PRIVATIZATION AND ITS ROLE IN THE RECONSTRUCTION OF LEBANON

by

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THESIS ABSTRACT

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Submitted to the Department of Civil Engineering in Partial Fulfillment of the Requirements for the Degree of Master of Science in Civil Engineering
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The objective of this thesis is to examine the role of privatization techniques and private sector's capital in the reconstruction of Lebanon.

The methodology followed to fulfill this objective has three stages. First, the concept of privatization is described. The definition, rationale, and purposes of privatization are exposed, and the adequate general policy, economic, and regulatory frameworks to sustain private investment in reconstruction and development are investigated. Second, techniques and methods of privatization are discussed. Special emphasis is given to methods of ownership and peripheral privatization, and Project Finance models. The experience of the United Kingdom in ownership privatization, and the experiences of Turkey and Pakistan in attracting private capital for infrastructure projects, using Build-Operate-Transfer (BOT) and Build-Operate-Own (BOO) schemes, are exposed. Third, applications and problems of privatization programs worldwide are discussed. Examples are drawn from the experiences of many developing countries in privatizing public services and development projects. Thorough consideration is given to the cases of Mexico and Argentina in particular, and empirical evidence of private sector superiority in public services provision is provided. In addition, different problems facing privatization programs are discussed. Special emphasis is given to political and unions opposition, inhospitable investment environments, weak regulatory structures, and under-developed capital markets.

Finally, the prospects for privatization in Lebanon are investigated. Proposals for privatizing the Lebanese electricity and PTT systems are exposed. The role of the Lebanese private sector in mega-reconstruction projects is also examined. In conclusion, the difficulties likely to arise and discourage private sector's involvement in reconstruction are discussed. Recommendations for practical steps that can be implemented today to lessen the impact of those difficulties, and encourage private investment in Lebanon are given.

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To my parents

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Chapter 1

Introduction

1.1 Objective

The objective of this thesis is to examine the role of privatization techniques and private sector's capital in the reconstruction of Lebanon. This study is driven by the current economic realities prevailing in Lebanon. First, the Lebanese public sector lacks of enough financial resources to undertake a large-scale reconstruction of the country. Indeed, since late 1983, soaring public indebtedness and limited public revenues characterize the poor situation of the Lebanese Treasury.

Second, Arab and international support to Lebanon's reconstruction is slow and likely to be very limited. The establishment of the long-awaited Arab Fund for the Reconstruction of Lebanon, which was initially scheduled for September 1990, was suspended after the Iraki invasion of Kuwait on August 2, 1990 [El-Khalil 91]. Furthermore, the magnitude of the economic difficulties prevailing in Eastern Europe and the former Soviet Union is diverting the EEC's and United States' financial support away from Lebanon. In those times of worldwide economic recession, international funds for reconstruction and development are scarce and driven by *urgent priorities*. Unfortunately, Lebanon is not on the list of urgent priorities of industrial nations.

These realities converge today making the Lebanese private sector the most likely source of finance for reconstruction. Indeed, the amount of private capital in hands of the domestic private sector and Lebanese abroad is important. Deposits of the domestic private sector in Lebanese commercial

banks were estimated in September 1991 to amount to 4,543 billion Lebanese pounds [ComLevant-c 91], or the equivalent of U.S.$4.2 billion approximately. Lebanese abroad (i.e., the Lebanese diaspora) are even more resourceful. In a lecture at Harvard University on March 30, 1992, Dr. Khalil Makkawi, Lebanese ambassador to the United Nations, estimated the amount of private capital in hands of Lebanese individuals and institutions abroad to U.S.$40 billion approximately [Makkawi 92]. This compares with a Lebanese Gross Domestic Product (GDP) of U.S.$2.85 billion in 1991 and U.S.$2.137 billion in 1990 [Sanan 91].

Therefore, it is rational to believe and support the idea of a large-scale private sector's participation in the reconstruction program. The estimated costs of such a program are indeed overwhelming -about U.S.$50 billion- nevertheless, the Lebanese private sector has the resources and expertise to be the driving force in reconstruction. What is missing is the incentives and confidence in investing for positive returns in the Lebanese economy, and this thesis will provide some insights to encourage private investments in the reconstruction of Lebanon.

1.2 Thesis Organization

Following Chapter 1, in which the objective and organization of this thesis are described, Chapter 2 provides an introduction to the concept of privatization. The definition, rationale, and purposes of privatization are exposed. In addition, the general policy, economic, and regulatory frameworks to encourage privatization and private investment in reconstruction and development are examined.

Chapter 3 investigates the techniques and methods of privatization. Public-private cooperation schemes, techniques of ownership and peripheral privatization, and project finance models are examined. Special emphasis is given to the experience of the United Kingdom in ownership privatization, and the experiences of Turkey and Pakistan in attracting private capital for infrastructure projects using BOT and BOO schemes.

In Chapter 4, applications and problems of privatization are examined. Applications focus on privatization of public services (electricity, water supply, telecommunications, and public transportation). Examples from several developing countries in privatizing public services and mega-development projects are provided. The experiences of Latin American countries -especially Mexico and Argentina- are particularly investigated. In addition, empirical evidence of private sector superiority in public services provision is provided.

Finally, different problems facing privatization programs worldwide are examined. Special emphasis is given to political opposition, unions opposition, inhospitable investment environments, weak regulatory structures, and under-developed capital markets.

Chapter 5 provides an overview of the past and present economic situation in Lebanon. The structure of the Lebanese economy before the start of the war, and the structural difficulties facing the economy today are examined.

Chapter 6 deals with the issue of privatization in Lebanon. First, the potential of the Lebanese private sector is described. Second, prospects for privatization in Lebanon are discussed. Proposals for privatizing the Lebanese electricity and PTT systems are provided, and the role of the Lebanese private sector in mega-reconstruction projects is examined. Third, the difficulties likely to face private sector's investments in the reconstruction of Lebanon are investigated. Recommendations for practical steps that can be implemented

today to lessen or eliminate the impact of those difficulties, and encourage private investment in Lebanon are given.

Chapter 7 concludes this thesis and evaluates the chances of success of a large-scale private sector participation in the reconstruction of Lebanon.

Chapter 2

Privatization

2.1 Definition

Privatization is a comparatively new word. It made no significant appearance in political or economic literature before 1979. It is a new word because it is a new thing. Despite that novelty, it rapidly became one of the most important facts of the eighties, spreading outward from Great Britain to affect more than one hundred countries throughout the world.

Privatization can be defined in several ways. At the broadest level, it refers to the introduction of market forces in the economy, and incrementally placing key decisions about resource use and disposition under non-governmental control. At the strict level, privatization refers to the conversion of Public Enterprises (PEs) into corporate form, followed by transfer of ownership to the private sector [Pirie 88]. Transfer may be through sales, free distribution, or other means.

Although the principal objective of privatization is the enhancement of the private sector's influence and impact on the economy, the state's role does not disappear. As Sundquist [Sundquist 84] defines it :

> "In true privatization, the government's role is only reduced; it does not disappear. And what is relinquished may be the easiest part of the whole job -the doing. The conceiving, planning, goal-setting, standard-setting, performance monitoring, evaluating, and correcting all remain with the government. If these are done badly, the public interest suffers, and so, usually does the private sector. This is why privatization is not panacea for government incompetence."

2.2 The Rationale of Privatization

In many countries, through a variety of measures which included nationalization and establishement of new public enterprises, the public sector came to dominate almost all aspects of economic life. This reality is especially true for developing and Third-World countries, including many Arab countries. Short [Short 84] estimates that, worldwide, at the beginning of the eighties, PEs accounted, on average, for 10% of GDP at factor cost. Public enterprises have been important in industrial nonsocialist countries as well as in centrally planned and developing countries. For example, the United Kingdom's public sector (prior to 1979) accounted for 10.2% of GDP, had 55 billion British Pounds in turnover, and employed 1.75 million people. In France, after the 1981 nationalizations, PEs employed 16.6% of all French salaried workers (excluding the agricultural sector) and contributed 17.2% of value added (again outside agriculture), and 33.5% of Gross Fixed Capital (GFC) formation [De Chalendar 84].

In developing countries, the reliance on public sector's enterprises to achieve socioeconomic goals has been even greater than in industrial countries. Their contributions are significant; for example :

- In value added in manufacturing, in a great many cases exceeding 50% of national totals.
- In total investment, averaging 25% in what appears to be a representative sample of 14 developing countries [Nair 88].
- In shares of utilization of developing countries' credit systems (at a rough estimate, averaging 30% of domestic and 20% of total foreign debt).
- In nonagricultural employment, averaging about 15% in developing countries versus 4% in nations of the Organization for Economic Cooperation and Development (OECD) [Nellis 89].

Table 2-1 shows the contribution of public sector's enterprises of selected industrial and developing countries.

Initially, the dominance of the public sector was thought to make a positive contribution to the cause of development and modernization. The experience of the last twenty to twenty-five years seems to point in the opposite direction. It was found that with few exceptions, the public sector incurs substantial losses, contributes significantly to budget deficits, earns exceedingly low, even negative rates of return, and has a negative impact on the balance of payments. In addition, there is evidence that pattern of investment in the public sector is at variance with considerations of comparative advantage.

Therefore, privatization would certainly reduce the burden on the national budget, eliminate a major source of waste and inflation, and make a positive contribution to the balance of payments position [El-Naggar 89].

The rationale of privatization can be divided into three fundamental reasons:

- Macro Factors
- Loss of Comparative Advantage
- Poor Performance by the Public Sector

2.2.1 Macro Factors

(1) Foreign Capital

The first of these macro factors refers essentially to the government's decision to attract foreign capital so as to avail of the technology and the investment opportunities that it provides. In the process, the overall proportion of private holding in the economy might increase, assuming that the foreign capital is private.

(2) Investment Promotion

An interesting connection between macro investment needs and privatization can be derived from an investment promotion cause. For a time, the private sector in developing and Arab countries, whose savings went up

enormously, did not find "open doors" to absorb its savings capacity and therefore moved towards increased consumption or speculation or investment abroad. This, some governments realised was a lost opportunity. Privatization could thus be the way of catching private savings for public investments [Ramanadham 87].

(3) Public Expenditures

Closely related to the preceding consideration is the compulsion experienced by many governments to curtail public expenditures as a matter of overall economic and budgeting policy. Often, agreements with the International Monetary Fund (IMF) for example, have included limitations on government expenditures. The area open for private investment, including foreign capital not borrowed or guaranteed necessarily by the government, expands in such a situation.

2.2.2 Comparative Advantage

This ought to be the main plank on which the case for privatization should rest. What is implied is that, when an enterprise loses its comparative advantage in a given sector of activity by being a public enterprise, there is a case for its privatization [Ramanadham 87].

An easy segment under this head is that of enterprises whose "original purpose" has been achieved and which should be discontinued. Two difficult problems, however, need to be added in the context of the original purpose: how easy is it to determine whether it is achieved; more basically, is the original purpose valid today ? Solutions are, no doubt, easier in a mixed economy than in a predominantly public-enterprise oriented economy. Moreover, gradual diminutions in market imperfections and changes in economic strategy, weaken the comparative advantages of public enterprises.

2.2.3 Poor Performance

The most powerful factor underlying thoughts favoring privatization seems to lie in the poor results recorded by the public sector across the board. It seems that social returns realised under government ownership are outweighed by the lowness of financial returns. Low productivity and rates of return on public enterprises' investments are favoring the need for privatization through the "discipline" of the markets.

There are a number of surveys of the comparative performance of public and private industries. Overall, where private and public sectors undertake similar activities, the private sector more often shows higher profits, lower costs, and greater efficiency [Kay 87].

However, in assessing the impact of privatization on performance, it is important to distinguish the effect of privatization as such -the process of transferring the ownership of assets to the private sector- from the effects of deregulation or liberalization -the removal of statutory restrictions on competition. Private industry performs at its best in competitive environments, where there is pressure from consumers on prices and products, and pressure from the capital market on costs and investment. Where competition is limited, the need to respond to consumer needs is less urgent, and there is less accountability for costs or for investment plans, because expenditures can be recovered from consumers, and those who provide finance are confident of the industry's capacity to repay.

Therefore, the greatest prospect of gains in efficiency would arise where competition and privatization can be introduced simultaneously [Kay 87]. The difficulties of introducing competition into traditional public sector industries are, however, a good deal greater than appears at first sight. The first and most obvious problem is that many of public sector's enterprises are "natural" monopolies -i.e. industries where it is technically impossible, or obviously

inefficient, to have provision by more than one firm [Kay 87]- as with gas, electricity, water, telephones, etc. Or they are industries where there are apparent substantial benefits from coordination -as with most transport industries. It is often these arguments which provided the rationale for public ownership in the first place. Nevertheless, where competition and privatization are feasible, we do notice indeed gains in efficiency and productivity [Kay 87].

Therefore, sometimes competition and privatization are not feasible, and cannot be implemented simultaneously. This case arises especially at the outset of privatization, when we are considering the privatization of large public monopolies which enjoyed an unchallenged monopoly for decades and have built large production, marketing, and distribution systems. Even if competition is encouraged to challenge the monopolistic position of large privatized enterprises, we notice that no real competition is introduced despites government efforts to facilitate the entry of small and large competitors. An example can be drawn from the privatization of British Telecom (BT) in 1984. The British government realized very well that privatizing British Telecom would simply mean transferring a public monopoly from the hands of the state to the hands of private investors. Despite those difficulties, the government tried to enhance competition and encouraged Mercury, the only British firm capable to enter the telecommunications field with a certain success, to compete with British Telecom. Furthermore, Mercury was given access to BT's international network in return for very low access fees paid to BT. However, until today, we do not notice *real* competition in British telecommunications and BT's market share is stable and even increasing over time. A similar case can be found in American telecommunications where American Telephone & Telegraph (AT&T) is enjoying a *quasi-monopoly* in the American market. Some relatively new telecom companies like MCI, which was established in the early seventies, are beginning to grasp market share from AT&T; but the dominant position of AT&T is still unchallenged in American telecomunications.

However despite the absence of competition, evidence can be found suggesting that regulated private monopolies are more efficient than public monopolies. An extensive 1979 study sponsored by the US General Accounting Office (USGAO) which compared 95 publicly owned hydro-electric plants and 47 regulated privately owned plants in the United States, showed that the cost per kilowatt-hour was 21% higher, on average, for the public than for the comparable private plants [USGAO 79]. That is, regulated private firms tend to be more cost-efficient than firms owned and operated by government. The logic of this evidence turns principally on differences in the incentives and opportunities of public versus private sector managers. Benefits accruing to managers of public firms are less closely related to the future profitability of the firm than benefits flowing to managers of regulated, private firms. Consequently, managers of public firms have a greater opportunity to maximize their own utility. Operationally, the public manager allocates more of his resources to enhancing the probability of his survival. He keeps the firm's employees happy by purchasing more labor and capital than is necessary, giving rise to the notion that public firms tend to less cost-efficient than private firms [Ross 88].

