Subsidise prices of local raw material.
8	Subsidise fuel prices.
3	Subsidise electricity prices.
1	Provide electricity free of charge.
1	Subsidise water prices.
2	Provide water free of charge.

No. of times repeated	Financial issues
2	Offering financial subsidies.
1	Provision of no interest loans.
6	Provision of low interest loans.
1	Reduce interest rates on loans not to exceed 2%.
1	Provision of low-interest loans for working capital purposes.
1	Watch interest rates in banks.
4	Assistance in easing the obtaining of loans.
2	Extend the grace p eriod of the industrial bank loans.
1	Provision of short-term loans.
1	Provision of medium-term loans.
8	Provision of long-term loans.
	Land subsidy issues
3	Provision of plots to those who need them.
9	Granting enough plot areas for the projects' needs.
4	Granting extensions to the plot areas.
2	Provision of plots for storage purposes.
1	Provision of industrial plots for ownership and not lease.
	Customs duty exemption
13	Provision of exemption.
2	Provision of exemption for semi-produced goods.

No. of times repeated	Customs duty exemption
9	Provision of exemption for raw materials.
3	Exemption to continue after ten years.
	Customs protection
54	Provision of protection measures.
3	Provision of full protection.
3	Protection via high tariffs.
3	Increase protection tariffs.
2	Protection via unit prices.
3	Effective watch over imports for protection purposes.
4	Counteract dumping policies of the foreign firms.
1	Provision of protection against dumping practices.
1	Simplifying of customs procedures for imports.
5	Reduction of the imports of similar goods.
5	Prohibition of the imports of similar goods.
1	Monopolistic protection of all national industries.

both questions by the same firm one of them was discounted.

The replies are grouped under the following headings: government-related issues, government purchases, export-related, labour issues, utilities and raw materials, financial matters, land issues, market-related, customs duty exemption and protection measures.

Conclusion

It has been found that the overwhelming majority of the respondent firms believe that they do not receive any subsidies from the State at all. The very nature of Kuwaiti subsidies being of the type of "not paying" (for example the full electricity cost, etc.) rather than paying the full cost of the provided services and then receiving rebates adds to the fact that the Kuwaiti subsidies are concealed (or implicit) rather than being transparent (or explicit).

Also, an overwhelming majority of the respondent firms reported customs duty protection as the most important form of subsidy which they would like the State to introduce. Of course, this high rate of response for this particular form of assistance which is in reality applied in Kuwait reflects the fact that customs duty protection is used in Kuwait in a very consevative and restricted manner.

Other forms of subsidies which were suggested by the

majority of the respondent firms to be introduced include: export subsidies, customs duty exemption, financial subsidies and assistance with the costs of both locally available raw materials as well as with the costs of the imported raw materials. To a lesser but large extent the following were also mentioned as desirable forms of assistance to be introduced by the State: the subsidising of research and development, labour and management training, the costs of imports in general, assistance with marketing, retail showrooms, and housing for labour.

Section 6

Difficulties

As has been mentioned earlier, the manufacturing sector in Kuwait faces many difficulties. Indeed, Kuwaiti society has been traditionally mainly a merchant one and manufacturing was practised only on a very limited scale. It was mainly confined to the manufacturing of the items involved in the merchant activities. Modern manufacturing involving the production of totally new items for a totally different Kuwaiti society with newly developed tastes is a very recent phenomena in Kuwait.

As noted earlier, manufacturing firms in the modern sense of the word began to be established in the late 1950s and in the early 1960s, and because it is relatively young, manufacturing industry is bound to be faced with many problems and difficulties.

Some inherent problems include, as have been discussed earlier, the lack of abundant local raw materials (apart from oil and natural gas), the small size of the domestic market, and the scarcity of indigenous labour skills. These problems were coupled with underdeveloped administrative and financial structures.

Table 7.61 lists the difficulties which are felt to face the manufacturing sector. They are listed in

descending order according to the total number of times each one was pointed at by respondents.

It should be noted that, originally, in the questionnaire, there were no "yes" or "no" answers to these problems. Rather, the 21 statements were set out and the respondents were asked to tick what they thought to be the most important ten items and to add any comments. Those which the respondents ticked have been referred to as "yes", and these are expressed as a percentage of total possible "yes" answers for the total number of the participant respondents, i.e. 161, a number resulted designating the number of times that each particular item was not selected. Thus, giving the number of respondents who chose the concerned item and those who did not choose it.

It can be seen from Table 7.61 that 76 per cent of the respondents feel that they face severe competition from foreign goods. More than 60% of the respondents reported that they feel that the worst difficulties facing them are: the high costs of raw materials, the high costs of labour, the small size of the local market, the practice of international companies dumping in the local market, the lack of seriousness of state agencies in dealing with the local industries, and finally, the lack of a state industrial strategy.

More than 40% (but less than 50%) of the respondents

Table 7.61 Difficulties facing the manufacturing sector outlined in sequence of importance

Seq.	Difficulties	Yes	Yes as % of total
1	Severe comp. from imports in the local market	122	75.8%
2	High imported raw mtls. costs	103	64.0
3	High labour costs	99	61.5
4	Small local market	98	60.9
5	Int. dumping	97	60.2
6	Unserious state agencies	97	60.2
7	Lack of industrial strategy	95	59.0
8	Consumer pref. for foreign gds.	78	48.4
9	Inadequate data about economy	76	47.2
10	Difficulty in obtaining loans	74	46.0
11	Too many local firms	72	44.7
12	State agency multiplicity	70	43.5
13	Inflexible industrial laws	69	42.9
14	Import merchants' influence	55	34.2
15	Lack of local industrial experts	51	31.7
16	High advertising costs	51	31.7
17	Lack of proper state training	48	29.8
18	Export difficulties	33	20.5
19	Others	29	18.0
20	Lack of local outlets	18	11.2
21	Low quality of Kuwaiti gds.	11	6.8

reported that the following are very important problems that they face: the consumer preference for foreign-produced and imported goods, the lack of data about the national economy and the local market, the difficulties in securing long- and short-term loans, the too many local establishments producing the same types of goods, the multiplicity of state departments which firms have to deal with, and finally, the inflexibility in the industrial laws.

Between 30% and 34% of the respondents felt that the following are important problems facing manufacturing industry in Kuwait: the influence of the importing merchants, the lack of locally available technical and administrative experts, the high costs of advertising, and the lack of state training activities.

Eighteen firms felt that there is a lack of local retail outlets for their products. This is mainly because of the high rents prevalent in Kuwait for showrooms. Renting a 16 x 8 yards shop in a relatively important commercial centre at 1983 prices would cost approximately KD 28,800 p.a., i.e. about £72,000*. Obviously, this rent is perceived by the 18 firms to be high. Indeed, it is high even by

*This estimate is based on KD 300 per shop per month. 16 x 8 yards would represent eight shops on Kuwaiti standards. Location is assumed to be Tunis street in Hawalli. One KD is taken to equal £2.50.

Kuwaiti standards. It is a reflection of the highly inflated prices of commercial land and buildings in Kuwait. It is worth noting that since the survey was carried out the slack in the national economy which started in early 1983 and continued throughout 1984 and most of 1985 had reduced commercial rents in general by one-third in the first half of 1985 as compared to that prevailing in 1983.