This evidence about private sector superiority can also be confirmed today in the U.K., where regulated privatized enterprises like British Telecom are more efficient in the post-privatization period that they were in the pre-privatization period. The U.K.'s Financial Secretary to the Treasury argued in a notorious speech in 1985 that "where competition is impractical, privatization policies have been now been developed to such an extent that regulated private ownership is necessary and still preferable to nationalization" [Moore 85]. The arguments behind Moore's statement will be discussed thoroughly in the paragraph related to the regulatory framework of privatization exposed later in this chapter.

Total Factor Productivity changes of British industries in the period 1968-78 (pre-privatization) and the period 1979-85 (post-privatization) are shown in Table 2-2. Those industries include privatized mega-enterprises (e.g. British Telecom), or nationalized industries which have experienced senior management changes introducing a more commercial, abrasive, and profit-oriented management style (e.g. British Rail, British Steel, the Post Office, and British Coal).

Figure 2-1 shows the rationale of privatization considering Macro Factors, Comparative Advantage, and Poor Performance by the public sector. The most widely cited arguments in favor of public enterprises' privatization are shown in Table 2-3.

Furthermore, there has been a confluence of several "big picture" trends over the last ten years that have encouraged privatization in infrastructure and public utilities projects [Pandis 92]:

- There is an increasing realization on the part of many governments world-wide that they should not own and/or operate certain types of infrastructure facilities.
- There is an increasing need to rehabilitate, replace, or build new public facilities to meet population growth. Yet at the same time, there is a decreasing amount of government funds available to finance these facilities, and a decreasing tolerance among taxpayers to increase taxes.
- The overall cost of private finance for privatization of infrastructure projects is decreasing, to a point where it may have become competitive with the overall cost of public finance. Especially in the case where a public/private partnership is implemented allowing the use of government financial backing and sources, the costs get very low.
- The number of successful privatization projects is increasing. This raises the confidence of the public and private sectors in using the approach.
- New environmental regulations, new technologies, and new standards have

emerged, which have increased projects' required expertise and qualifications. The resulting increases in construction and operating costs enhance the likelihood of private sector's participation in design, execution, and finance.

2.3 Prelude to Privatization

2.3.1 General Policy Framework

It is necessary to formulate an explicit general policy for the development of privatization, identifying the criteria of choice, setting priorities, drawing up a program and a timetable.

The wide breadth of possible choices suggests the need for a general policy on privatization. The first stage in developing a policy would be to define the government's "aim of purpose": Why is privatization being considered ? What are its hoped-for consequences ? What are the benefits to the public and private sectors ? What are the benefits to the national economy as a whole ?

A General Policy Framework for privatization might be organized as follows:

- Objectives of Privatization
- Means of Privatization
- Conditions for Success

2.3.1.1 Objectives of Privatization

Do governments operate by principles or objectives ? This is not a question of semantics but a serious attempt to find an approach to formulate an overview of privatization [El-Naggar 89]. Which are easier to identify, are operational, and can better help in policy formulation -objectives or principles? Moreover, one can imagine a case or an example in which there is a conflict between principles and objectives. In considering the principle of economic

efficiency, which can mean

- an increase in output from existing inputs (which means a reduction in per unit cost);
- a reduction in inputs required to produce existing outputs (which also means a reduction in per unit cost); or
- an improvement in quality of output, including reduced waiting lists, or some combinations of all three,

the objective of the government may be the availability of certain necessary goods (for example, bread, edible oil, sugar, or soap). Privatization can make such goods more easily available to all consumers, but costs may rise by a certain margin (for example 10 percent).

Costs in the public sector are often artificially low -by not including all costs or by using book values instead of market prices or replacement values. However, if the costs of the public sector are lower, the government should not privatize because the principle of economic efficiency is breached; even the private sector can make the necessary goods available to all consumers in all parts of the country, at higher but reasonable prices.

It is clear from the above discussion that it is simpler, more realistic, and more operational to think in terms of objectives rather than principles. The most widely mentioned objectives of privatization policies are :

- Reducing the burden on the national budget, and eliminating a major source of waste, inefficient expenditures, and inflation. And consequently, making a positive contribution to the balance of payments position.

- Utilizing private resources for investment promotion by catching private savings for public investments, and curtailing public expenditures.

- Attracting foreign private capital is a possible objective of privatization.

Transfer of foreign technology and know-how is also a major goal.

2.3.1.2 Means of Privatization

Again, as part of a systematic framework, the general policy should provide a comprehensive treatment of the means of privatization; because the success of privatization or of its objectives depends to a large extent on the means adopted to achieve it. Different means of privatization include: Public sales, private placements, deregulation and fostering competition, employees and/or management participation plans, and debt/equity swaps.

2.3.1.3 Conditions for Success

It is equally important for policymaking that the conditions for the success of privatization be discussed. Such an analysis is necessary in a policy overview, because it tries to answer a crucial question: Can any country attempt privatization and can it succeed ? Here is a summary of some of the conditions for success of privatization :

- The creation of an economic environment that is hospitable to private ownership. This involves especially the review of taxation and property rules.

- The establishment of public information to help "sell" privatization to the public, and to private investors.

- The formulation of a plan of privatization that is executed by well-trained specialists.

- The clear definition of targets and objectives of privatization can reduce risks and enhance success.

- The selection of techniques and strategies that will maximize the support of the political constituency.

- The preparation of public enterprises and utilities for privatization is a necessary condition for success, especially if it does not involve large public investments. Here the question may be: Why invest to dispose of them ? The reason is that the sale price may be even higher. Even if it is not, the high running costs, which are wasted year after year, can definitely compensate for such investment in the long run.

Figure 2.2 shows the General Policy Framework for discussion of privatization considering ideology, economic objectives, and social targets. Lance Marston [Marston 87] identifies 14 necessary steps to be considered by governments in preparing, implementing, and monitoring end results of privatization. These steps are shown in Table 2-4. The institutional development of privatization is shown in Table 2-5.

2.3.2 Macroeconomic Framework

As a prelude to the privatization process, it is necessary to establish an adequate macroeconomic environment, that will foster and sustain the private sector's participation in the process. Macroeconomic reform is thus an essential prerequisite to successful privatization. Privatization can only achieve its ends if the marketplace is a stable, unfettered, economic system [Cardoso 91]. The characteristics of an hospitable macroeconomic environment are :

- Minimum inflation rates, through fiscal restraint and cautious monetary policy to stabilize the price system. A fiscal restraint policy must include the scaling down, and eventually, the elimination of subsidies to the public sector.

- Trade liberalization that reduces the distortions born of trade policy, and pressures all firms producing traded goods to make more efficient use of the resources they deploy. An open trading policy generally includes: low tariffs on imports and exports to keep local producers competitive and push them to seek market abroad; elimination of quotas; and ending licensing of trading firms.

- Liberalizing currency controls and keeping the exchange rate realistic. The stabilization of the domestic curency exchange rate versus hard currencies is a necessary step to encourage medium and long-term planning by the domestic private sector.

- Reactivating capital inflows through a favorable climate for foreign investment. The removal of the legal barriers to attract foreign capital are especially important for developing countries willing to take advantage of the technological know-how of foreign enterprises. Here also, minimum inflation, stable exchange rates, and positive real interest rates are necessary factors to attract foreign capital.

By way of example, we can cite the latest macroeconomic stabilization policies of Latin American countries, which are embarking in ambitious privatization programs. Those policies have recorded a tangible success until now. The buzzwords are "sustained, non-inflationary, export-led growth". Bolivia recorded a 3.5% GDP growth in 1991 with total investment up 5.5%, and inflation at 18% per year (it was 20,000% a few years ago). Argentina expects to achieve a GDP rise in 1992 of 2-3% in real terms with investment up by 10%. By August 1991, inflation in Argentina had sunk to only 1.3% a month [Economist 91]. Recent macroeconomic performances of selected Latin American countries are shown in Table 2-6.

2.3.3 Regulatory Framework

It is widely believed that privatization cannot work without a stable and efficient regulatory environment to encourage private sector's participation. Although deregulation is sometimes needed to foster privatization (this argument will be discussed thoroughly in the following paragraph), it is still necessary to install a clear regulatory framework in developing economies at the outset of their privatization experiences. The rules of the game must be clear enough to instil sufficient confidence that privatization will not be reversed, halted, or subject to bureaucratic meddling. Furthermore, antitrust rules, economic and social regulation, will enhance the competitive environment necessary to the success of privatization, and will prevent monopolistic practices by large private holdings that are likely to monopolize privatized markets in developing economies due to the significant distortions in revenue distribution, and the concentration of wealth in few private "hands".

The case for regulation most strongly appears in the privatization of "natural" monopolies -such as electricity, water, telecommunications, real estate holdings, and large infrastructure projects- where new private owners are entrusted with monopoly powers. A regulatory framework must be in place to prevent privatized concerns from exploiting this monopolistic position. Therefore, the absence of competition or substantial competition in the natural monopolies sector should not stand in the way of privatization. The solution is regulation. In the United Kingdom, the Financial Secretary to the Treasury defended in 1985 the case for regulation in privatizing natural monopolies. He observed: "Where competition is impractical, privatization policies have now been developed to such an extent that regulated private ownership of natural monopolies is necessary and still preferable to nationalization" [Moore 85]. It is therefore clear that when privatizing public utilities and mega-projects, regulatory aspects will be paramount. New regulatory regimes are needed to define the price structure of the privately-owned public utility or mega-project.

For example, electricity could be priced according to its marginal cost, and oil according to its import parity. Those pricing rules could be determined by government regulatory laws, making their modification difficult.

Another argument in favor of regulation is that the government has to ensure that privatization is made to private consortia with the capacity to attract capital, management, and technology. Adequate regulation should be enacted to ensure that the bidding conditions are appropriate, that unacceptable bidders are sorted out according to qualitative criteria before public auctioning, that the valuation of assets is realistic, that reliable information on financial markets is given due consideration when establishing the financial conditions, that the regulatory framework for the postprivatization period will be consistent with the current experiences of other countries, and finally, that recognized international industry experts and financial advisers are consulted [Cardoso 91]. Therefore, regulation must encroach on many areas: price, quality of service, freedom of access, fairness, and financial rewards (magnitude of profits and rates of return).

Regulation may take a "self-regulatory" form or it may be imposed by departments of state or by bodies especially created by government which are "external" to the industry which is being regulated. The system of regulation may also lie between these two limiting cases [Breyer 82].

Self-regulation is a phenomenon with many facets. There are self-imposed group codes of conduct which are sometimes a form of consumer protection. At the extreme such codes may be devised by private firms without any involvment on the part of the official regulatory commissions or for that matter the consumer.

External regulation is exerted by a wide variety of bodies such as government departments, but more often agencies which enjoy a degree of independence from government such as commissions, boards, corporations, executives, and of course, courts.

The three major types of regulation are :

- Antitrust Laws
- Economic Regulation
- Social Regulation

2.3.3.1 Antitrust Laws

Antitrust is a type of regulation which forces businessmen to compete. Typically, it is a policy which addresses itself to phenomena such as monopoly, dominant firms, mergers, and restrictive business practices [Swann 88]. Antitrust regulation is concerned with the enhancement of competition and the prevention of prohibitive pricing, excessive barriers to entry in face of new competitors, limited access, and consolidated market power.

In practice, national systems worldwide differ in at least two ways. Firstly, the range of antitrust phenomena covered by the legislation varies from country to country. Secondly, the stances vary. The United States for example takes a per se view of many restrictive business practices. That is to say "they are in and of themselves illegal, and no mitigating arguments will be admitted in defense" [Breyer 82]. In the United Kingdom and Germany, on the other hand, the approach tend to be that dominant agreements are contrary to the public interest or prohibited, but exemptions are provided for. In other countries yet a different approach is adopted. The law is neither against nor for such practices but judges them on their merits. Finally, I mention that the impact of Antitrust Regulation depends partly on the severity of its sanctions and these also vary. Thus in the U.S., treble damages and incarcerations have been possible penalties for those who transgressed antitrust laws, whereas the U.K., for instance, has taken a more lenient line [Swann 88].

2.3.3.2 Economic Regulation

We have seen that Antitrust is a form of regulation which is appropriate where competition is feasible. But there are some industries where it is alleged that competition is simply not feasible. This is generally agreed to be the case where natural monopoly conditions exist -where therefore it is more efficient if only one firm serves the market. However, if despite Antitrust Laws the force of competition has to be suspended, supply being left in the hands of a monopolist (e.g., privatizing the electricity supply industry and transferring ownership to one group of investors through a private placement), then it is essential that the consumer and small firms be protected against exploitation. This is where economic regulation comes in. Typically, economic regulation refers to the imposition of controls over prices, entry, exit, output and volume in particular industries. The regulator may control the level and structure of prices. Prices may be fixed, may be subject to a "floor" or "ceiling", or may only be allowed to fluctuate within prescribed upper and lower limits. Regulatory authorities may merely recommend prices. Then again firms may be required to file prices with the regulatory authority which has the power to refuse approval [Breyer 82]. Controls could also be imposed on entry -often through the agency of licensing. Even if a firm is allowed to enter, it may nevertheless be restricted as to the markets in which it may operate. The entry of foreign firms may also be absolutely precluded in some "strategic" industries. Control may be placed on exit -as when a railway wishes to close a line. Output may also me controlled (e.g., the number of flights on a particular route may be limited). It is not untypical for firms subject to regulation to be exempted in some degree from normal antitrust rules. In respect of some antitrust phenomena, such as mergers, control may be assumed by the regulatory authority. Table 2-7 shows the scope of federal economic regulation in the United States.

2.3.3.3 Social Regulation

Social regulation takes in matters such as the protection of the consumer, the protection of the environment, the imposition of occupational safety and health standards, and affirmative action (i.e., equal rights in employment and opportunity as between sexes and racial groups). Unlike economic regulation, such social regulation, or what some economists call "new style" regulation, often applies across the economy and not to specific industries. Typically, it takes the form of the provision of information -unit pricing, product control labelling-, prescription of standards -work safety, permitted levels of pollution, permitted contents, product testing-, and rights of redress -consumer rights in relation to deception, defective goods, and product-related injury [Swann 88]. Industries which are subject to competition and also industries which operate under a system of economic regulation may nevertheless fail in some degree. Such failures may be concerned with externalities (e.g., pollution), the difficulties faced by consumers in respect of information and safety, the possibility of injury and death at the workplace and the problem of discrimination in access to jobs. The major social regulatory agencies in the United States are shown in Table 2-8.

2.3.4 The Case for Deregulation

2.3.4.1 Deregulation Identified

Strictly interpreted deregulation refers to the removal of all regulation. But practically, this is an improbable development. In practice, when we use the word deregulation we are employing a term which encompasses (a) differing degrees of deregulation and (b) a variety of possible changes in the way in which regulation operates [Swann 88]. All this can best be described as regulatory reform.

Regulatory reform may take the form of total economic deregulation -i.e. the whole panoply of controls over price, entry, exit, the range of business which firms may engage in, may be removed and the industry left to be disciplined by competition and the forces of the marketplace. But economic deregulation may also take the form of a partial removal of restrictions. Thus fixed price may be replaced not by free prices but by prices which can fluctuate within limits. Quantitative licensing which may rigidly restrict the number of entrants, may be replaced by qualitative licenses which stipulate that anyone may enter provided they meet certain, perhaps quite low, standards of professional competence and financial strength. The latter is partial deregulation in the sense that the overall scheme of control is rendered somewhat more flexible.

2.3.4.2 When and Where Deregulation Is Needed ?

In paragraph 2.3.3, I exposed the arguments in favor of a clear and stable regulatory framework as a prelude to privatization. I argued that the case for regulation in privatization most strongly appears in privatizing natural monopolies in industrial or developing countries; and in the privatization of any industry in developing or Less-Developed Countries (LDCs), where we notice significant distortions in the distribution of income among the various classes of the population, resulting in the concentration of private wealth with few individuals, the mass of the population earning very low incomes.

In my discussion of the rationale of privatization, I concluded that private industry performs at its best in a competitive environment, where there is pressure from consumers on prices and products, and pressure from the capital market on costs and investment. Theoretically, a competitive environment can best be achieved by introducing deregulation and liberalization policies. At this point, it seems that we have reached a paradox : "A clear regulatory framework is needed to instil private sector's confidence in the privatization

process, while a competitive and deregulated environment enhances private sector's efficiency !".

The answer to this contradiction is very objective and depends largely on the context in which privatization is implemented. Establishing a privatization program in post-socialism economies previously guided by central planning policies, should be accompanied by a deregulation program to promote or install competition and free-markets orientation. On the other hand, privatizing natural monopolies in mixed-economies, where a strong private sector already exist, must be accompanied by clear regulatory policies to prevent monopolistic practices and excessive returns to the private sector.

Therefore, the choice of a regulation policy versus a deregulation orientation to accompany privatization depends : (1) on the nature of the economy in which privatization is implemented (free-market, mixed, or post-socialism economy); (2) on the type and scale of the industry or activity to be privatized (natural monopolies versus already competitive and/or fragmented industries); and, (3) on the strength of the private sector and the degree of private wealth distribution among different classes of the population (industrial countries' form of wealth distribution versus private wealth held by few induviduals as is the case in developing countries and LDCs).

Finally, I argue that although regulation is an important step at the outset of the privatization process, it should be followed at the medium term, and in all circumstances and contexts described before, by a deregulation policy in order to foster competition and encourage the entry of new competitors challenging the dominant position of private monopolies or oligopolies. Because in the absence of a deregulation policy, what privatization would accomplish is solely the transfer of a monopolistic power fom the hands of the state to the hand of select and powerful private investors.

Major economic deregulation policies in the United States from 1975 to 1987 are shown in Table 2-9.

2.4 Forms of Privatization

The concept of privatization can be divided into two broad categories: Micro-privatization and Macro-privatization. Furthermore, each of these two categories can be broken up to encompass two forms of privatization :

* Micro-Privatization:
    - Privatization of Ownership
    - Privatization of Operations or Peripheral Privatization
* Macro-Privatization:
    - Incremental Privatization
    - Stimulated Privatization

The gradual subdivision of the concept of privatization into these different forms is shown in Figure 2.3.

2.4.1 Micro-Privatization

Micro-privatization is privatization at the enterprise level, which refers to the introduction of private sector's participation in the ownership or operation of public enterprises.

2.4.1.1 Privatization of Ownership

Privatization of ownership in the public sector envisage, on the whole, a reduced public shareholding proportion in one way or another. It comes to the zero level when an enterprise is denationalized (i.e. transferred totally to the

private sector), and could also encompass a loss of a majority shareholding position (51% in most cases) to the private sector [Ramanadham 87].

In considering ownership privatization, it is useful to distinguish between domestic private capital and foreign private capital let into a public enterprise. Foreign capital might be zealously welcomed in some countries and it might be totally interdicted or restricted to certain "ceiling" limitations in other countries. Pre-privatization legislation plays an important role here in modelling the adequate lequal and economic framework to encourage foreign capital participation in the privatization process.

2.4.1.2 Peripheral Privatization

Peripheral privatization or privatization of operations refers to the contracting out of some or all operations and/or services of a public sector institution to the private sector [Glade 91].

Generally, peripheral privatization takes place as a "preparatory phase" to ownership privatization. Through the initial participation of the private sector in the operations of the public enterprise, the subsequent ownership privatization of the same enterprise is significantly facilitated. Private sector's investors would have had the opportunity to gain an "insider" look at the organizational structure, facilities, operations, and eventually the defficiencies and modernization requirements of the public enterprise.

Peripheral privatization is of significance in a unique sense in the context of developing countries. Ownership changes in developing countries, especially of the extreme kind -i.e. denationalization-, are not "politically" easy; yet substantive elements of privatization can be introduced in the organizational structure and operating criteria of the public enterprise. Therefore, operations privatization or "contracting out" has begun to assume importance in

developing countries in a special way. Public enterprises are encouraged to promote ancillary units with which they enter into contractual relations for the supply of inputs, production of goods, or provision of services. In this way, the operational activities that public enterprises could have themselves undertaken are partly or completely shed to private units.

Public agencies can contract with a variety of organizations to supply or produce goods that they do not want to provide in-house. Most commonly an agency will contract with a private firm or individual, but it may also contract out to voluntary or cooperative organizations, or even in some cases to other public sector agencies.

Although the public sector generally contracts out for goods, the focus of many governments recently, has been on the increased contracting out of services [Ascher 87]. Service provision is labor-intensive and therefore the more natural target for a government determined to reduce manpower levels and improve managerial efficiency.

Three different modes of public service provision can be outlined: "regulated", "grant" and "contracted" [Ascher 87]. Under a regulated mode, the state is involved in planning, but not in financing or producing a service; zoning enforcement is a good example of this type of activity. Under a grant mode, the state provides financial support for an activity, but does not plan or produce it; form support, student grant, or legal aid systems fall into this category. Finally, under a contract mode, the state plays a financial and planning role but does not produce the service itself; building maintenance, road construction, and different types of infrastructure projects have traditionally been provided via such contractual arrangements. In a contract mode, the process by which private contracts are usually awarded is known as "competitive tendering". The most common form of competitive tendering

involves private contractors competing against one another either for contracts that had previously been in private hands and expired (for example, catering concessions at sporting events) or for contracts that had not previously existed (for example, contracts for building motorways and highways) [Ascher 87].

What are then the major arguments for using private sources to supply government services ? Private supply will lead to *lower government costs* for at least five reasons [DeHoog 84] :

- Competition for contracts would help to reveal the true costs of production and eliminate waste, since contracts would be awarded to those offering the most or best quality services at the least cost level.
- Substitution of the profit motive for budget maximization and empire-building would help to limit public budget growth in particular, and government growth, in general, in the long run.
- Economies of scale (i.e., lower per unit costs) could be realized in some jurisdictions through the reduction of overhead, start-up costs, or high personnel costs by spreading supply over a large number of units or other agencies (e.g., contracting for specialized medical services).
- High personnel costs would be reduced, primarily due to avoiding public employee unions and public personnel controls (e.g., civil service rules).
- Greater flexibility in the use of personnel and equipment would be achieved for short-term projects, part-time work, specialized needs, or new problems -without a commitment to sustaining a bloated bureaucracy.

2.4.2 Macro-Privatization

Macro-privatization relies on the fact that the proportion of private investment in the national economy will expand as a sequel to new government policies on investment and entrepreneurship by the private sector [Ramanadham 87]. The micro changes cited in the preceding paragraphs

themselves culminate in changes at the macro level, unless for every micro change increasing the private proportion of ownership in some case, there are offsetting developments which raise the public share of ownership in other enterprises or bring into being new enterprises under full or majority ownership.

In the context of Macro-Privatization, we notice policies of Incremental Privatization and Stimulated Privatization.

2.4.2.1 Incremental Privatization

Incremental privatization is based on the argument that instead of privatizing existing public sector enterprises, which raises a number of thorny problems, the goals of privatization could be achieved by a policy of active and persistent encouragement of the private sector [El-Naggar 89].

The logic of the argument can be stated as follows. The economy of any country is more or less growing over time. If additional growth is year in year out, dominated by private sector activity, the overall character of the economy will eventually shift from public to private with no need for a specific, formal privatization program. Stated in terms of marginal and average shares, "if the private sector is persistently dominant at the margin, it is bound to become dominant on the average of the whole economy given a sufficient lapse of time" [El-Naggar 89].

2.4.2.2 Stimulated Privatization

Stimulated privatization is a dynamic form of incremental privatization. In incremental privatization, the government does not ameliorate or increase its holdings in the economy, letting the private sector engross the lion's share in the domestic growth. It is a static process. Moreover, the success of an incremental privatization policy is closely tied to the existence of a strong

private sector at the outset of the privatization process. In general, post-socialism and developing economies cannot satisfy this necessary condition.

Therefore, a stimulated privatization policy is more suited to countries dominated by public enterprise, which try to embark in a privatization program. It is however a dynamic process, which requires an important contribution from the government in stimulating privatization by reforming the domestic legal and economic frameworks, and removing the regulations and restrictions which prevent the private sector from growing, entering into certain fields, and competing on equal terms with the public sector.

Table 2-1: The Contribution of Public Enterprises of Selected Industrial and Developing Countries

Country	Period	(A) Output: Percentage Share of GDP	(B) Investment: Percentage Share of GFCF
Australia	1978-79	9.4	19.2
France	1982	6.5	12.5
Germany, F.R.	1978-79	10.2	10.8
Italy	1978	7.5	16.4
Japan	1978-81	-	11.2
Portugal	1978-80	-	33.2
Sweden	1978-80	-	15.3
United Kingdom	1982	11.2	17.1
United States	1978	-	4.4
Industrial Countries: Average	**1973-77**	**9.6**	**11.1**
Brazil	1980	-	22.8
Chile	1978-80	13.0	12.9
India	1978	10.3	33.7
Korea, South	1978-80	-	22.8
Mexico	1978	7.4	29.4
Taiwan	1978-80	13.5	32.4
Developing Countries: Average	**1973-77**	**8.6**	**27.0**

Notes:
- Column A represents the contribution of Gross Domestic Product (GDP) made by public enterprises.
- Column B represents the portion of Gross Fixed Capital Formation (GFCF) required to generate Column A.
- Period Averages are weighted averages of GDP and GFCF, expressed in U.S. dollars.

Sources: [Short 84] and [World Bank 86]

Table 2-2: U.K. Public Sector:
Total Factor Productivity Changes

(Percent per annum)

	1968-78	1979-85
British Rail	$(0.8)_2$	2.8
British Steel	-2.5	12.9
Post Office	(-1.3)	1.9
British Telecom$_1$	5.2	0.5
British Coal	-1.4	0.0
Electricity	0.7	1.4
British Gas	(8.5)	1.2
National Bus	-1.4	0.1
British Airways	5.5	4.8
All U.K. Manufacturing	1.7	n.a.

Notes:
1. British Telecom experienced huge investment expenditures in the period 1982-85.
2. Figures in brackets are for labor productivity where total factor productivity is not available

Source: [Kay 87]

Table 2-3: Seven Arguments in Favor of PEs' Privatization

1.	Privatization rolls back the frontiers of the state and subjects the enterprise to the market and the resultant competition will enhance individual choice and freedom.
2.	The market discipline will lead to greater economic efficiency and effectiveness.
3.	It will reduce the pressure on state finances for investments.
4.	It will free the government from the incubus of loss-making enterprises.
5.	It will free ministers to concentrate on important policy formulation and implementation.
6.	It would lead to genuine public ownership as the shares will be offered to and bought by the public.
7.	It will lead to more realistic levels of wages by breaking up powerful public sector unions

Source: [Rao 88]

Table 2-4: Fourteen Steps of Privatization of Public Enterprises

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Phase I - Institutional Development

1. Organize for privatization
2. Assess political situation
3. Create private sector coalitions
4. Develop strategies and guidelines

Phase II - Selecting Targets

5. Policy review
6. Organizational survey
7. Business evaluation
8. Strategic analysis

Phase III - Privatization Transfer

9. Estimate value
10. Issue conditions and solicitation for transfer
11. Evaluate and select successful bidder
12. Negotiate and execute transfer

Phase IV - Monitoring End Results

13. Establish regulatory and oversight mechanism
14. Monitor performance

Source: [Marston 87]

Table 2-5: Institutional Development in Privatization

Steps	Issues
1. Organize for Privatization Initiatives	• Government vs. non-government • Define policy and program roles • Inter-governmental relations
2. Assess Poltical Situation	• Legal barriers • Economic constraints • Employment dislocations • Other political costs/benefits • Strengths/weaknesses of coalitions
3. Create Private Sector Coalitions	• Educating the public • Create/strengthen privatization coalitions • Develop tactics to blunt opposition
4. Develop Program Strategies and Guidelines	• Incremental vs. wholesale approach • Increase incentives (taxes, loans) • Reduce disincentives (deregulation)

Source: [Marston 87]

Table 2-6: Macroeconomic Performances of Selected Latin American Countries

Country	Real GDP: (% change on year earlier) 1988	1989	1990	Consumer Prices: (% increase on year earlier) 1989	1990	1991
Argentina	-2.7	-4.4	-1.5	3195	2315	115
Brazil	-0.1	3.2	-4.6	1287	2928	387
Chile	7.4	10.0	2.1	17	26	24
Colombia	4.1	3.6	4.2	26	29	31
Mexico	1.3	3.1	3.9	20	27	22
Venezuela	5.8	-8.7	5.2	84	41	34

Source: [Economist 91]

Table 2-7: Scope of Federal Economic Regulation in the United States

Enactment Date of First Named Body	Regulatory Body(ies)	Regulatory Role
1863	Comptroller of the Currency, Federal Reserve Board (1913), Federal Deposit Insurance Corporation (1933), Federal Home Loan Board (1933), and Federal Savings and Loan Insurance Corporation (1934)	Supervision of banking and other deposit-taking institutions and provision of insurance for depositors, etc.
1887	Interstate Commerce Commission	Control over rates, entry and exit in railways, road haulage, buses, inland waterways and other related activities
1913	Federal Reserve Board and Securities and Exchange Commission (1934)	Control of margin requirements in security dealing, supervision of security dealing on stock exchanges and supervision of public utility holding companies
1916	United States Shipping Board (ultimately replaced in 1961 by the independent Federal Maritime Commission)	Control of rates and service frequency of trans-ocean freight shipments
1920	Federal Power Commission (replaced in 1977 by the Federal Energy Regulatory Commission in the D.O.E.)	Regulation of wellhead price of natural gas and wholesale price of electricity