Table 7.62 illustrates the difficulties which are perceived to face the manufacturing sector in Kuwait grouped as follows: (I) Market-related difficulties (II) Government-related difficulties, and (III) Labour- and raw materials-related difficulties.

It is noted from Table 7.61 that 29 respondents mentioned other difficulties which they thought face the manufacturing sector in Kuwait. Many of these respondents mentioned more than one difficulty. Some of the difficulties that were mentioned were repetition for some of the difficulties which were provided on the list in the questionnaire itself. However, some were worded differently. These difficulties which were reported by the respondents are summarised in Table 7.63. They are presented together with the number of respondents which mentioned them.

A vehicles' trailer body manufacturer reported that it cost them about KD 5,000 to manufacture a specific type of trailer. Similar types of trailer, it reported, are sold

Table 7.62 Difficulties facing the manufacturing sector grouped by related issues

Seq.	Difficulties	No.of firms	Yes as % of total
	I. Market-related		
1	Severe comp. in local mkt.	122	75.8
4	Small local mkt.	98	60.9
5	Int. dumping	97	60.2
8	Consumer pref. for foreign gds.	78	48.4
11	Too many local firms	72	44.7
16	High advertising costs	51	31.7
18	Export difficulties	33	20.5
20	Lack of local outlets	18	11.1
21	Low quality of Kuwaiti gds.	11	6.8
	II. Government-related		
6	Unserious state agencies	97	60.2
7	Lack of industrial strategy	95	59.0
9	Inadequate data about economy	76	47.2
12	State agency multiplicty	70	43.5
13	Inflexible industrial laws	69	42.9
14	Import merchants' influence	55	34.2
17	Lack of state training	48	29.8
	III. Labour & raw mtls.		
2	High raw mtls. costs	103	64.0
3	High labour costs	99	61.5
15	Lack of local experts	51	31.7

Table 7.63 Difficulties facing the manufacturing sector suggested by respondents

No. of times repeated	Difficulties
4	Government bureaucracy and routine.
3	The existence of many unlicenced establishments
2	The lack of customs protection.
2	The absence of an industrial society for the generation of industrial entrepreneurs.
2	Lack of concern of the government about the national industries.
2	Difficult and inflexible immigration rules.
2	The unavailability of Kuwaiti technicians.
1	Interruptions of the electricity supply.
1	Bad telephone services in Mina Abdulla industrial area.
1	The unavailability of local raw materials.
1	Economic viability studies are often based on incorrect data with the aim of obtaining licences and without regard to the effects of such a practice on the possible failure of projects.
1	The absence of state-sponsored promotion programmes for national industries.
1	High costs of employing technicians.
1	Abuse of sales vouchers for customs protection purposes.
1	While local products are examined for standards checks, imported goods are not.

No. of times repeated	Difficulties
1	Inability to buy new machines because of lack of finance.
1	Marketing difficulties.
1	Inter-industry labour mobility.
1	Competition from government and semi-government manufacturers which are provided with their financial requirements at subsidized costs.
1	High prices of the locally produced packaging materials. [Most of packaging materials products are protected by 30% customs duties].
1	The unavailability of common spare parts.
1	Customs duty exemption requests often take up 6-7 months in order to get an acceptance or a rejection reply.
1	Exporting difficulties as a result of severe competition in the export markets.
1	Default and long-delays in payments of bills.
1	The small size of the domestic market does not allow the promotion of products because of the high fixed costs which are involved.
1	Importing "low" quality goods.
1	Any employee in the Industrial Subsidies Division in the Ministry of Commerce and Industry, whatever his administrative position, can delay all dealings of the firm as he/she wishes.

in Kuwait at KD 3,000-3,500 (including the profit margin of the importing merchants). These prices were reported to be less than the raw materials prices that are included in the product itself in their country of origin.

Another establishment which produces paints reported that it used to successfully market its products in the United Arab Emirates. The firm decided to print a "Made in Kuwait" statement on its products. "Our sales completely stopped as a result" the company reported. Once this statement was removed, the sales returned to their normal trend.

A plastics producer reported that it took three years to obtain an industrial licence. Another year was spent until it obtained an industrial plot. Moreover, it reported that it is not allowed to produce complementary products, or to diversify its plastic products in accordance with market changes in order to survive and grow.

A wood and partly metal furniture producer reported that it exports all of its products to the neighbouring markets in the Gulf area, especially Saudi Arabia. It says that the Ministry of Commerce and Industry refused to grant it an industrial licence. Therefore, the firm rented an industrial licence from another company together with a 1,000 sq.m. plot for an annual rent of KD 18,000 (about £45,000) though this plot area is not nearly sufficient

for the activity purposes of the company.

The firm reported that the Ministry refused its application because the domestic market is saturated, without any regard for export potential. Because the licence is rented, the firm has been refused loans from the Industrial Bank. Moreover, the Ministry of Works and Social Affairs prevented it from importing the labour which it needed on the same grounds. It says that if it had a licence it would have been able to import machines and reduce its labour force. The company also reported that it does not have any showrooms in Kuwait because of the prevailing high rents.

Finally, an aluminium products producer reported that there are twice as many unlicenced aluminium producers as there are licenced ones. It also reported that an entrepreneur would need to have a friend or somebody who will do you a favour in the State Departments so that your transactions do not get delayed and that they pass with ease.

Moreover, inconsistencies in measures and standards are another source of problems that pose additional problems for the firm, an aluminium products firm-owner reported. He said that the length and width measurements are so diverse bewteen the different buildings, and even in the same building, that they cause many production difficulties.

Each door and each window will have to be measured individually, and thus, formed individually. There are no specific standards. Therefore, more workers with technical abilities and a larger labour force are required to carry out a job which could be done by much less labour if standards were prevalent. A matter which adds to the costs and reduces the competing powers of the firm.

The above mentioned firm also reported the physical difficulties which are involved in the sea ports when raw material imports arrive. There, inspections are made twice, once by the police authorities and another by the customs officials. On many occasions, crane drivers, and lifting and taking-down labourers are needed twice. Although the police and customs authorities are very near to each other. These actions only add unnecessarily to the costs of the firm.

Conclusion

The major difficulty to face the manufacturing sector has been found to be the severe competition from imports in the local market. Other very important difficulties facing the local manufacturing sector have been found to include the high costs of the imported raw materials, the high labour costs, the small size of the local market, international dumping practices, the lack of serious support of the State agencies, and the lack of a clear State

industrial strategy.

Other serious dificulties which face the manufacturing sector have been found to include the local consumers' preference for foreign produced goods as compared to the locally produced, the absence of adequate data regarding the national economy and which may be used by firms for forecasting purposes, the difficulties in obtaining loans, and the multiplicity of the local firms which produce similar goods. Also, the multiplicity of the State agencies which have to be reviewed by the firms, and the inflexibility of the laws and regulations which have to be dealt with.

Furthermore, about one third of the respondents reported the import merchants' class influence, the lack of locally available industrial experts, the high costs of advertising in the local market, and the lack of proper State training facilities.

It is apparent that only few of the above mentioned difficulties which face the manufacturing sector are of the type which may be considered to be inherent in the Kuwaiti economy. However, the majority of these difficulties seem to be the outcome of either an unwillingness or an inability to deal with them. Indeed, some of them seem to be as the result of the prevailing administrative structure of the State as well as its industrial strategy, laws and regulations.

Obviously more in-depth studies are required in order to define in detail and more specifically the causes and magnitudes of these difficulties so that proper policy recommendations and amendments could be put forward.

CHAPTER EIGHT

CONCLUSION

Introduction

This chapter will summarise the main findings from the literature survey concerning the Kuwaiti manufacturing sector and the survey questionnaire findings as well as an attempt to relate these issues to the literature review from Chapter One.

First,we will examine the industrialisation aim in Kuwait and its relevance to the issue of subsidies. The general subsidy costs to the State budget will also be considered. Then, we will look at the manufacturing sector where some interesting remarks will be made. Within this context, the State administrative framework will be looked at.

The second section of this chapter will present a definition for industrial subsidies in Kuwait, and classify them as general and specific types. Also, conclusions will be drawn as regards the objectives and effects of subsidies in Kuwait. The third section will summarise and present the conclusions which were reached from the survey questionnaire. The final section will present some recommendations for further research studies.

Section 1

Industrialisation in Kuwait

Industrialisation aim in Kuwait

Unlike the majority of developing countries, Kuwait's efforts to promote industrial development are not targeted primarily towards increasing its per capita income, reducing its rate of unemployment, enhancing its national welfare, or earning foreign exchange. These objectives, which have long been considered central to economic development programmes in the less developed countries, take a secondary role in the case of Kuwait, as in the other small, rich, oil-based economies. These countries, which already have achieved high levels of per capita income with little or no unemployment and with a relatively high level of national economic welfare, aim to achieve two basic goals: a diversified economic structure in the short run and a self sustainable level of economic growth in the long-run in preparation for the inevitable post-oil era. Therefore, industrial development is more important for Kuwait on the basis of its future and potential role than for its present accomplishments.

In addition, because of its oil revenues, Kuwait has been in the fortunate position of having a level of savings that has exceeded its domestic investment

possibilities. As with the other oil-based economies, the savings-investment relationship is reversed in Kuwait and the question becomes one of finding economically attractive investment opportunities that would absorb the country's savings.

Because capital is the only flexible economic resource which Kuwait possesses, it may be sensible to use it as a means of obtaining further long-run benefits, creating employment and assisting in the development of skills, as these are vital to the future viability of the Kuwaiti economy.

Thus, the use of capital in this long term development role is perhaps of no real cost to the economy. Hence, the provision of subsidised capital to create productive enterprises may be justified. Although, such subsidised capital should not be a permanent entitlement, as there is a danger that it will be used to prop up enterprises which are making a negative contribution to the economy.

But, industrialisation in Kuwait, as well as in the other Gulf countries, has led to what might be called "foreign enclaves" (imported capital equipment, imported raw materials, imported management and imported labour). Therefore, the question of its future economic viability is perhaps not as pressing for the policy-maker as is the question of the socio-political consequences of ever-growing

foreign enclaves.

Infant industry

Of course, the infant industry argument which is concerned with the temporary disadvantages of manufacturing production is used to justify support. The argument is that a learning process will in time overcome the disadvantages and reduce production costs or raise the quality of output and so make an industry competitive. This learning process may involve external economies, so that there may be some justification for subsidising an industry until the benefits of such processes are realised.

A similar argument could be advanced concerning the learning process or the market penetration process in the domestic as well as the export markets. The opening up of new domestic and export markets requires an initial investment in the collection of information and the exploration of export opportunities, in learning the business of marketing, in creating sales contacts and goodwill, etc. It is possible to argue that manufacturers, in developing countries in general as well as in Kuwait, should be subsidised temporarily in making this investment. They are "infant" in marketing locally and in exporting, and they should be assisted while they are growing up. Some of the answers and comments which respondents reported seem

to support this particular argument.

General subsidy costs and the State budget

Indeed, the Kuwaiti Government has been reconsidering the budgetary implications of providing free health and education services, subsidised housing, electricity, water and fuel, and the host of the other consumer subsidies to a rapidly expanding expatriate population, and whether the social cost of foreign labour, if added to their wages, might not in some cases exceed the value added in production, and therefore, nullify the objectives of diversification. Certainly, this argument will continue, if diversification eventually means the creation of a viable economy without oil, then it would be necessary for industry to stand on its own without subsidies, pay taxes and not have the benefit of "cheap" wages made possible by increasingly heavy subsidisation of consumer prices, not to mention the other more direct subsidies which industrial firms receive.

However, some of the most important forms of subsidies (electricity, water and fuel) are provided to the manufacturing sector in Kuwait as a part of the state welfare programme. This in turn implies that the existence or continuity of these subsidies is determined by exogenous factors, i.e. long term trends in international markets (shifts in the price of and demand for oil and Kuwaiti foreign investments).

The two main factors working together make it unlikely, in the long run, that the Government will maintain industrial subsidies at their present level. These factors are as follows: first, the large increases in the total amounts of subsidies to industry over the recent years because of the widening gap between the opportunity cost of factors of production and the prices paid for these factors by the industrial firms. Secondly, the recent decline in Kuwait oil exports (for different reasons) and the resultant deficits in the public budget.

The expected decline in the total amount and/or forms of subsidies to the manufacturing sector may lead to strong adverse effects on the economic viability of industrial firms. This decline is another factor to be added to the range of difficulties which face industry in Kuwait. Indeed, industrialisation in Kuwait remains severely constrained by the small size of the country, scarcity of skills in the indigenous population, negative attitudes towards industrial work, inadequate planning machinery, and the hostile climatic conditions and the harsh physical environment.

Industrial policy in Kuwait

It has been found that there is no clearly defined industrial policy. Indeed, Kuwait lacks a long-term

industrial strategy, plans, policies and objectives of industrialisation. The main reason for the absence of an industrial plan is thought to be the unwillingness of those taking political decisions to make them because they are not clear as to what they would like the future to look like, nor are they sure that a progressive and developed industrial sector is desirable, from both the imported labour point of view and the financial burden which will follow because of subsidies.

However, the Government should try to establish some sort of coherent industrial policy in place of the present uncoordinated mix. Even if the final decision were that Kuwait does not really want all that much more manufacturing industry, it would help to provide some sense of direction for the economy. It has been said that if the Kuwaiti private entrepreneurs were given a better idea of where the economy was going in an age of lower oil prices, they might be able to think up some uses for their money in Kuwait.

The manufacturing sector

The private manufacturing sector in Kuwait at the present time is little developed. It shows low technical capabilities, low labour productivity, high cost per unit of output, little capital per worker and limited export potential (as seen from the State industrial census).

Moreover, the manufacturing sector is neither sufficiently diversified nor sufficiently specialised. This structural weakness causes other but more fundamental weaknesses such as inadequate yields, absence of industrial research, weak distribution channels, etc. If industry has to expand, it has to be made more self-reliant, more efficient and competitive, innovative, productive and profitable. To achieve these goals industry in Kuwait would probably need more Government support.

It has been seen that the manufacturing sector is still very much concentrated on the final stages of manufacturing and shows little vertical integration. There is little activity in the area of primary and intermediate goods. There is also very few linkages of either a vertical or horizontal kind between raw material producers and manufacturing firms.