1927	Federal Radio Commission (replaced in 1934 by the Federal Communications Commission)	Regulation of price of telephone and telegraph service. Control of entry into the above telecommunications activities and into T.V. and radio broadcasting. Remit also extends to international telecom.
1938	Civil Aeronautics Authority (replaced in 1940 by the Civil Aeronautics Board)	Control over entry, exit, rates and mergers in air transport, both passenger and freight. Remit also extended to international operations although fares, particularly in early years, were agreed in IATA.
1970	National Credit Union Share Insurance Fund	Provision of insurance facilities in respect of credit unions
1970	Securities Investor Protection Corporation	Provision of insurance to protect investors dealing with brokers on stock exchanges

Source : [Swann 88]

Table 2-8: New Social Regulatory Agencies in the United States

Year Established	Agency	Location	Regulatory Role
1964	Equal Employment and Opportunity Commission (EEOC)	Independent	Investigation of charges of job discrimination. Equal Pay and Civil Acts were passed in 1963 and 1964 respectively
1970	Environmental Protection Agency (EPA)	Executive branch	The enforcement of environmental potection. A series of acts was passed between 1965 and 1972 dealing with air, water, and noise pollution and automobile emissions
1970	National Highway Administration	Executive branch	Setting of motor vehicle safety and fuel economy standards
1972	Consumer Product Safety Commission	Independent	Setting of consumer product safety standards
1973	Occupational Safety and Health Administration (OSHA)	Executive branch	Setting and enforcing of workers' health and safety regulations

Source : [Swann 88]

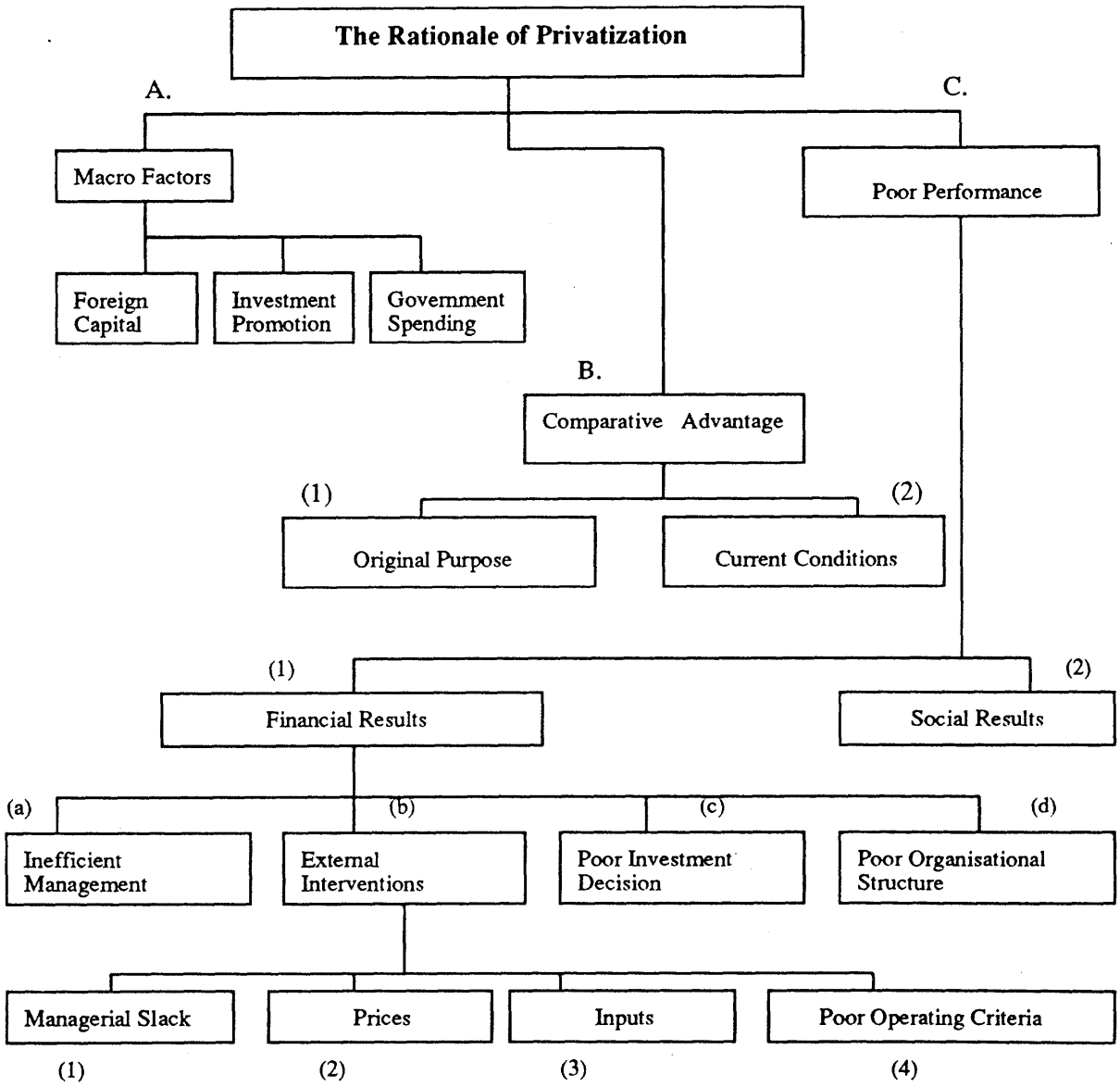
Table 2-9: Economic Deregulation in the United States from 1975 to 1987 (key deregulatory initiatives and statutes)

1975	Securities and Exchange Commission (SEC): abolition of minimum brokerage commissions on New York Stock Exchange. Securities Amendments Acts: development nationally of interlinked competitive securities markets.
1976	Railroad Revitalisation and Reform Act: increased rate setting freedom for railways.
1977	Air Cargo Deregulation Act: progressive entry and rate deregulation.
1978	Air Passenger Deregulation Act: progressive and ultimately total deregulation of rates and entry.
1978	National Gas Policy Act: gradual decontrol of gas prices focussing mainly on newly discovered gas.
1978	Public Utility Regulatory Policies Act: electricity wheeling and inter-connection power granted to FERC. Requirement to consider rate structure reform -e.g. electricity.
1979	FCC: radio programme content rules dropped.
1980	Motor Carrier Act: increased entry and rate freedom and reduced role for rate fixing bureaux.
1980	Depository Institutions Deregulation and Monetary Control Act: equalisation of reserve requirements among all financial institutions offering similar types of deposits; phasing out of limitations on deposit interest rates; easing of restrictions on the permitted range of lending activities.
1981	Decontrol of Crude Oil and Refined Petroleum Products (Executive Order): complete lifting of crude oil price controls.
1982	AT&T divestiture consent decree.
1981	Bus Regulatory Reform Act: entry and exit conditions eased, zones of rate freedom established and role of rate bureaux reduced.

1982	US-European discussions leading to introduction of zones of rate freedom on North Atlantic air routes.
1984	FCC: complete deregulation of rate and service regulation of satellites.
1984	Cable Telecommunications Act: virtual completion of deregulation of cable TV.
1985	Supreme Court ruling on inter-state banking pacts. Agreements between states, whereby a bank in one state may be controlled via the shareholding of a bank in another state, were upheld even if New York banks were specifically excluded from benefiting from such an arrangement.
1986 and 1987	FRB and court ruling eroding restrictions contained in Glass-Steagall Act. Proxmire-Garn bill to repeal Act introduced in US Congress in 1987.

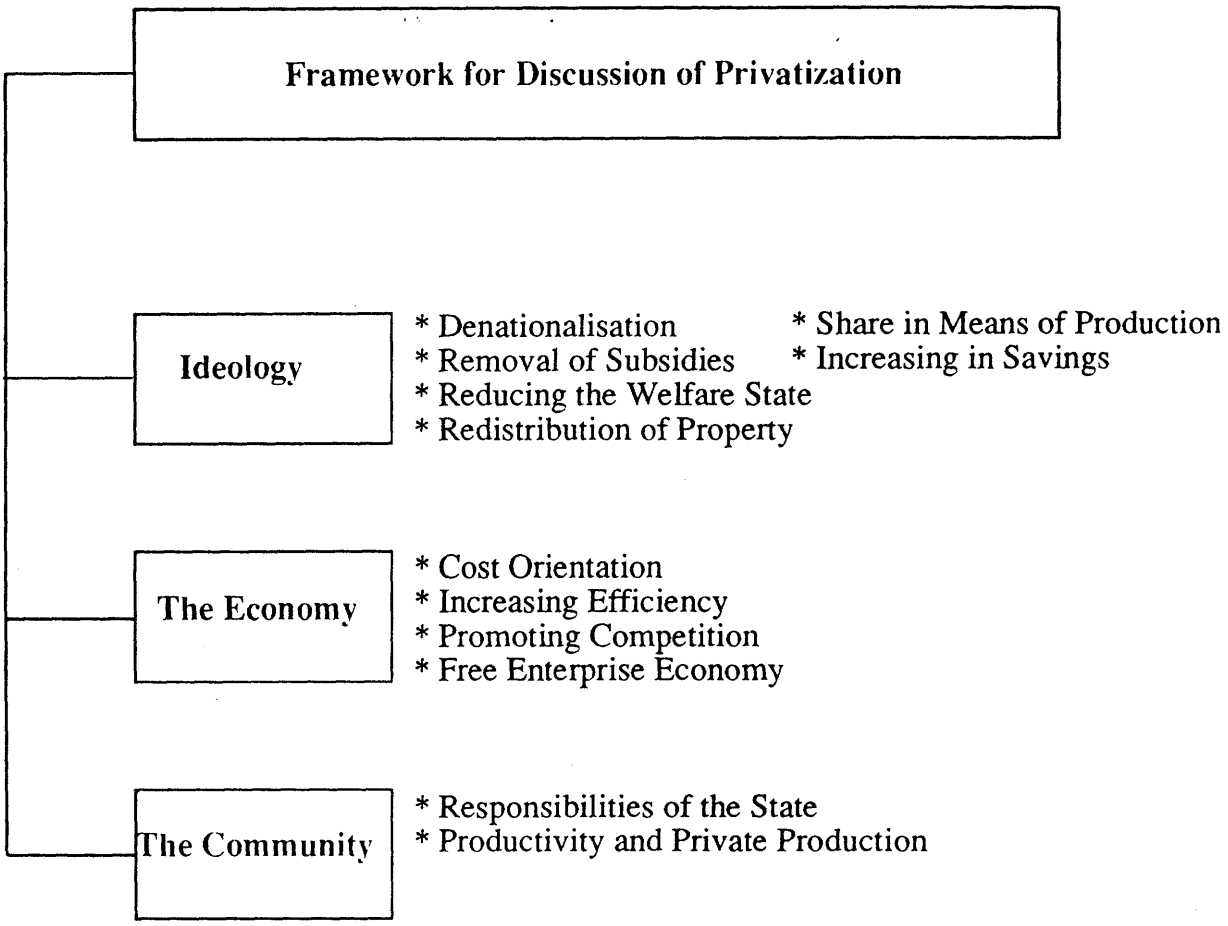
Source: [Swann 88]

Figure 2.1: The Rationale of Privatization



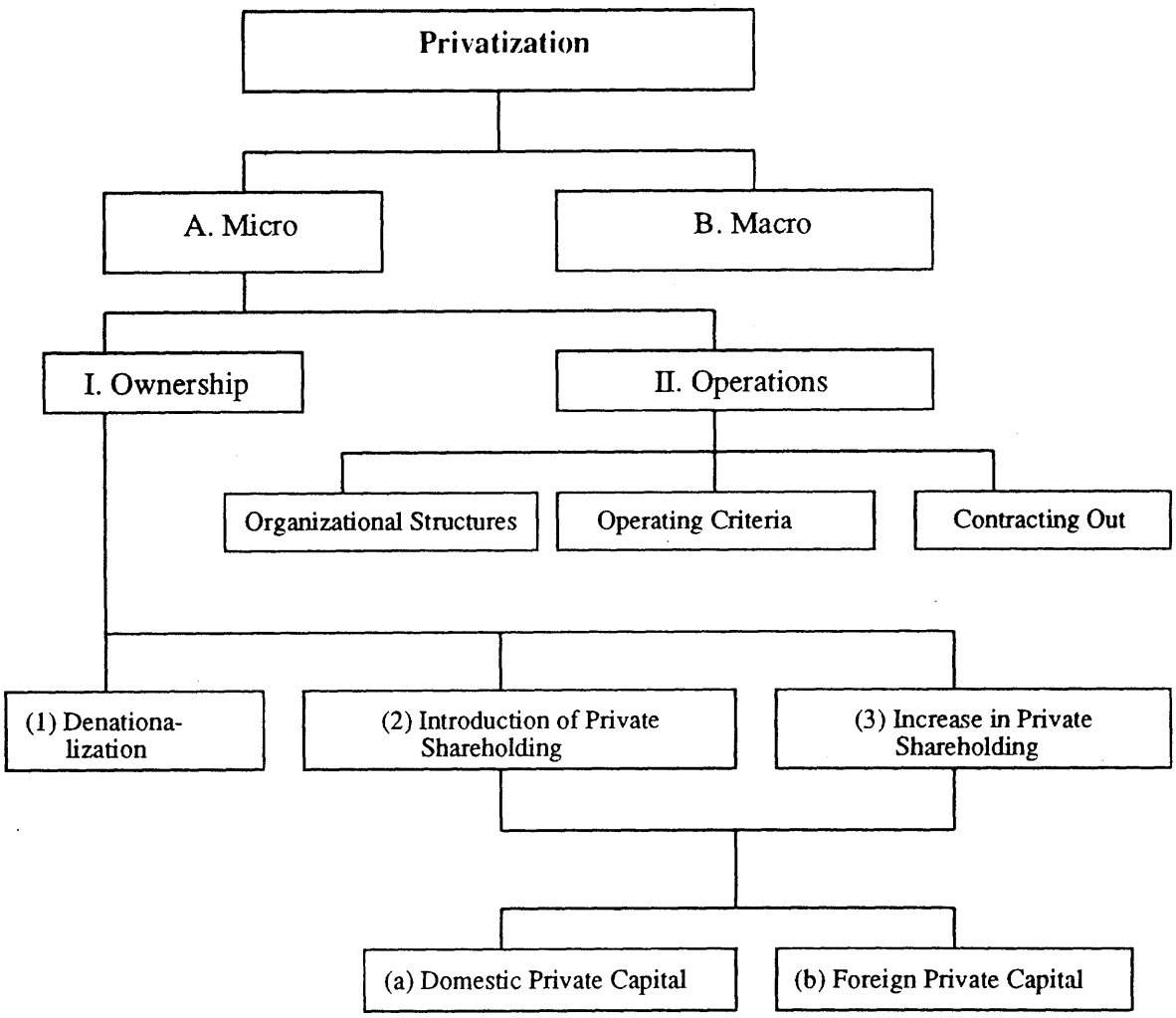
Source : [Ramanadham 87]

Figure 2.2: General Framework of Privatization



Source : [Hammer 89]

Figure 2.3: The Concept of Privatization



Source : [Ramanadham 87]

Chapter 3

Techniques and Methods of Privatization

3.1 Introduction

As we have seen in Chapter 2, privatization can be defined and applied in several ways. Depending on its needs and economic structure, each country will try to model a privatization format -and consequently adequate privatization techniques- that best achieves its own objectives.