Kuwaiti employment

As regards the Kuwaiti labour force, it has been seen that their participation rate and their preference for non-productive occupations restrict the number of Kuwaitis and their proportion in the labour market. Since it is difficult to change the structure of the Kuwaiti labour force in the foreseeable future, the dependence upon foreign labour is likely to remain a basic obstacle to industrialisation.

Indeed. the type and number of graduates of technical schools is way below the desired objective of ensuring that 25% of the manufacturing labour force be Kuwaiti. More attention needs to be paid to the development of Kuwaiti human resources than hitherto has been the case.

Industrial licencing

The licencing system as it prevails in Kuwait today is found to pursue too many objectives, which are too broad and sometimes contradictory. Without specific criteria,decisions are often made on ad hoc bases in response to particular short-term developments. This system was also found to place unnecessary restrictions on the industrial entrepreneurs and industrial firms managements in developing their market strategies in accordance with market developments as delays because of government bureaucracy are the rule rather than the exception.

State industrial administration

There are a number of institutions, primarily public, that are concerned directly or indirectly with promoting industrialisation in Kuwait. The pattern of growth of these institutions has not been orderly or consistent. There is a general lack of correspondence between objectives and practices, between specialisation and authority. More

coordination and harmonisation are needed among the institutions and between the institutions and policy makers.

Section 2

Industrial subsidies in Kuwait

Definition of subsidies

Industrial subsidies in Kuwait have been broadly defined to include relief from taxes, exemption from paying customs duties, import protection, provision of electricity at nominal rates, reducing the prices of water and fuel, low-interest loans, provision of industrial land at nominal rents, and favoured treatment in the allocation of orders by public authorities.

General vs. specific subsidies

Industrial subsidies in Kuwait (except customs duty protection and IBK loans) may be considered to be of the "general" type as compared to "specific" type subsidies. General subsidy schemes are those under which the subsidy is given under certain standard rules of procedure to determine the eligibility of applicants and within those rules is available to all comers. This philosophy behind general subsidy schemes is that their availability and value are readily calculable by firms, who can therefore take them into account in planning their activities. They are also relatively straightforward, quick and cheap to operate.

The Kuwaiti customs duty protection system and the IBK loans, on the other hand, may be considered as a specific and selective subsidy scheme where tailor-made rates packages are granted to particular product groups. Specific subsidy schemes involve more discretion and more top level decision making on the part of the government, and their results are much less predictable and calculable (as compared to general schemes).

Objectives of subsidies

As regards the objectives of subsidies, the following are important questions which need to be answered: first, what are the objectives of granting subsidies? Second, are these objectives legitimate and what are their priorities? Third, do the real effects of the subsidies in terms of costs and benefits, both direct and indirect, approximate to the objectives?, and do they compromise other objectives? Finally, are there alternative ways of achieving the objectives, and how do these compare with the subsidy in question in terms of costs and benefits?

Unfortunately, at least from the point of view of an economics analyst, the subsidies system in Kuwait has neither been directed toward clearly defined objectives nor has it been confined to the manufacturing sector. Even among the industrial sector itself, the subsidy as

well as protection policies in Kuwait lack a method of assessing a priority ranking or any criterion for the selection of industries that are eligible for subsidies and/or protection. Therefore, it is not possible to simply evaluate the effects and end results of subsidies against their "objectives".

Effects of subsidies

One of the most important issues while studying the subject of subsidies is their real effects in terms of costs and benefits, both direct and indirect on the industrial firms, both in how these firms perceive those subsidies and the real size of the involved subsidies.

It is of interest to know the role of subsidies in encouraging industrial firms to establish in Kuwait as compared to other countries in the Gulf for instance. Also, the subsidies role in encouraging firms to stay in business or expand. Furthermore, their role as to encouraging Kuwaiti entrepreneurs to invest in industrial activities in Kuwait, assuming that this is desirable by the policy-makers. In addition, it would have been of interest to know what the industrial sector would have looked like in the absence of the subsidies. In other words, how have the subsidies affected the shaping of the industrial sector.

It is extremely difficult to judge whether subsidies

have been successful because one can never identify what the position would have been without assistance. Certainly, new investment has been attracted that would have gone to other sectors of the economy or even to other countries, and firms have survived that might otherwise have gone out of business. Other industries and firms have continued along unsuccessful paths despite subsidies, and in that sense subsidies have inhibited rather than encouraged structural change towards the diversification aims of having successful firms for the future. Therefore, whether subsidies have helped the long-term aim of encouraging viable and internationally-competitive firms and industries is unproven.

As regards the above mentioned questions concerning the effects of subsidies on the different aspects of the industrial sector in Kuwait, lack of detailed relevant information inhibit us from reaching any definite conclusions other than the above broadly stated comments.

Section 3

Survey findings

As mentioned before, the main objectives of this study has been to discover the size and extent of the subsidies which are received by industrial firms, how these firms perceive the subsidies, the effects of the subsidies on firms' costs, and the degree of application of these subsidies and their qualities from the point of view of the industrial firms. In the meanwhile, data regarding some structural characteristics of the respondent firms were gathered, these together with the other findings are summarised below.

Structural characteristics

The first part of the survey contained some questions which have enabled us to assemble a crude profile of the manufacturing sector structure. The investigation covered the ownership structure, year of establishment, total capital employed, employment, industrial sector, exports structure, and industrial area issues of the respondent firms. The findings concerning each of these issues are presented below.

Ownership structure

It has been seen that the overwhelming majority of Kuwaiti firms are totally privately owned and that there are about 12 times as many private firms as there are mixed-ownership firms. The mixed sector firms were found to have larger total capital employed averages and were found to be, on average, the more capital-intensive enterprises.

Mixed sector firms were also found to benefit of, on average, larger electricity, water and fuel subsidies. Their total utilities subsidies per worker were more than twice of those of the private sector firms.

As regards electricity subsidy as a percentage of total utilities subsidies, the private sector firms were found to have larger shares of electricity subsidies than did the mixed sector firms. This may be taken to indicate that more private firms have been set-up to take advantage of the substantial electricity subsidies as compared to the other forms of subsidies.

In contrast, evidence suggests that the fuel subsidy as a percentage of total utilities subsidies of the mixed sector were, on average, more than twice those of the private sector firms. This, in its turn, may be taken to indicate a State initiative to involve the manufacturing sector even more in the hydrocarbon sector of the economy.

An interesting finding to note is that the State was

paying indirectly, on average, about one third of the respondent firms' average wages. However, it was noted that the mixed sector firms were in a more advantageous position.

Years of establishment

Kuwaiti manufacturing firms have been found to be in business for relatively short periods of time and may be regarded as young firms operating in activities that may be considered to be 'infant' industries in the economy.

Total capital employed

Most of the industrial Kuwaiti establishments were found to be of the small-scale type firms. Another large proportion of the firms were found to be of the medium-scale type. While yet another small fraction of the Kuwaiti undertakings were found to be large-scale entities.

The evidence from the data indicated that most of the Kuwaiti firms have experienced high compound growth rates.

It has also been found that the smaller and the larger firms were more capital-intensive than the middle-sized firms.

Employment

According to an unofficial State classification of

firm size by employment (not more than 25 persons) only about one fifth of the Kuwaiti establishments may be considered to be small-scale undertakings. However, if taking firms which employ not more than 50 persons, evidence would suggest that about half of the Kuwaiti firms may be considered to be of the small-scale type.

A peculiar finding concerning the nationality of the employees of the industrial firms is that the overall ratio of the Kuwaitis in the total labour force was 1.5 per cent. This is a sharp contrast to the State requirement of a 25% Kuwaiti labour force which was put forward 20 years ago in the Industrial Law of 1965.

Evidence suggested that 74 firms did not have any Kuwaiti employees, 34 firms had only one Kuwaiti each (thought to be an owner/manager person), 23 firms had only two Kuwaitis (also thought to be an owner/manager person). Therefore, 81 per cent of the Kuwaiti firms may be, in fact, considered not to have any Kuwaiti employees whatsoever.

It may be argued at this stage that since industrialisation is not an aim for the present times, rather it is a futuristic aim for the time when Kuwaiti oil runs out or when its "high" prices become "low", i.e. when foreign labour may be attracted away from Kuwait for other more promising jobs in other countries, and when only unemployed Kuwaiti labour force may be available to fulfil the "dirty" industrial jobs,

since it is for this time that industrialisation is desirable in Kuwait; then, one may argue that the initiative should be taken to prepare the native population in the industrial development process. Of course, this step may not be fulfilled under the present conditions where a Kuwaiti may be employed in the civil services for an annual average wage of KD 3,600 as compared to an average industrial wage of KD 2,155.

If Kuwaitis have to be attracted to work in the manufacturing sector, a subsidy has to be paid for each Kuwaiti worker, and to be at least the sum of the difference between what the entrepreneur is willing to pay at the market rate and what the Kuwaiti would have gained if he had worked in the civil service. Also, firms may have to be encouraged to be more capital intensive in order to use less foreign labour. It should be mentioned at this stage that the Kuwaiti oil companies have been very successful in attracting Kuwaiti labourers, engineers and technicians by paying substantially higher wages with an annual average of KD 8,400, which the oil industry indeed can afford. Added to this attraction is the fact that the oil industry is wholly-owned by the public sector, where Kuwaitis have tended to prefer to work for job-security reasons and that the employer is the State and not of a rival family (one of the societal ethics of the Kuwaitis).

Industrial sectors

It has been found out that about one third of the respondent firms were involved in producing metallic products and about one quarter of the total number of firms were involved in chemical producing activities.

In contrast, evidence suggested that the construction materials, the food and beverages, and the chemicals sector are heavy-electricity consumers, while the textiles, the wood products and the paper and printing sectors are low electricity consumers. A similar industrial sector distribution for water subsidies was also noted.

However, as regards fuel subsidy, the findings reveal that the chemicals sector benefits of, on average, the highest fuel subsidy per worker. This may be taken as a sign of success in attracting industrial firms to be even more involved in utilising the indigenous hydrocarbon raw materials.

The most heavily subsidised firms, as related to their sheer capital size, were found to be in the construction materials, food and beverages and wood products sectors. In contrast firms in the textiles and paper and printing industries were found to be the least subsidised in those terms.

The construction materials industry has also been found to benefit of the highest land subsidy per worker, while the wood producers had the least land subsidy per worker.

The textiles, construction materials and chemicals sector firms were found to be, on average, the most capital-intensive firms. The wood products firms were seen to be the least capital-intensive.

The paper and printing and the food and beverages sectors had the largest average employment sizes, while the textiles and chemicals sectors had the least average employment sizes.

The textiles and the paper and printing sector firms had the highest compound growth rates, while the food and beverages sector firms had the lowest rates.

Exports

It has been seen that while about one-quarter of the firms produced solely for the local market, about half of the firms were low exporters, about one eighth were "middle" size exporters and a similar proportion of the firms were high exporters.

The findings revealed that by considering firms exporting only up to 10 per cent of their total output as firms producing primarily for local market purposes, about

half of all the respondents would fall into this category of being firms supplying local market needs only.

Industrial areas

This study shows that Shuwaikh and Sabhan industrial areas are mostly occupied by light small-scale industries. In contrast, Shuaiba and Sulaibiya industrial areas were found to be mostly occupied by heavy large-scale industries. As regards conditions of the lands, firms located in Sabhan and Shuaiba industrial areas reported more satisfaction with their industrial land conditions than did firms located in Shuwaikh, Sulaibiya and Ahmadi industrial areas.

Electricity subsidy

Evidence suggested that smaller firms receive more electricity subsidy, as related to their employment sizes, than the larger ones. Also, electricity subsidy was found to constitute higher ratios of the total capital employed of the smaller firms as compared to those of the larger ones.

Another peculiar finding is that electricity subsidy constitues, on average, the highest share of the total measurable forms of subsidies. Finally, evidence revealed that more firms have been established in the recent years

that are more electricity-intensive than in previous years.

Water subsidy

It has been found from data that smaller firms were receiving more water subsidies than were the larger ones. As in the case of the electricity subsidy, but to a somewhat lesser extent, more firms have been established in the recent years that consume higher ratios of water subsidy per worker than was the case in previous years.

Fuel subsidy

Evidence suggests that contrary to the observation which was made earlier that smaller firms were receiving greater electricity and water subsidies per worker than larger firms; larger firms were receiving greater fuel subsidy per worker than smaller ones. Also, increasingly, more firms have been established in recent years that benefit of substantially higher ratios of fuel subsidy per worker than in previous years.

Total utilities subsidies

An important finding in terms of total utilities subsidies per worker is that smaller firms receive, on average, greater such subsidies than do the larger firms. Also, total utilities subsidies constitute a greater share

of the smaller firms' total capital employed as compared to those of the larger ones.

Another important finding is that more firms have been established in the more recent years that benefit ~~of~~ from higher ratios of total utilities subsidies per worker than in the previous years.

Evidence indicated that the high electricity subsidy has encouraged the establishment of electricity-intensive industries. This together with the other forms of utilities subsidies may have encouraged the establishment of capital-intensive industries. The eradication of these subsidies may, in the long-run, have a counter effect and encourage the establishment of labour-intensive industries. Thus, by eradicating or cutting-down the electricity, water and fuel subsidies, capital-intensive industries rather than labour-intensive are the ones most likely to be adversely effected by a future reduction in subsidies to industry in Kuwait. This is an undesirable outcome from the policy-makers' point of view and from the international comparative advantage principle standpoint.

Land subsidy

Evidende suggested that more smaller firms benefit of, on average, greater land subsidy per worker than do larger firms. Also that smaller firms benefit of more land subsidy as a percentage of their total capital employed as compared to the larger ones.

It has also been found that land market prices form, on average, about half of the total capital employed of the respondent firms.

Employment average wages

According to the data presented in Chapter 5, a salient finding has been that the State is indirectly paying substantial proportions of the industrial firms' average wages (32 per cent of the average wage bills in the case of total utilities subsidies per worker). In some

other instances, these shares reached 94 and 126 per cent of the average total subsidies per worker.

It was also seen that total subsidies per worker constitute a greater proportion of the most capital-intensive firms average wage bills than they do in the case of the least capital-intensive firms.

Hypothetical cost effects of the measurable subsidies

It has been seen from the hypothetical setting which was explained in chapter 5 that the measurable subsidies may constitute a very large proportion of the cost structures of the concerned firms. It has been shown that if materials bought by firms were not subsidised their cost structures would change dramatically depending on the relative importance of each subsidised item.