Privatization in industrial countries like France and the United Kingdom, where the public sector constitutes a large segment of the manufacturing and services industries, means primarily the transfer of ownership of these Public Enterprises (PEs) to the private sector.

On the other hand, privatization in countries like the United States, where the presence of the public sector in manufacturing and services is almost non-existent, means primarily the promotion of the private sector's role in developing, financing and executing large infrastructure facilities in regions and states where the local government cannot undertake such megaprojects without the financial and technical support of the private sector.

Privatization in mixed economies, which is the case of most developing countries, means both the transfer of ownership of the domestic PEs to the private sector, and the promotion of the private sector's role in developing and financing large infrastructure projects. A mixture of the privatization formats

of the United Kingdom and France, on one hand, and the privatization format of the United States, on the other hand, will thus be implemented in developing countries.

Finally, privatization in post-communism economies, like East European countries, means the introduction of free-market principles in the forces of the economy, and the development of a strong domestic private sector from scratch basically knowing that the State was until recently the sole active player at both the macro and micro-economic levels.

For the purpose of this thesis, I will solely focus in this chapter on the methods and techniques related to: (1) Privatization of existing Public Enterprises with a special emphasis on the British model; and, (2) the use of the private sector in developing, financing and executing infrastructure projects. A special emphasis will be placed on the U.S. model in the study of the Project Finance technique, and on the Turkish and Pakistani cases in the analysis of the Build-Operate and Transfer (BOT) and Build-Operate and Own (BOO) financing schemes which were first implemented in those countries in the mid-eighties.

3.2 Privatization of Public Enterprises

As mentioned in chapter 2, privatization of PEs can be accomplished through a "Privatization of Ownership" policy, or a "Peripheral Privatization" (i.e., Privatization of Operations) policy. The techniques and methods related to each of these formats are discussed thoroughly in the following paragraphs.

3.2.1 Techniques of Ownership Privatization

The privatization of ownership of Public Enterprises can be accomplished using three methods :

- Public sale of shares
- Private Placement of shares
- ESOP plans or selling to workforce and management

3.2.1.1 Public Sale of Shares

A public sale of shares or "Public Flotation" is the most widely used and most direct privatization method. It is based on the sale of shares in the Public Enterprise directly to the public through domestic and international stock exchanges.

Clearly a public flotation method is most suitable in the first instance for operations in which a product or service is produced. Activities involving state regulation and supervision cannot be easily privatized in the same way [Pirie 88]. The investors are most likely to invest in privatized entities producing a good or service they are familiar with, and which have an independent, although government-sponsored, executive body (e.g., British Telecom, British Airways, Rolls Royce, and Jaguar Cars) than those activities relying extensively on government supervision and control (e.g., the U.K.'s Post Office or Ports Authority).

Here, it should be emphasized that a public flotation method for ownership privatization cannot succeed without the existence of an efficient domestic capital market. Although, a substantial part of the issue could be sold using international investment bankers through international stock exchanges, the existence of a developed local stock exchange is primordial. The domestic stock exchange will be the "dynamo" in the successful execution of the sale.

The public flotation method of privatization was the primary method in transferring the ownership of a large number of British PEs to the private

sector beginning in 1979 when the Thatcher government came to power. Like the United States, Japan, and France, the United Kingdom has developed a very large and efficient capital market domestically. The availability of a large pool of private resources which could be mobilized almost immediatly through London's Stock Exchange (LSE) was the main factor behind the success of the British experience of privatization. Furthermore, the British investors, like their American or Japanese counterparts, fully understand the principles governing the functioning of a capital market; and the number of individual British shareholders as a percent of the total population in the U.K. is among the highest in the world. Table 3.1 shows the ratios of individual shareholders as percent of total population in selected industrial and developing countries. We notice that this ratio is a high as 19.6% in the U.S. or 15.2% in the U.K., and as low as 0.3% and 0.2% in Mexico and Argentina respectively [Gill 89].

Table 3.2 shows the date of sale and proceeds from the privatization of British enterprises using the public flotation method. The total proceeds of privatization by year since the outset of the British program in 1979 are shown in Table 3.3. Here, It should be noted also that sales involving more than one million British pounds (British Telecom and British Gas) were carried out simultaneously through London's Stock Exchange and other major international exchanges in North America (New York and Toronto), in East Asia (Tokyo and Hong Kong), and Australia (Sydney). British Gas' public flotation with total proceeds of 5,090 million British pounds was the largest ever public flotation in the world -the "sale of the century" as many financial observers labelled it; and British Telecom's flotation with proceeds of 4,090 million British pounds was the second largest and most successful public flotation worldwide (100% of the shares offered were sold in the first day of the sale) [Walters 89].

Another feature of the U.K. experience is that the British government tended to sell PEs' shares in the stock exchanges at discounted prices that

allow the original buyers hefty gains. The purpose of this initial fixed-price "underpricing" was twofold: (1) Underpricing increases the chance of success of the sale, knowing that the initial gains realized in the first days of the flotation will induce investors to participate in future flotations. Indeed, in a number of circumstances shares have been "oversubscribed" by investors feeling the opportunity to buy at a discount and to realize early gains (e.g., British Telecom and British Airways flotations); (2) The popular support for the privatization program is enhanced when investors -especially small investors- realize early gains. Therefore, politically, the Conservative government would increase its support base among middle class voters, which generally stood on the side of the Labour Party. Table 3.4 shows the amount of initial discounts applied to the British public flotations following the fixed-price offering method.

However, this "underpricing" phenomenon led to numerous accusations the the government was "selling the family silver" cheaply [Vernon 88]. Indeed. a comparison of the prices established in the market immediatly after flotation with the fixed prices at which the shares were offered for sale shows "a level of discount high by the standards of comparable private sector flotations" [Kay 86].

Between September 1983 and June 1984, the British government responded to these accusations by offering shares by tender (i.e., auction) rather than at a fixed price. The result was that, in a number of cases, offers were "undersubscribed" -for example, Britoil (35% of shares were applied for in November 1982), Cable & Wireless (70% in December 1983), and Enterprise Oil (73% in June 1984) [Kay 86]. Since July 1984, however, the British government again offered shares at fixed prices, and the market price after the offer soared. Thus, Rolls Royce was sold on May 20, 1987, for 1.4 billion pounds, and a day later, frantic dealings in London's Stock Echange has raised the price by 70% to a value of 2.3 billion pounds [Vernon 88].

Finally, in the context of the public flotation method, I point out that it is possible to sell the whole of the PE's ownership (100% of the shares), and it is sometimes appropriate to offer for sale only a proportion of the ownership. In this case, instead of offering 100% of the ownership for sale, the government offer a smaller percentage, often 51%.

From the government's point of view, keeping a 49% stake in the ownership of the privatized PE, can be a very effective method of gaining value for money when releasing government assets. A state enterprise with an unhappy performance record behind it, might not command a high selling price at the beginning. By selling a percentage -especially a controlling percentage- the state transfers it to the private sector even when it retains a significant holding. As the disciplines of the private sector assert their effect on the operation, it may become more cost-effective and more profitable. Therefore, the value of the remaining state's share may increase, and could be sold for a higher price [Pirie 88].

3.2.1.2 Private Placement of Shares

In countries where an efficient domestic capital market does not exist, making the application of the public sale method non-feasible, it could be appropriate to privatize the ownersip of the PE by offering the sale of the shares to a group of domestic and/or foreign buyers. This method is generally known as a "Private Placement of shares".

Thus, in a private placement, the government engages in direct negotiations with a number of potential buyers selected following different criteria of financial soundness, technical, and marketing ability. The candidates are then invited either to submit bids, or to participate in a government-sponsored auction, where the highest auctioner wins the sale.

Also, in a private placement, the government can either offer for sale 100% of the shares or 51% of the shares, keeping a 49% participation in the privatized enterprise. The government will thus continue to have an ownership interest in the enterprise, without controlling its operations and day-to-day decision-making process. The government will generally apoint a private auditor to control its interest, and to supervise the profits distribution at the end of each exercise.

Finally, I mention that in the case of a private placement, local groups of private investors are encouraged to form joint-ventures with foreign concerns, in order to strenghten the terms of their final bid. Foreign participation in the privatization of PEs in developing countries is much needed. Technological know-how, access to international financial markets, expansion of the products' market base, and an increase in operational efficiency are some of the major reasons for which a foreign participation is sought. Other reasons include: the development of local labour skills and increase in the number of qualified workers, better access to raw materials markets, better access to international consumers markets, and the improvement of the local Research and Development (R&D) expertise.

3.2.1.3 Selling to the Workforce or Management

In cases where the employees opposition to the privatization of a PE is intense, it may be appropriate to sell the enterprise as a complete entity or part of the ownership to management, to the workforce, or to both. The obvious merit from the government's point of view is that this will secure the co-operation of labour and management, and facilitate the execution of the ownership transfer transaction.

This method is also appropriate for privatizing PEs where independent private buyers might doubt their ability to achieve full-hearted co-operation from the employees under private management. If offered a stake in the ownership of the privatized enterprise, the employees, as owners, will have an excellent motivation to do what is required to facilitate the transfer process.

Generally, Employees Stock Ownership Plans (ESOPs) are established, and constitute a trust fund for employees' shares. Shares are transferred to the account of each employee depending on its seniority (number of years in service) and the amount of accumulated pension benefits the employee is entitled to receive. In Argentina, for example, a plan entitled "Program of Shared Property" was announced in 1985. The plan permitted Argentinian employees to participate in the purchase of the privatized enterprise. Seniority and salary would determine the level at which an employee could participate, and payment would be generated by a lien on the shares. Once the shares were paid for, an employee could dispose of them at will. Until that time, however, the shares would be managed collectively through a shareholders' organization [Glade 91].

Finally, I mention that in countries where private pension funds are non-existent at the outset of the privatization program, it is necessary to privatize the pension system first before embarking in a full-scale privatization program, even if the methods of sale used to privatize PEs do not include selling to workforce or management. Because, employees must be encouraged to buy shares in privatized enterprises through their pension funds. In this way, the pool of investors is significantly increased, and will not encompass solely a limited number of wealthy individuals. An example could be drawn from Chile, which established a "Capitalismo Popular" policy in the early seventies to encourage small investors to participate in the privatization program. Before the launching of the Chilean privatization program in the mid-seventies under the presidency of General Pinochet, the domestic pension

system was privatized, and a whole set of regulations and policies were enacted to encourage the participation of small investors in the ownership of privatized enterprises [Glade 91].

3.2.2. Techniques of Peripheral Privatization

The most effective method for accomplishing peripheral privatization or privatization of operations is the "contracting out" of public sector's operations to the private sector. Recently, governments are increasingly relying on a new method of peripheral privatization: Leasing. In the following paragraphs, a thorough description of the "contracting out" and "leasing" methods is provided.

3.2.2.1 The Contracting Out of Public Sector Operations

3.2.2.1.1 Definition

The term *contracting out* is defined as "the situation in which one organization contracts with another for the provision of a particular good or service" [Ascher 87].

The commercial reasons for contracting out the provision of a service or good which could otherwise be provided "in-house" vary, but generally include: cost effectiveness, lack of in-house expertise, the need to reduce overheads, greater administrative convenience, and the need for increased flexibilty to respond to changes in market conditions, financial support, or technological requirements [Ascher 87].

In the private sector, contracting out is a common practice, where private enterprises contract out with other enterprises which can provide the good or service more effectively. In-house operations are restricted to those activities that the firm can perform effectively and at a lower -or comparable

cost- than that of any other performer.

Contracting out is less common but frequent in the public sector, where public enterprises and agencies contract with a variety of organizations to supply products that they cannot or do not want to provide in-house. Most commonly an agency will contract with a private firm or individual, but it may also contract out to voluntary or cooperative organizations, or to other public sector agencies. The product provided externally may be required to maintain *internal* operations (for example, computers to process employees' pay, or window cleaning cleaning services); alternatively, it may contribute directly to meeting external *output* obligations (for example, the purchase of linen or the use of agency nurses by the U.S.' NHS). Although the public sector regularly contracts out for both goods and services, the focus of the public sector's recent interest is exclusively on the increased contracting out of services [Ascher 87]. Service provision is labor-intensive and therefore more natural target for a government determined to reduce manpower levels and improve managerial efficiency.

3.2.2.1.2 The Case for Contracting Out

What are the arguments in favor of contracting for public services ? The most extensively cited argument is that "the competitive marketplace produces goods and services efficiently, whereas monopolies, whether public or private, tend toward both inefficiency and unresponsiveness" [DeHoog 84]. Since in most program and service areas, government agencies are service monopolies, the personnel are likely to behave in ways that promote their own interests at the expense of the interests of efficiency and the consumer/citizen. It is argued that public bureaucracies are inefficient and expensive burdens because bureaucrats use their *monopoly of information* vis-a-vis the legislature to maximize their bureaus' budgets -a goal that, if achieved, is most likely to increase their personal rewards. Consequently, bureaus tend to produce too

much output, exceeding the point at which benefits equal costs, thus leading to larger budgets, the inefficient use of public funds, and bigger government [DeHoog 84].

Currently, the basic perspective of economists who study the supply side of public services is to encourage governments to explore alternative methods of service delivery and to use private sctor mechanisms for services usually provided by the state or local municipalities. For the production of mainly private goods (those that are highly divisible and packageable) that the public sector has traditionally provided, governments could try to return both the financing and production of such services to the private sector entirely (e.g., garbage collection). Or governments could provide vouchers to the consumers thus subsidizing the consumer rather than the supplier of a service and thereby giving the consumer/citizen the opportunity for choice among various agents (e.g., education) [DeHoog 84].

The essential role of the government agency or enterprise who contracts out the delivery of goods or services, would be to perform a "watchdog" function. Not only would it deal with revenue gathering or budget allocations and the transfer of payments to the delivery agent, but the government unit would also choose the agents, continue to monitor and evaluate their performance, and engage in long-range planning.