Conditions of industrial land

Data has shown that most of industrial firms often start-off with relatively small size plots. Supporting this point is the fact that the majority of the allocated extension areas exceeded half the initial areas of the original plots granted to these firms.

Many firms were found to utilise plots which were privately owned by the entrepreneurs themselves because they were rejected the allocation of industrial land areas

by the State.

Evidence also revealed that about two thirds of the participating firms felt that the areas of their State industrial plots were not sufficient for their activity purposes. Another two thirds said that there were no adjacent land vacancies to their original plant location which could possibly be annexed to their plots if needed to expand their firms' activities. Also, two thirds of the respondents reported that their firms' plot areas did not have the capability of bearing any possible future expansion activities.

Two thirds of the respondent firms reported having requested extension areas for their plants. Only about two thirds of these requests were met. Furthermore, only two thirds of the allocated extensions were adjacent to the original plant locations of these firms. Therefore, while more than one third (40 per cent) of those requesting extension plot areas were rejected such extensions, about one third of the allocated extensions were not adjacent to the original plant locations of these firms. Moreover, two thirds of those which were allocated extension areas reported that their plot areas were still not large enough for their activity purposes.

Moreover, about two thirds of the firms which reported that their present plot areas were not large enough

for their purposes also reported that there were no adjacent land vacancies to their original plant locations.

In a supporting evidence to the above observations, 40 per cent of the total respondent firms reported that they leased plot areas at the commercial market rates to supplement their original plot areas.

Perhaps the most striking conclusion about the conditions of industrial land, suggested by our evidence, is the ineffectiveness and inefficiency of the method of allocating industrial land.

The problem of land misuse would not be solved by the creation of industrial estate authorities per se. However, the availability of vastly improved services to the tenants of industrial estates would justify the levying, by the estate authorities, of leasing fees closely reflecting the market value of the land. Such fees would serve the purpose of an effective pricing (and therefore, allocative) mechanism for industrial land, and would discourage the request and the possible over-use of unnecessary acreage. For purposes of reasonbly expected future expansion of new projects, unserviced plots adjacent to the project sites could be "reserved" for a given period of time, against the payment by the entrepreneur of a "commitment" charge for the additional acreage.

Obviously, the implementation of this system, while

solving the problem of misallocation of land, would remove one of the main forms of subsidisation of industrial investment in Kuwait; which, in the Government's view, are necessary to promote the industrialisation of the country and are justified on grounds of infant industry arguments, and in order to compensate for the country's inherent disadvantages at this stage of its economic development.

It should be noted that the levying of fees for industrial land, as compared to the other forms of subsidies, is justified on the basis that firms were found not to be allocated with land areas enough for their needs, while on the contrary, they did obtain as much electricity, water and fuel as they needed.

Financial subsidies

A distinct feature to be noted here is the fact that about one third of the respondent firms reported that they face difficulties in obtaining commercial loans.

As regards the conditions of the industrial bank loans, about one third of the respondents reported that they thought the interest rates on these loans were too high, a half thought that their grace periods were too short, while yet one third believed that the nominal loan periods were too short. A majority of the respondent firms

suggested 3% as an appropriate interest rate for IBK loans, another majority proposed 5 years as a proper grace period, and a further majority of the respondents mentioned 10 years as a proper nominal loan period.

Evidence suggested that more smaller firms faced loan difficulties as compared to the larger ones. Also, smaller firms were found to be less satisfied with the IBK's interest rate structures, loan grace and nominal loan periods.

It was noted in Chapter 3 that the abundance of capital in Kuwait does not necessarily mean that capital is a "cheap" factor of production, especially when it is used in the context of industrial investment.

Customs duty exemption

Many respondents in the interviews indicated that the extensively detailed and routine paper work procedures that are involved in applying for customs duty exemptions make this subsidy not worth the "hassle". Some even said that they often do not apply for exemptions because it would cost them more to do so than the potential benefits.

The effects of customs duty exemption seem to be limited because of the low tariffs on imports in Kuwait (4 per cent). Also, because of the condition that net return on investment should not exceed 15 per cent, which seem to make them a subsidy for the inefficient producer.

Moreover, there are no clearly defined objectives for this kind of assistance.

Customs duty protection

It has been noted that the Kuwaiti Government has provided very limited customs duty protection, and that it applies a very strict system before granting protection, particularly where such protection has already been cancelled. It has also been indicated that the protection system as it exists in Kuwait is incoherent and limited in coverage and scope and is administered on an ad hoc case by case basis. Furthermore, it has been indicated that the over-valued exchange rate (trade-wise) of the Kuwaiti Dinar limits the effects of tariff protection measures. This is thought to imply a further reduction in the economic size of the local market.

Data revealed that 121 firms (75 per cent of the participating firms) considered protection as one of the most important types of subsidy which they could be granted. Also, 122 firms (76 per cent of the total participants) mentioned that they faced severe foreign competition in the local market. In addition, 97 firms (60 per cent of the total number of the participants) reported that dumping practices by foreign competitors in the domestic market is one of the more serious problems facing them.

These overwhelming majorities indicate the extreme importance of protection issues to firms.

In what may be taken to support evidence regarding the inefficiency of the MCI system of granting customs duty protection, many firms reported that between 1 to 12 years have passed since they applied for protection and still the Ministry is telling them that their applications are under study.

Protection and market shares

It has been found that about half of the Kuwaiti firms have low market shares, a quarter have a "middle" range market share, and another quarter of the firms have high market shares.

However, many respondents reported that the current customs duty protection system is ineffective and that tariff rates of 20% and 30%, if applied effectively, would be sufficient to improve their market shares substantially.

As regards the MCI's requirement that manufacturing firms must obtain a 40% market share before being qualified to apply for protection, 62 firms (more than one third of the total number of the participants) reported that they needed protection to increase their market shares to the 40% MCI condition. This seems to be a vicious circle in which firms may never obtain protection.

Government purchasing preference and contracts

It was discussed in Chapter 3 that local importers as well as foreign exporters have been able to absorb the Government 10% premium preference for local producers. It was also mentioned that government agencies are alleged to often specify detailed standards which are only available from foreign-produced products while their Kuwaiti alternatives have slightly different specifications.

In what may be considered as supporting evidence, while the majority of the industrial firms reported that they currently supply low shares of overall government purchases of their type of products, a majority also reported that they could each supply substantially larger proportions of such purchases.

The findings revealed that the main reasons for the local producers' "low" shares of government purchases are that contractors carrying out government orders do not purchase their requirements from local producers. And also, that government agencies do not care to purchase their needs from local manufacturers.

A peculiar finding is that the overwhelming majority of the respondents felt that the Government's tendering 10% purchase preference to local manufacturers was neither applied nor sufficient. Evidence suggested that increases in Government purchase preference rates of between 20 to 30%

would seem to be most desirable from the firms' point of view.

Firms' perception of subsidies

A striking observation is that the overwhelming majority of the respondents feel that they did not receive any subsidies from the State at all, i.e. they do not take any account of the subsidies which they are in fact granted. This is because firms take the concerned subsidies for granted and because they simply are exempted from paying what it actually cost to produce goods as compared to having to pay the actual cost and then receiving rebates. In the first method, the subsidy element is concealed, while in the second method the subsidy element is explicit and clearly measurable.