3.2.2.2 Leasing the Enterprises' Assets

Under a "leasing" arrangement, the private operators -the lessees- undertake to run all or part of the enterprises, and lease the physical installations from the government -the lessor- for specified lengths of time in return for paying predetermined fees. The government *retains ownership* of the physical assets, thus leaving it free to pursue any of the other options when the leases expire [Bergeron 91]. Thus, leasing is a method of privatization that

permits a government to avoid making the drastic departure from the *status quo* entailed by an outright sale of a PE, while leaving it free tu pursue a wide range of options in the future, including divestiture, which might become attractive once a PE has been turned around.

In most leasing cases in privatization, lessees bring in their own management and engineering teams to operate the leased assets. Therefore, leasing can bring new skills to the organization -technical and managerial- that allow the available assets to be utilized more fully. Leasing may also be the means for providing a PE with greater managerial autonomy. At the same time, leasing may be preferable to outright privatization -that is selling 100% or 51% of the PE's equity to the private sector- because it keeps several options open for the government down the road. If the PE's performance improves under private management, the PE can be sold later for a more attractive price than when it is deep waters. Alternatively, the government might decide to keep the firm under state ownership after it has been turned around. However, this alternative is highly unlikely for a government who has firmly commited himself to privatization.

Leasing may also be preferable to the liquidation of a public enterprise for several reasons. Among the principal advantages is that some, if not all, jobs can be preserved, and the government can also avoid the political costs associated with closure and layoffs. Another advantage is that the government can postpone the embarassingly big write-off that will accompany liquidation of the company. Such a write-off is also likely to be required under outright privatization because the troubled PE could only be sold for only a fraction of its book value.

In negotiating a leasing arrangement, the government must make sure that the agreement is sufficiently attractive to the private party, and yet does not give away the store from the country's standpoint. Given the political and

economic uncertainties entailed in lease arrangements with PEs in developing countries, private entrepreneurs are likely to seek high and quick returns on their investment. They are likely to demand attractive prices, protection from imports, and special privileges with regard to taxes and duties or government regulations; to offer very low fees or rents for the use of a PE's expensive assets; and to ask that these matters be guaranteed to some extent via formal agreements. One possible way to avoid conceding too many benefits to the private party is to structure lease agreements so that they contain a mechanism to review the agreement within a reasonable period of time (say five years). At that time, the government could use the venture's actual experience (and profitability) in the previous five years to *renegotiate* the pricing formula so that the extent of protection might be lowered and a greater part of the benefits passed to the consumers through lower prices for example.

An interesting element in leasing arrangements with foreign parties is the eventual requirement that a percentage of the company's equity (the lessee's operating company) be sold to domestic investors over a specified period of time [Bergeron 91]. Generally, this percentage is about a third or half of the operating company's equity. This mechanism will ensure that if the venture turned out to be a financial success, at least some part of the surplus would go to domestic investors rather than all of it go to the foreign investor.

Table 3.6 shows the methods of privatization used in privatizing selected British enterprises and agencies. The methods followed to privatize public enterprises in developing countries of Latin America, Sub-Saharan Africa, Asia, the Pacific region, North Africa, and the Middle East, are shown in Table 3.7. We notice that while the "Public Sale of Shares" method was the primary method used to privatize British PEs, this method was not very popular in a number of privatizing developing countries. Contracting Out and Leasing schemes, and Private Placements of Shares were indeed the popular options

in developing nations. The main reason for this difference in the choice of the appropriate method of privatization is due, as mentioned earlier in this chapter, to the lack of efficient capital markets and experienced financial intermediaries in developing countries.

3.3. Privatization in Infrastructure Projects

Back in 1985, Soviet President Mikhail Gorbachev, when talking to Tony Caelho, former U.S. House Majority Whip, made an astute comparison between the economies of the U.S. and the Soviet Union :

> "There is a lot of talk about how you folks do not really believe that I am prepared to abide by the arms control treaty agreements, so let me tell you why you should believe me and why I intend to:
> I cannot afford this military buildup. While we are building our military, we are not involved in the real war. That is an economic war. The countries that we defeated in the last world war are the ones that are fighting that war and winning that war.
> Now, you have in your country a word you call *'infrastructure'*. We have no infrastructure here. I need highways, bridges, air facilities, but I also need hospitals, schools, housing. To build my infrastructure, it will cost me $3 trillion. I do not have $3 trillion.
> Everybody in the world knows that you in the United States have the best infrastructure in the world. Just to repair what you have, though, it will cost you $3 trillion. You do not have $3 trillion either.
> So we both need to cut back on this arms race and start paying attention to economics and infrastructure. Or we both fall to Germany and Japan in the economic war."
>
> President Mikhael Gorbachev, 1985.
> Source: [Reinhardt 91]

If Gorbachev's numbers are real, what about the investment needs in all the countries in between, especially LDCs and developing countries ? Mexico, Argentina, Chile, Indonesia, Malaysia, Egypt, Lebanon, Pakistan, Hungary, and Sri Lanka, for example. For them and others, inadequate transportation,

power supplies, and usable water are often the limiting factors on economic growth.

The infrastructure problem is no longer access to technology or expertise. The problem is lack of long-term investment capital for public sector projects [Reinhardt 91]. Today, every government has a wish list of critical needs that will not be met unless financing can be arranged. The amounts needed are enormous. The amounts available are not. This reality has created the need and an opportunity for *private sector* financial engineering, risk assumption and technical expertise to play a larger role in the provision of public-purpose infrastructure facilities.

The contribution so far from privately developed infrastructure is limited to a few projects worldwide. Among them are the Channel Tunnel rail link between England and France, Turkey's Bosphorus Bridge, Pakistan's Hab River electric power project, Shenzen China's super-highway, Kuala Lumpur's North-South Expressway and perhaps a dozen more.

Renewed interest among the international development banks, investment houses and governments suggests that the potential contribution may be much greater. After years of cost overruns and change orders on 100% publicly funded projects, many development experts are seeking the efficiencies made possible by centralizing the management of complex infrastructure projects in the hands of private sector experts who, as investors, are wholly or partially at risk for the economic performance of their product [Grant 91]. The possibility of creating large construction projects and making higher than normal profits over a long term is pulling strategic private partners together to attempt to bridge the gap between public and private interests. These consortia frequently include international technology suppliers, large contractors, domestic private investors, project finance bankers, real estate developers, and facility operators. The product or service provided can be highways, bridges, mass transit systems, water and sewer systems, electric

power stations, basically any type of project than "can be substantially supported directly by user fees or through service contracts with governments or other public agencies" [Reinhardt 91].

Private management control and operations of infrastructure projects usually takes the form of a concession granted by government to a private consortium that finances new or expanded public-purpose facilities on a nonrecourse or limited-recourse basis. In its purest form, this type of financing means that lenders *cannot* get their money back from the individual private project sponsors or the host government [Reinhardt 91]. This financing scheme is called *Project Finance* and is extensively applied in the United States for financing power plants and other industrial projects (see Table 3-8).

Internationally, Project Finance usually includes support from home-country export credit guarantee agencies, government-operated political risk insurance pools, and from bilateral and multilateral financial institutions such as the World Bank, the Asian Development Bank, the InterAmerican Development Bank, the Islamic Development Bank, and the new European Bank for Reconstruction and Development (EBRD).

A particular form of Project Finance is a scheme where the project company operates and may own the facility for a period of time in order to pay off the project debt and to provide a return for equity investors. At the end of the concession period, the project company transfers ownership and/or management control of the project to the host government. In the early eighties, Turkey's prime minister named this arrangement Build-Operate and Transfer (BOT). That name and its various derivatives have stuck [Grant 91].

In the following paragraphs of this chapter, I will thoroughly investigate the structure of both the Project Finance and BOT financing techniques. The types of risks inherent in those techniques are exposed, and the allocation of these risks to those parties best able to manage them is examined. The

purpose of the BOT financing scheme is discussed in the cases of both developed and developing nations. Examples are drawn primarily from France and the experiences of Turkey and Pakistan which were the first developing countries to apply BOT for financing infrastructure facilities.

3.3.1 Project Finance Technique

3.3.1.1 Definition

In recent years, private sector ownership and operation of traditional public works projects have emerged as growing trends and legitimate options for financing needed infrastructure facilities worldwide. Public and private leaders are increasingly relying on a new privatization technique to help meet infrastructure needs: the "Project Finance" technique.

Project Finance can be defined most explicitly as follows: "Project Finance is a technique of funding a project based *solely* on the cash flows that the project is expected to generate" [Beidleman 90].

Generally, this financing technique is most appropriate for projects with high capital requirements, large and complex risks, and a consequent inability to raise sufficient funds from conventional sources [Beidleman 90].

Furthermore, as traditional sources of public financing are constrained by budget deficits while the demand for new infrastructure projects and improvements of existing infrastructure is increasing, the privatization "fever" in public works which relies on using the skills and resources of the private sector to replace public sector enterprises, has generated additional interest in Project Finance.

To qualify as a Project Finance, a venture must be capable of standing alone as a *completely independent* entity, and its nature must be such that it has a clearly definable conclusion [Kensinger 88]. The investors must receive cash flows from the project as they are generated. The legal entity set up to establish the project must have a *finite life*, so it cannot outlive its original purpose. Any creditors, furthermore, must have claims to the assets and cash flows of only the project itself, with *no recourse* to other assets of owners (except to the extent that any of the owners have other contractual obligations to the project) [Kensinger 88].

In 1987 and 1988, 83 Project Finance transactions in the United States have been announced in the *Wall Street Journal*. Those transaction closings represented almost $13 billion worth of new project financings [Kensinger 88]. For a breakdown of such financings by category, see Table 3.8.

3.3.1.2 Allocating Risks in Project Finance

Allocating the various types of risk to those participants best able to manage them is the *key* ingredient that makes Project Finance so successful in large-project undertakings [Beidleman 90]. This requires skill in identifying the areas of risk at all stages of a project, allocating each risk component to the appropriate participant, and arranging the many guarantees and undertakings necessary to cover each component of risk.

Each project phase -development, construction, and operation- has distinct financial considerations, sets of participants, and associated risks.

3.3.1.2.1 Development Phase

The development phase in Project Finance requires tenacity, since technical, financial, and environmental studies may take from eighteen months to three

years to complete. Because funding is essentially equity-based and venture capital at this stage, commercial and investment banks are reluctant to provide *seed* money [Beidleman 90]. Developers and contractors, usually in consortium, take an equity position at this stage. This may be tied to sale of equipment or to their respective interests being served. However, often sponsors with expertise in a particular industry, such as resource development for instance, retain equity participation until the facility is up and running, because doing so gives them a competitive edge in future deals [Kensinger 88]. It is also not unusual for financial advisors to provide their services on a "success fee" basis, thus taking some of the risk that the project may not get off the ground.

The risks associated with this stage and the contractual arrangements that can allocate these risks to the appropriate participants include the following:

3.3.1.2.1.1 Technology Risk

A new technology may not prove economically or structurally viable, or regulations regarding its use may change. Projects sponsors assume this risk in general through their equity participation.

3.3.1.2.1.2 Credit Risk

This has to do with the creditworthiness of an individual sponsor, the project as a whole, or (as in the case of a power plant project) a utility company [Beidleman 90]. Credit is often enhanced through "letters of credit" issued on behalf of developers by small to medium-sized merchant banks or by commercial banks. By allocating credit risk away from the sponsor, these credit enhancements ensure that the lenders need not rely solely on an individual sponsor's creditworthiness. In other situations, prestigious rating agencies (e.g., Standard and Poors in the U.S.) rate Project Finance projects based mainly on the credit strength of the sponsoring consortium.

3.3.1.2.1.3 Bid Risk

All projects involve the risk of not being launched successfully or undertaken at all. This risk is generally assumed by project sponsors, as well as by financial advisors who provide their services on a "success fee" basis.

3.3.1.2.2 Construction Phase

Interruptions at any point during construction may delay the revenue flow and hence jeopardize completion of the project and timely repayment of its debt. Moreover, in energy and mineral-processing projects, there is a further risk that legislative or regulatory changes will affect a particular technological or environmental aspect of the project, thus interrupting or delaying construction work.

Construction-phase risks can be categorized and allocated in the following ways :

3.3.1.2.2.1 Completion Risk

The trend in Project Finance is to assign the risk that the project may never reach the operating stage to the engineering and construction (E&C) contractors. The contractors, in turn, allocate segments of completion risk to equipment and material suppliers [Beidleman 90]. Project sponsors often prefer a "turnkey" arrangement in which the primary E&C contractor assumes responsibility for completion of the entire project, but these are difficult to obtain in general. Typically, contractors do give some form of completion guarantee that specifies a time frame and a rate of minimum operating efficiency. These guarantees do not normally expire when construction is complete, but rather terminate after a period sufficient to ensure that the project will perform as represented. It is also common to use performance

incentives (e.g., additional payment to labor or construction management, CM, for work completed before the contractual deadline) [Kensinger 88].

3.3.1.2.2.2 Cost Overrun Risk

Any cost overrun must ultimately be borne by the sponsor or contractor, but it may be funded by lenders or by precommited cost overrun financing [Beidleman 90]. While a fixed-price contract may not be available at the start of a project, such an arrangement may be negotiated later if sub-contractor bids can be obtained on that basis. Sometimes cost overrun risks can be covered by providing price escalation clauses in off-take contracts. They are thus borne by the contractor. Some projects also use "Completion Bonds" issued by indemnity and insurance companies.

3.3.1.2.2.3 Sponsor's Performance Risk

A sponsor may not meet quality standards or deadlines by failing to provide specified goods or services on schedule. Like completion risk, performance risk can delay a project, or even cause it to fail. Completion and performance guarantees help to cover this risk, as do strategic alliances with reputable firms, with a respectable track-record in the field of Project Finance.

3.3.1.2.2.4. Political Risk

Included here are legislative or regulatory changes that occur during project construction (particularly tax laws and environmental regulations), as well as the possibility that governments will disallow repatriation of funds. Political risk is associated largely with public sector projects in both domestic and international projects. It is one of the major hurdle in face of large-scale application of the Project Finance technique in developing countries and LDCs. Countries with a substantial background of nationalizations and central-

planning policies (e.g., Chile, Egypt, Syria, and East-European countries), must deploy important efforts in promoting their adherence to free-market and privatization concepts, in order to attract foreign Project Finance sponsors and investors.