Indeed, the entire subsidies system is based on not charging rather than not paying. Of course, if firms do not perceive them as subsidies, then, they will not have their desired impact. In addition, the government would not be able to directly (via current types of subsidies) influence firms.

Viability of subsidised firms

Industrial subsidies in Kuwait benefit firms whether or not they are making profits, and thus, would tend to

result in a waste of resources. In order to avoid such an effect, a continuing examination of the economic performance of industries which considers ways to improve their efficiency needs to be carried out. Of course, the administrative costs of such examinations must also be taken into account.

Moreover, if industrial entrepreneurs require that the Kuwaiti government subsidise their operation (or activities) on a long-term basis, in order that they remain in business, then clearly the Government must question whether the economy as a whole is benefiting from the enterprise. If it is doing so, then the question arises as to why the private sector participants in the enterprise should benefit from a subsidy from the society as a whole. This suggests that where significant and sustained subsidies are required, there is a case for questioning the very existence of an enterprise or considering its transfer to full State ownership and continued subsidisation. Continual subsidy of industrial firms involves the transfer of government funds to private shareholders, without any economic justification, at the effective expense of the Kuwaiti population as a whole.

Finally, it seems that there is an urgent need to systemise the presently uncoordinated system of subsidies, protection and finance. There seems to be a fundamental

need to draw rules and regulations in organising the bases of granting subsidies.

Section 4

Recommendations for further research

Investigations into the fertile subject of subsidies, no matter how limited the knowledge they provide, should be considered as a valuable contribution which may assist in producing a better understanding of the issue of subsidies to the industrial sector, particularly in developing countries and in Kuwait.

Although we were able to investigate some interesting issues in a relatively limited time, we also investigated dimensions of issues of considerable importance to policy-makers. This study has prepared the ground for scholars and practitioners interested in studying subsidies, particularly in developing countries, by providing a broad basis for further comparisons and significant issues. Accordingly, some recommendations for further research are proposed here:

(1) More comparative studies ought to be carried out to examine subsidies in systematic research in two different samples. Whether these samples are chosen from developed or developing countries or a combination of both is for the researcher to decide. The area of comparative research between firms receiving subsidies and those in similar positions but not (for location or employment size and

nationality reasons for instance) in order to test the efficiency of subsidy programmes is highly recommended, to shed further light on the opinions of both sides to issues similar to those discussed in this study.

(2) In general, more attention has been given to some extent to the effects of different types of subsidies rather than firms' perceptions and opinions of these subsidies. However, in developing countries subsidy effects may need to be further investigated in a systematic and comparative manner, particularly in Kuwait. There is need to develop a wide range of systematic research in studying managers, by using statistical techniques such as regression analysis and factor analysis.

(3) It is evident that for a country considering the development of its own system of industrial subsidies, the results of research on local industrial firms and comparison with industrial firms in other countries, particularly the developed countries, may have special relevance to the country's progress. Any addition to what might be known about subsidies in Kuwait, in regard to size of subsidies, cost effects, relation to project profitability and output, etc., is of value on its own account. It is hoped, for example, that this study will assist those firms which participated in the questionnaire survey to determine if "the gap has been narrowed" between what they think

subsidies should do and what these subsidies are actually doing; and on the other hand, what objectives the government wants subsidies to achieve.

(4) New forms of subsidies. This is an area which needs further research to investigate and evaluate in a detailed manner. In addition, new subsidies in Kuwait should be compared with those in other developed and developing countries. These studies should make it possible to establish conclusively exactly what types of new subsidies are required in Kuwait and what activities need the most help, e.g. it is possible that they may be found to be most needed in the technical, marketing or even management aspects of the industrial firms.

(5) Further issues which require more detailed attention and scrutiny are financial subsidies and trade protection, in order to obtain greater detailed information and to be able to reach more solid conclusions.

(6) The evidence from the data presented suggests that the industrial firms felt that they did not receive any subsidies from the State, while they do benefit of at least one form of subsidy or another, and often more than one. Therefore, it may be more efficient for the State policy-maker to review the basis on which subsidies are granted (not charging rather than not paying). The State might need to make its subsidies more tangible in order to

be able to influence the decision-making process in the firms. In-depth research into these areas might prove to be of benefit.

(7) It was seen from the study that a large number of difficulties face the manufacturing sector in Kuwait as a whole. Further research is required to define the exact causes, magnitudes, types and ways of overcoming them.

Eventually, it is hoped by the researcher that this attempt to investigate subsidies will serve as a stimulus for the much needed research in this area, particularly in developing countries. Also, avenues for new research projects in this promising area of inquiry has been considered. If it does stimulate further research, the effort will have been worthwhile.

Appendix A

Directions for the Questionnaire

1. The enclosed questionnaire have been distributed on the General Managers in a chosen number of manufacturing companies in Kuwait. The purpose is to gather data and information required for the completion of a Ph.D. research in Economics at the University of Manchester Institute of Science and Technology in England. The subject of the study is "Analysis and Evaluation of Government subsidies to the manufacturing companies in the state of Kuwait". It is known that Government subsidies in the industrially advanced and the newly industrializing countries are usually more in quantity and quality than subsidies granted for manufacturing industry in Kuwait. The objective of this study is to identify the weak points in the government subsidies policies, see their effectiveness from a practical point of view and thus suggest the proper solutions.

2. Most of the questions may be answered by putting (√) on the proper square. There are also some questions which are open-ended in order to provide with enough opportunity to express your personal opinions in more detail as we appreciate your co-operation.

3. Enclosed are two copies of the questionnaire, one in Arabic and one in English. While you may choose to answer the English copy, you may choose to ask your Kuwaiti (or Arab) counterpart to answer these questions in Arabic which you want him to. The English translation is almost exactly the same as the Arabic original, while the numbers of the questions are exactly the same.

4. While answering the questions, kindly choose the answers Frankly and Sincerely giving serious thinking to them. All questions will enjoy full secrecy, as the name is totally unrequired.

5. Please do not hesitate in asking about any ambiguous points, contact us at the following telephone number.

With Sincere thanks MEHDI AL-SALMAN

P.S. THE NUMBER WHICH IS PLACED ON THE QUESTIONNAIRE IS FOR FOLLOW-UP PURPOSES ONLY.

Appendix B

The Questionnaire

GENERAL INFORMATION ABOUT THE FIRM

1) What is the ownership type of your firm:

☐ Private Sector ☐ Mixed Sector ☐ Public Sector

2) Have you obtained an Industrial licence from the Ministry of Commerce and Industry: ☐ Yes ☐ No

3) What year was the commencement of commercial production: _____

4) What are the main types of products that you produce:

_____

5) What was the paid share capital at the start of the Project: _____ K.D.

6) What was the total investment of the Project (Value of fixed assets when they were purchased + operating capital) as presented in 1982 Budget: _____K.D.

7) Where is the location of the plant:_____

8) If you have obtained an industrial land, what is the total area of the land which was granted originally by the Ministry of Commerce and Industry:_____ Sq. Metres

9) If you export, what is the gross value of your exports as proportion of total sales:

☐ Less than 10% ☐ 10-25% ☐ 26-50% ☐ More than 50%

10) What is the total number of the Project's employees and labour: Kuwaities _____ & Non-Kuwaities_____

11) What is the annual average cost of the Project's electricity consumption: _____ K.D.

12) What is the annual average cost of the Project's Water consumption: _____ K.D.

13) By what methods do you obtain your needs of water:

☐ Connected Pipes ☐ Public Water Tankers

☐ Company's Private Water Tankers

14) What are the annual average costs of your plant's Fuel consumption of each of the following types for 1982:

1 - Super Gazolene : _____ K.D.

2 - Momtaz Gazolene : _____ K.D.

3 - Kerosene : _____ K.D.

4 - Gas Oil : _____ K.D.

5 - Liquid Gas : _____ K.D.

FINANCING

(1) A - Do you face difficulties in obtaining enough banking and commercial facilities: ☐ Yes ☐ No

B - If you have obtained a loan from the Industrial Bank of Kuwait, what is the value of this loan in proportion to total investments in the project as shown in the 1982 Budget: _____

(2) If you have obtained a loan from the Industrial Bank:

A - Do you consider the grace period to be enough:

☐ Yes ☐ No

B - What is the period that you think is proper:_____

C - Do you consider the loan period to be enough:

☐ Yes ☐ No

D - What is the period that you think is proper:_____

E - Do you consider the interest rate to be proper:

☐ Yes ☐ No

F - What is the rate that you think is proper:_____

(3) If your request for a loan from the Industrial Bank have been rejected:

A - What was the Bank's justification for that:_____

B - What is your opinion of this answer:

☐ True ☐ Reasonable ☐ Untrue

INDUSTRIAL LAND

(4) If you have obtained an industrial land:

A - Is its area enough for all the purposes of the project:

☐ Yes ☐ No

B - Can it bear any extension for the development of the plant:

☐ Yes ☐ No

(5) Have you requested any subsequent extensions of the area which was originally granted to you

☐ Yes ☐ No

A - If you have obtained the extension, is it located next to the original land:

☐ Yes ☐ No

B - What is its total area: _____ Sq.Metres

C - Are there any free Government land next to your plant which could be available for any future expansion:

☐ Yes ☐ No

(6) If you rent any land or offices for the purposes of the project:

A - What is their total annual rent: _____ K.D.

B - What is the total area of the leased lands:

_____ Sq.Metres

CUSTOMS PROTECTION

(7) A - Have you submitted a request for customs protection at the Ministry of Commerce and Industry:

☐ Yes ☐ No

B - How long has it been since submission of the request: _____

C - What was the Ministry's reply:

☐ Rejected the request ☐ Delayed the answer

☐ Under study

(8) A - What do you estimate your market share at present:

☐ Less than 10% ☐ 10-20% ☐ 21-40%

☐ 41-60% ☐ 61-80% ☐ More than 80%

B - What is the customs duty protection rate that you think is proper for your products:

☐ 10% ☐ 20% ☐ 30% ☐ 40% ☐ 50% ☐ More than 50%

C - What do you estimate your market share would be, in case, you obtained the protection which you have chosen:

☐ Less than 10% ☐ 10-20% ☐ 21-40%

☐ 41-60% ☐ 61-80% ☐ More than 80%

(9) What do you estimate your products' share as a percentage of total domestic demand for your products' type if you were granted a protection rate of 50%:

☐ Less than 10% ☐ 10-20% ☐ 21-40%

☐ 41-60% ☐ 61-80% ☐ More than 80%

(10) If you were able to expand production to cover at least 40% of total local demand for your products' type, what is the protection rate which you think is necessary to assist you in reaching this goal:

☐ 10% ☐ 20% ☐ 30% ☐ 40% ☐ 50%

☐ 60% ☐ More than 60%

GOVERNMENT PURCHASES

(11) A - What do you estimate as the size of your annual sales to the Government as a percentage of total Government purchases of your products' types:

☐ Less than 5% ☐ 5-10% ☐ 11-20%

☐ 21-40% ☐ 41-60% ☐ 61-80%

B - What is the percentage of these purchases which you think you can fulfill: _____

C - What are in your opinion the most important 3 considerations which have led to the "Low" percentage of Government purchases of your products:

☐ Influence and authority of the high merchant class.

☐ Quantities which we can produce are less than the quantities required by the Government:

☐ High prices of the Kuwaiti products as compared with the prices of the imported goods.

☐ Non-availability of required specifications in the locally produced goods.

☐ Carelessness from Government establishments and agencies to purchase locally produced goods.

☐ Non-commitment on the part of big contractors to purchase their needs from local producers.

(12) By law, 10% increase in prices of locally produced goods is granted in Government's tenders in comparison with the prices of the lowest bids:

A - Do you think that this is really applied: ☐ Yes ☐ No

B - Do you think that it is enough: ☐ Yes ☐ No

C - What is the percentage increase which you think is necessary in order to be effective: _____

GOVERNMENT SUBSIDIES IN GENERAL

(13) What is the effect of Government subsidies on the performance of your firm at the present time:

A - Subsidies cover those costs which result from the difficulties that hamper industrialization in Kuwait: ☐ Yes ☐ No

B - Subsidies encourage us to export: ☐ Yes ☐ No

C - Subsidies increase the firm's profitability:

☐ Yes ☐ No

D - Subsidies help the increase of our products' share of the domestic market: ☐ Yes ☐ No

E - Subsidies are sufficient to attract more private capital into the manufacturing sector: ☐ Yes ☐ No

(14) If the Government was intending to grant specific types of subsidies in order to cover particular costs which face manufacturers in Kuwait, what are the main 5 objectives that you think are most important to be assisted by the Government:

☐ Export Subsidies

☐ Marketing & Advertising

☐ Research & Development

☐ To bear part of the costs of raw materials

☐ Preparation of local & external exhibitions

☐ Industrial Training

☐ To make use of good experts and consultants

☐ Offer financial facilities to cover temporary costs

☐ Bear part of the costs of importation and external transport

☐ Customs protection

☐ Customs duty exemption

☐ Other aims: _____

(15) What are, in your opinion, the main 10 problems which face national industries and limit their development:

- ☐ Non-elasticity of industrial laws.
- ☐ Absence of a state industrial policy.
- ☐ Multiplicity of Government agencies which are concerned with industry and their routine procedures.
- ☐ Non-seriousness of Government establishments and agencies in purchasing local products.
- ☐ Influence and authority of the merchants' high class.
- ☐ Small size of the domestic Market.
- ☐ High costs of raw materials.
- ☐ High costs of skilled labour.
- ☐ Lack of Government's industrial training.
- ☐ High costs of advertizing.
- ☐ Severe competition from the imported goods in the local market.
- ☐ Dumping policies practiced by the international companies.
- ☐ Difficulty of exporting.
- ☐ Lack in local channels of distribution.
- ☐ Domestic consumers' preference of foreign products.
- ☐ Low quality of locally produced goods.
- ☐ Multiplicity of local plants that produce similar goods which exceed the absorptive capacity of the local market.
- ☐ Difficulty of obtaining long- and medium-term loans with reasonable interest rates.
- ☐ Lack of local administrative and technical expertise.
- ☐ Other problems: _____

(16) What is the government assistance and subsidies system which you believe is the most successful in developing your firm:

*Do you wish that I send you a summarised copy of the Ph.D. thesis after its completion: ☐ Yes ☐ No

<u>With Sincere thanks and appreciation</u>

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