Political risks are so difficult to control and therefore to allocate that some developers deliberately avoid public sector projects. Many developers involved in public sector transportation work will not consider a project unless strong political backing and commitment, expectations of high traffic flow, and a pressing public need are present [Beidleman 90]. Domestic political risks may be mitigated if the relevant political body demonstrates commitment by providing tax-exempt financing. Joint-venturing with an experienced partner also helps to mitigate political risk (e.g., the participation of the World Bank or an equally respected institution). Finally, organizations like the Overseas Private Investment Corporation (OPIC) in the United States, provide expropriation insurance to help alleviate foreign political risk for American companies.

3.3.1.2.3 Operation Phase

Once the project has been successfully completed, the financing terms for the debt portion of the capital can normally be more favorably negotiated. Some of the risks have been resolved, since the project is now operational. The following risks remain, however :

3.3.1.2.3.1 Cost Overrun Risk

Labor or material used during operation of the completed facility, such as fuel in traditional power plants, may turn out to be more expensive than anticipated. Contractual arrangements similar to those described for managing the cost overrun risk during the construction phase, including price escalation

clauses in the off-take contracts, are sometimes appropriate. In energy projects, for example, it is common to tie the price of power to current fuel prices in the contracts. In pipeline and refinery projects, the facility owner sometimes agrees to provide both the input and output at a price differential sufficient to cover all operating costs and debt repayment [Beidleman 90].

3.3.1.2.3.2 Sponsor's Performance Risk

Operations and maintenance contractors may not meet quality standards. Like any other performance risk, this one is borne by the operations contractor.

3.3.1.2.3.3 Liability Risk

The risk of death or injury on the operating facility may be allocated to the national or local government involved. Private insurance companies can also cover this risk.

3.3.1.2.3.4 Equity Resale Risk

Contractors and other sponsors may not be able to sell their share in a project upon its completion because the secondary market (i.e., resale market) for sponsor equity positions can be very limited. The International Finance Corporation (IFC) has recently considered implementing an insurance program whereby the IFC would purchase equity positions from sponsors and issue notes in its name [Beidleman 90].

Because of this limited secondary market, some sponsors prefer to use a "subordinated" loan for project capital -one that support senior borrowings for third-party lenders. As debt, the borrowed amount will eventually be repaid, and typically the subordination is limited to specific senior third-party

loans. The sponsor lender can preserve the advantage of an equity stock position through stock warrants or stock conversion rights under the subordinated loan agreement [Kensington 88].

3.3.1.2.3.5 Off-take Risk

The risk that the project may not meet revenue projections because of market prices changes occurs in all types of projects. It is referred to as the steam sale risk in cogeneration plants (simultaneous generation of electric and thermic power), the toll revenue risk in transportation projects, the resale price risk in industrial projects, the resource risk in mining and oil development projects, and generally, the *overall economic risk* of the project. Off-take agreements may guarantee that the purchaser pays for a product delivered over an extended term. These agreements may also stipulate either of the following: a particular payment level whether or not the product is purchased (take-or-pay contracts) or, on the other hand, a guarantee that the product will be purchased and paid for (take-and-pay contracts). Such agreements give lenders excellent security because loan repayment is provided for even given severe fluctuations in market demand [Beidleman 90].

Table 3.9 shows the typical allocation of risks among Project Finance participants. A project risk summary in the development phase, construction phase, and operation phase is shown in Table 3.10. Table 3.11 shows selected international financial mechanisms used for Project Finance.

3.3.1.2.4 Ongoing Risks

I should emphasize that Project Finance risk management is unique: Sponsors and lenders alike are willing to assume higher-than-traditional levels of risk because this risk can be allocated. Serious financial-exposure risks are

present throughout the Project Finance process and must be continuously monitored.

This exposure is best handled through *financial engineering* -specifically through financial swaps and options or other financial derivatives instruments. A diligent financial advisor will focus on the cash flow maintenance *throughout* the project by attempting to alter the cash throw-offs to make them acceptable to short-term and permanent investors. Both maturities and currencies can be matched to the needs of the project's investors and participants.

Financial engineering concerns include the following :

3.3.1.2.4.1 Interest Rate Risk

Changes in interest rates affect the cash flows and market values of borrowers and lenders who use contractually determined or fixed-income securities. *Coupon Swaps* are a convenient way to alter interest rate risk. A coupon swap is an "exchange of one coupon or interest payment for another that has a different configuration but the same principal amount" [Beidleman 90]. Borrowers in Project Finance usually have access to certain floating and fixed-rate debt markets. They are able to utilize either market with the assurance that they may swap the debt service into the coupon configuration of their choice. The project's financial advisor can design the necessary configuration of cash flows and hence manage these over the course of the project as interest rates change.

Note : Coupon swaps are a fairly recent phenomenon in capital markets instruments; they lenghten the time period over which interest rate risk can be hedged. For shorter maturities, Treasury note and bill interest rate future contracts can cover interest rate exposure and, hence, alter the project's cash flows, but swaps are essential to the effective management of longer-term interest flows.

3.3.1.2.4.2 Currency Risk

Foreign exchange rate fluctuations affect international projects in which project revenues or expenses are paid out in foreign currency.

To mitigate this risk, financial managers can convert the exposed cash flows into the desired home currency in proximate amounts and dates. Short-term transactions in major currencies can be readily hedged in the foreign currency forward or futures markets. However, recurring transactions, such as collecting revenues from an operating project, expose currency for much longer periods. In these cases, it is more appropriate to hedge with either a series of long-date forward currency contracts or else a currency swap to mitigate the currency risk [Beidleman 90].

Financial managers can also convert the exposed cash flows into the desired currency using currency-collateralized loans and foreign exchange options. The best method depends on the length of the exposure and hedging period, as well as the currency in which the transactions are denominated. During a project's bidding stage, options are particularly useful because they can cover uncertain or conditional future foreign exchange cash flows. The option to purchase or sell the foreign currency in question would not be exercised should the bid be unsuccessful. However, the longest option period is nine months (on all international options exchanges), which curtails long-date appllication.

To manage interest rate and currency risks is to manage a foreseeable problem. Unforeseeable, uncontrollable problems -such as "force majeure" events- are also a possibility throughout the life of a project. These risks cannot be reliably estimated and are not commonly provided for contractually. Project sponsors typically assume these risks themselves, though there is growing pressure for lenders to assume some portion of their cost.

3.3.2 BOT and BOO Schemes

3.3.2.1 Definition

Build-Operate and Transfer (BOT) and Build-Operate and Own (BOO) schemes are particular forms of the Project Finance technique. The principal difference between BOT/BOO schemes and the classical non-recourse Project Finance described in the precedent paragraphs is that in BOT/BOO some "second level" guarantees must be provided by the host government concerning local political and economic risks, while the classical Project Finance does not require specifically any government guarantee. It is a pure non-recourse scheme, the sole recourse being the cash flows generated by the project. In all other aspects (construction and operation risks, financial structure, etc..), BOT/BOO and Project Finance are similar.

What is exactly BOT and BOO ?

The structure of BOT or BOO is simple. Governments invite foreign and domestic contractors to form special ventures which raise finance for, build, and then operate projects to pay off construction financing and equity dividends. In a BOT scheme, the project is handed over to the government after a *finite* operating period -around 15 years in most cases. In the BOO approach, the venture operates the scheme for the *whole* of the project life, the equipment and facilities of the project remaining the property of the private investors with a possibility of sale to domestic investors before the expiration of the project life [MEED-b 87].

Generally, BOT and BOO are financing schemes for large-scale capital intensive infrastructure projects. BOT was pionereed by Turkey's privatizing government in the mid-eighties [MEED-b 87]; while BOO was implemented for the first time by Pakistan's privatizing government in 1987 [MEED-a 87]. The

basic premise of the BOT/BOO concept is that construction financing is covered by investors outside of a government's public investment program.

Practically, BOT leads to a contract to be signed between the host government and the promoter (or sponsor). This contract is a concession during which the promoter will own the project. The period of operation is based on the expected cash flows of the project [Selwan 90].

One special feature of BOT/BOO is that the project cannot rely on any *main* guarantee from the government and must be analyzed based on its proper cash flows, without considering any consequence of decisions that could be taken by the government and that could affect the feasibility of the project. However, the consequences of government decisions and policies which could affect the project indirectly are indeed guaranteed by the host government. Those *secondary* guarantees -also called "second level" guarantees [Selwan 90]- could be summarized in four main points.

First, the host government should give guarantees concerning the consequences that might emerge from domestic political decisions and that might affect negatively the construction or the yield (during operation) of the project. Another main point concerns the cash flows generated during the operating phase. There should be a guarantee for the normal transfer of funds and the stability of exchange rates. Those two items are necessary in order to convert the local currency provided by the cash flows from operations into foreign currency, and to transfer the funds to repay the loans and the investments provided by investors. Third, a guarantee concerning the transfer of the project ownership is necessary at the end of the concession. It can be done by signing during the contract negotiation, a selling convention for a determined price at a specified date. And finally, the government should guarantee the payment of financial backup in order to reach the equilibrium agreed upon during the contract's negotiation in the operating phase in the

event the revenues are lower than expected due to reasons external to the operator's management. For example, the reduction in the amount of energy bought by the local public utility from an electricity power plant would force the local authorities to pay the required sum to reach the agreed upon level. This financial backup is in fact just the difference between the expected minimum revenues and the actual revenues [Selwan 90].

3.3.2.2 Objectives of BOT and BOO Schemes

The objectives in using a BOT or BOO scheme to finance the construction of an infrastructure project are different whether we are considering industrial or developing countries. In the following paragraphs, I will expose the goals those countries are expecting to attain with this new project financing scheme.

3.3.2.2.1 Industrial Countries

The reliance on the private sector to build and operate large public works projects is principally aimed at transferring to the private sector the large industrial or *publicly-oriented* enterprises (i.e., infrastructure). The developed countries have two main goals for such a move. First, this strategy allows the state to reduce its financial involvement in megaprojects. The local authorities can now rely on the domestic and international financial markets to provide the long-term finance required to support the development of these types of projects. Development is required to meet demand which is generally always rising.

Second, this strategy allows the private sector's managers and executives to take advantage of such oppoortunities in order to prove their skills in the development and management of megaprojects, and be able to compete efficiently in international markets. The participation of the private sector in

the ownership, construction, and ownership of infrastructure projects in the United States through the conventional project financing techniques, has proven to be economically feasible, and can be extended to the use of BOT/BOO schemes in the U.S. and other industrial nations. For example, in France, the construction and operation of highways and toll-bridges is increasingly being financed by using BOT schemes implemented by joint-ventures of domestic and international contractors [Selwan 90].

3.3.2.2.2 Developing Countries

BOT and BOO were first implemented in developing countries -Turkey and Pakistan respectively. And indeed, contractors and financiers seeking large-scale capital intensive projects in developing countries, are increasingly turning to the BOT/BOO concept. This trend has now reached a watershed with the World Bank's leadership in formulating and developing new BOT and BOO projects. The case for wider use of BOT/BOO schemes in developing countries is championed by Ibrahim Elwan, one of the World Bank's divisional heads for energy programs. It offers "flexibility, lower overall costs, and incentives to private developers" he argues [MEED-b 87].

One recent example can be drawn from Pakistan which has used BOO schemes to develop a number of electric power plants. The *core* of the three Pakistani schemes is the way World Bank financing can be used to attract additional funds from other sources. In this way, the Bank helps to *mobilize resources* that might not otherwise be available. In the Pakistani schemes, the private investors accept all the project's risks. Sovereign guarantee is provided only up to the amounts owed to international funding agencies. Those include the Saudi Arabia-based Islamic Development Bank (IDB), The US Agency for International Development (USAID), the UK's Overseas Development Administration (ODA), and the International Finance Corporation (IFC). Agency money is to be provided to the Pakistani government, which will pass

it on to private schemes. This private sector "window" will channel money through the government to the private sector for schemes that are cost-effective and are "financially and technologically viable" [MEED-b 87].

In the Pakistani BOO projects, equity investors will have to provide 25% of the financing themselves, the window will provide another 30%, and the remaining 45% would be covered by commercial loans and supplier credits. This contrasts with schemes implemented in other developing countries. In Turkey, for example, the state is a direct or indirect shareholder in BOT/BOO projects, and through the compromise of contingency funds, has provided at least a partial sovereign repayment guarantee for construction financing [MEED-b 87].

On the surface, there might appear to be some potential disadvantages to BOT or BOO schemes. These are, namely, in that with the foreign debt repayment, repatriation of dividends represents an outflow of scarce hard currency, and might cost more than conventional project funding. However, this is more than offset by the benefits accruing from the the additional foreign and local private resources mobilized without government guarantee and the debt relief to the public utility for example, during the construction period of the power plant.

In the Pakistani model, like the Ankara model, there will be an "escrow" account, into which part of the BOO venture's profit will be paid to secure the government against the venture's non-performance [MEED-b 87]. This gives the government leverage -the venture gets all its initial equity when the debt is retired after 20 to 25 years. The government has additional security as far as the venture's performance is concerned, by virtue of the completion and operating guarantees provided by contractors.

Pakistan's Water and Development Authority will purchase the electricity output at *agreed* volume and price levels. However, because the Authority does not have to borrow construction costs the burden of debt on electricity tariffs to customers is reduced.

World Bank's Elwan summarizes the benefits of BOT/BOO schemes in developing countries as follows: "BOT/BOO will reduce the burden of investment on the public sector, particularly during periods of financial constraints. Furthermore, as well as mobilizing international resources, The BOT/BOO approach will encourage local private sector capital formation. Shares in the projects are sold to the private sector through the domestic stock exchange, once the schemes are commissioned" [MEED-b 87]. However, to ensure commitment by the initial investors, they would be required to remain with the scheme for at least 10 years. Initial investors can sell their shares after that. Finally, Elwan says that "BOT/BOO schemes will eventually encourage repatriation of flight capital -capital invested outside the home country- and attract foreign exchange savings hoarded overseas by expatriate workers of developing countries" [MEED-b 87].

Today, the first private sector project with 1,292 megawatts' capacity is being installed at Hab River in Pakistan. A number of other power-generation projects are still under construction. It is expected that those projects will raise the generation capacity by 4,235 MW by June 1992 [Uddin 91]. The total number of electrified villages as of February 1991 had risen to 34,928, or 71% of the total. In coming years, the remaining villages will also be electrified [Uddin 91].

Recent BOT project proposals in the Middle East are shown in Table 3-12.

3.3.2.3 Participants in the BOT/BOO Process

In BOT/BOO schemes, we have six main actors with different impacts on the process. The main actor is the private promoter, also called the sponsor. He is the *creator* of the project. The second important actor is the operator of the infrastructure because he will be in charge of the project's day-to-day operations. The operator is responsible to get the best out of the equipments and facilities (this is generally the key for a successful BOT/BOO project) [Selwan 90]. The other participants are the Public Authorities, the constructor, the investors, and, least but not last, the lenders.

3.3.2.3.1 The Private Promoter

The private promoter's ability to create, execute, and operate the project is based from the lenders and investors point of view on different characteristics. The first characteristic is the promoter's technical and financial expertise that would allow him to undertake and ultimately, conclude successfully the project. Second, the reputation and previous experience in similar projects is an important criterion for the selection of an adequate private promoter. Finally, the motivation and commitment of the promoter play an important role. This criterion can be most sustained by the promoter participation in the equity-financing of the project. Furthermore, the promoter ability to assemble local and international investors and lenders is primordial. The private promoter can be a local developer, or a local or international engineering and construction (E&C) company. A joint-venture between domestic and international private concerns is also feasible.

3.3.2.3.2 The Public Authority

As the purpose of BOT/BOO is to build an infrastructure project which is ulimately transfered to the host government or domestic investors, the

government has to regulate the different phases of the project. This regulatory role is necessary in addition to the "second level" guarantees mentioned earlier in this paragraph. The host government should first of all, authorize and accept the location and utility of the project. Second, he should regulate the process following which the transfer of funds generated by the project is to be undertaken. He should authorize and facilitate such process if the country was previously under strict transfer of funds policies. Third, the host government must regulate and supervise the contracts signed between the promoter and the constructor, and the operator and the public utility. Finally, the government can give some financial incentives (i.e., tax exemptions) to promoters and constructors depending on the relative importance and impact of the project on the local economy.

3.3.2.3.3 The Constructor

The constructor is responsible for the proper execution of the construction phase of the project. He should be aware of the host country's needs and regulations (e.g., construction codes, environmental regulations, safety procedures, employment policies, etc..). The constructor should be able to provide a final and reliable cost estimate that takes into account the eventual changes in the economic conjuncture of the host country. This does not mean that the constructor will ultimately assume all the cost risks, but he will surely bear the bulk of the risks associated with the construction phase of the project.

3.3.2.3.4 The Operator

As mentioned earlier, the operator will assume the responsibility of the efficient and optimal operation of the facility. We should keep in mind that in a BOT/BOO scheme the operational phase is essential and the sole security to the promoter and investors to cover construction and development expenses.

An infrastructure project is a long-term investment, and the operator is the main actor after the construction phase, as soon as the project is in its operational stage. Generally, the operational phase is between 15 and 25 years for BOT schemes [Selwan 90], and the operating life of the project for BOO schemes.

3.3.2.3.5 The Investors

Investors are looking for an investment that would maximize the yield in regard with the associated risks they are bearing and the length of the investment. Here, we note that the length of the investment is generally equal to the length of the concession, especially in developing countries where the capital markets are not sufficiently developed to allow foreign and domestic investors to sell large blocks of their holdings in the secondary market [Selwan 90]. The magnitude of the investment involved in infrastructure projects financing precludes a high liquidity for equity investments. Therefore, investors should look at the expected yield for the long-term, and not be interested in short-term or speculative returns. This is why the technical and financial feasibility of the project in addition to the reputation of the promoter play a major role in securing investors' confidence in the long-term prospects of the project.

3.3.2.3.6 The Lenders

The lenders, which are generally commercial banks, that enter a BOT or BOO scheme will have to bear some of the risks associated with the project. Although this additional risk is reflected in the borrowing rates, lenders are concerned with the default risks associated with the schemes, and focus extensively on the economic and financial feasibilty of projects.

In practice, the banks do not rely completely on the feasibility studies provided by the promoter. They prefer to have their own study done, because infrastructure financing requires substantial amounts for long-term commitments, and the slightest deviation from the expected outcome can translate into huge financial losses. Here, we note that a banks-sponsored feasibility study is not necessary if the promoter's reputation is strong enough, and further if a prestigious development agency (e.g., the World Bank) has placed it "seal of approval" on the promoter's feasibility study.

If the project is to be executed in a politically unstable environment, lenders will try to secure further their participation by using private or public insurance agencies (e.g., OPIC). Generally, the insurance provided by OPIC or any other guarantee corporation is solely against political and economic risks of the host country (e.g. expropriation and funds transfer risks) , and not against the technology or credit risks of the project.

The role of the different participants in a BOT or BOO scheme is shown in Figure 3-1.

Table 3-1: Individual Enterprise Shareholders in Selected Countries, 1986

Country	Estimated Shareholders (thousands)	As Percent of Total Population
Industrial Countries		
United States	47,000	19.6
Japan	22,000	18.3
United Kingdom	8,500	15.2
Canada	3,200	12.8
France	7,000	12.6
Developing Countries		
Chile	500	4.2
Jordan	100	2.9
Brazil	3,300	2.4
Korea, South	755	1.8
India	8,000	1.1
Portugal	70	0.7
Venezuela	75	0.4
Mexico	200	0.3
Nigeria	200	0.2
Argentina	50	0.2

Note: These estimates refer to direct ownership of shares of business enterprises and exclude participants in mutual funds and other vehicles for indirect ownership of shares. If the latter were included, the percentages would increase by as much as 6.7 percentage points, for a total of 26.3% for the United States. Other countries for which data were available were Canada (1.9% increase), France (2.7%), and India (0.2%).

Source: [Gill 89]

Table 3-2: United Kingdom: Privatization of Major Public Enterprises, February 1981 - January 1987

Date[1]	Enterprise	Proceeds (millions of pounds sterling)
February 1981	British Aerospace	43
October 1981	Cable & Wireless	181
November 1983[2]	Britoil	627
December 1983	Cable & Wireless	263
June 1984	Enterprise Oil	382
July 1984	Jaguar Cars	297
November 1984[3]	British Telecom	4090
May 1985	British Aerospace	346
August 1985	Britoil	426
December 1985	Cable & Wireless	571
December 1986[4]	British Gas	1796
January 1987[5]	British Airways	415

Notes:

1. Dates shown indicate initial offering.
2. Of which 334 million sterlings in 1982/83 and 293 million in 1983/84.
3. Of which 1352 million sterlings in 1984/85, 1246 million in 1985/86, and 1084 million in 1986/87. Also included is 408 million generated by the sale of British Telecom stock and preference shares.
4. Total estimated proceeds are 5090 million sterlings, with the second installment having been due in June 1987 and the third in April 1988. In addition, 750 million sterlings of British Gas debt was redeemed in May 1987.
5. Total estimated proceeds are 825 million sterlings, with the second installment paid in August 1987.

Source: [Hemming 88]

Table 3-3: Revenues from Privatization in Great Britain, 1979 to 1987

Fiscal Year of Sale	Net Proceeds (in millions of pounds)
Sales of local authority council houses	
1979-1980	500
1980-1981	800
1981-1982	1,400
1982-1983	1,850
1983-1984	1,700
1984-1985	1,600
1985-1986	1,200
Sales of Public Enterprises	
1979-1980	**377**
5% of British Petroleum	276
25% of international Computing Labs	37
Shares in Suez Finance Company	22
Shares in Drake and Scull Holdings Ltd.	1
Land and Buildings of Regional Water Authorities, New Towns, and Property Services Agency	41
1980-1981	**405**
50% of Ferranti	55
100% of Fairey	22
North Sea oil licenses	195
49% of British Aerospace	43
Miscellaneous (including motorway service area leases, land, and buildings)	90
1981-1982	**494**
24% of British Sugar	44
50% of Cable & Wireless	182
100% of Amersham International	64
100% of National Freight Corp. (to its employees)	5
National Enterprise Board subsidiaries	2
British Petroleum rights issue	8
Crown Agents and Forestry Commission land and property; miscellaneous	21
Motorway service area leases	19
New Towns	73
Oil stockpiles, other stocks, and Forestry Commission	76

1982-1983	**488**
51% of Britoil (first cash call)	334
51.5% of Associated British Ports	46
Crown Agents Holding, Forestry Commission land and miscellaneous	38
Motorway service area leases	4
North Sea oil licenses, and Oil stockpiles	66
1983-1984	**1,142**
Britoil (second cash call)	293
7% of British Petroleum	543
25% of Cable & Wireless	263
Scott Lithgow shipyard	12
Miscellaneous	32
1984-1985	**2,132**
Associated British Ports (remaining 48.5%)	51
British Telecom (first installment)	1,352
British Telecom (loan stock)	61
Enterprise Oil	142
NEB subsidiaries	382
Forestry Commission land and miscellaneous	40
North Sea oil licenses	121
1985-1986	**2,702**
British Aerospace	346
British Telecom (second installment)	1,246
British Telecom (loan stock)	61
Britoil	426
Cable & Wireless	571
NEB subsidiaries	30
Forestry Commission and Land Settlement Association (land and buildings)	22
1986-1987 (See Note)	**4,400**
1987-1988 (April-December)	**5,100**

Note: Net proceeds for 1986-1987 are not available. Gross proceeds were: British Gas, 7.7 billion pounds; British Airways, 900 million; Rolls Royce, 1.1 billion; British Airports Authority, 1.3 billion; and British Petroleum (31.5%), 5.7 billion pounds.

Source: [Vernon 88]

Table 3-4: Price Discounts in the Offer for Sale of British PEs at "Fixed Prices"

Company	Discount (%)	Increase from issue price to share price in 9/30/1985 (%)
Amersham International	35	10
Associated British Ports	98	169
British Aerospace	15	66
British Petroleum	6	-130
British Telecom	91	111
Cable & Wireless	15	295
Jaguar Cars	8	45

Notes:
- The discount is measured by the change in price from the issue price to the closing price after one week's dealings after allowance for market-wide share price movements.
- The increase from issue price to market price on Sept. 30, 1985, is similarly adjusted for market-wide movements in share prices.

Source: [Kay 86]

Table 3-5: Changes in Share Prices of Privatized Firms in the U.K.

Firm	Issue date	Price (in pence) Issue	10/15/1987	10/22/1987
British Telecom	Dec. 3, 1984	130	265	222
TSB	Oct. 10, 1986	100	150	125
British Gas	Dec. 9, 1986	95	170	142.5
British Airways	Feb. 11, 1987	125	221	166
Rolls-Royce	May 20, 1987	170	208	152
British Airports Authority	July 28, 1987	100	150	118

Note: The two dates of Oct. 15 and Oct. 22, 1987, were chosen to reflect changes occured before and after the stock market crash ("Black Monday") of October 19, 1987.

Source: [Vernon 88]

Table 3-6: Methods of Privatization in the United Kingdom

Method of Privatization	Selected Examples
Public sale of shares	Amersham International[1], British Aerospace[2], British Telecom[3], British Gas, British Petroleum, Jaguar Cars[1], Cable & Wireless, Britoil, and Rolls Royce.
Selling or "giving" to the workforce and management	National Freight Corporation (NFC), and Hoverspeed.
Contracting out	Local authority and National Health System (NHS) services.

Notes:
1. 100% of the shares of Amersham International and Jaguar Cars were sold at the initial offerings.
2. 51.6% of British Aerospace was sold at the initial offering.
3. 50.2% of British Telecom was sold at the initial offering.

Source: Compiled by author from data in M. Pirie, *Privatization* (London, Adam Smith Institute, 1985), and data in *Economic Survey of the United Kingdom* (Paris: OECD, January 1985).

Table 3-7: Methods of Privatization in Developing Countries, by Region and Type, as of End 1987.

Region	*Public Sale*		*Private Sale*		*Contracting Out*	
	No.	Percentage	No.	Pecentage	No.	Percentage
Latin America and the Carribean	36	46.1	139	49.5	3	4.2
Sub-Saharan Africa	6	7.7	98	34.9	48	67.7
Asia	27	34.6	31	11.0	15	21.1
Pacific Countries	1	1.3	3	1.0	2	2.8
North Africa and the Middle East	8	10.3	10	3.6	3	4.2
TOTAL	**78**	**100.0**	**281**	**100.0**	**71**	**100.0**

Notes:

- "No." indicates the number of privatization transactions occuring in each region.
- The number of countries involved in each region is:
  - Latin America and the Carribean: 12
  - Sub-Saharan Africa: 25
  - Asia: 10
  - Pacific countries: 3
  - North Africa and the Middle East: 7
- *Leasing* transactions were: 15 in Latin America (29.4%), 22 in Sub-Saharan Africa (22%), 8 in Asia (15.7%), 4 in Pacific countries (7.8%), and 2 in North Africa and the Middle East (3.9%).
- Other methods of privatization included: Sale of assets, Employee Buyouts, fragmentation of PEs, and new private investment in existing PEs.

Source: Compiled by author from data in R. Ramamurti and R. Vernon, *Privatization and Control of State-Owned Enterprises* (IBRD, the World Bank, 1991).

Table 3-8: Project Financings in the United States, January 1, 1987 to August 31, 1988.

Power Production Project Financings

TOTAL	$5,702.2 million	5,076.4 MW	57 projects
Cogeneration	$4,400.4 million	4,577.2 MW	38 projects
Geothermal	$709.2 million	284.8 MW	7 projects
Hydroelectric	$272.1 million	102.5 MW	7 projects
Wood-fired	$338.5 million	112.0 MW	5 projects

Other Project Financings

TOTAL	$7,248.0 million	26 projects
Oil & Gas Development	$4,631.3 million	6 projects
Plant Construction	$1,344.9 million	5 projects
Resort Development	$593.3 million	5 projects
R&D Partnerships	$457.2 million	5 projects
Miscellaneous	$221.2 million	5 projects

Source: [Kensinger 88]

Table 3-9: Typical Allocation of Risks among Project Finance Participants

Types of Risk	Developers	Contractors	Lenders	Suppliers	Gov't	Investors
Technology	X					
Credit	X	X	X			
Bid		X				
Completion		X		X		
Cost overrun	X	X				
Performance	X	X		X		
Political	X	X			X	
Liability					X	
Equity resale	X	X				X
Off-take				X		

Source: [Beidleman 90]

Table 3-10: Project Risk Summary

Project Phase/Risk	Participant	Mechanism
Development Phase		
Technology Risk	Sponsors	Equity or subordinated debt
Credit Risk	Banks, Developers Sponsors	Letters of credit Credit rating
Bid Risk	Sponsors Financial advisors	Equity Success fee
Construction Phase		
Completion Risk	Contractors	Performance incentives and guarantees
	Sponsors	Turnkey contracts; use and occupancy
	Suppliers	Performance incentives and guarantees
Cost overrun Risk	Sponsors	Fixed price contracts and completion bonds
	Subcontractors	Fixed Price contracts and completion bonds
Performance Risk	Sponsors	Completion and performance guarantees
Political Risk	Sponsors	Tax-exempt finance, joint ventures with public partner, and OPIC (country risk)

Operating Phase		
Performance Risk	O&M contractor	Equity, performance guarantees
Cost overrun Risk	Sponsors	Throughout agreements, fixed price contracts
Liability Risk	National and local governments Insurance firms	 Insurance contracts
Equity resale Risk	Sponsors	Subordinated debt
Off-take Risk	Sponsors	Take-or-pay Take-and-pay Advanced payments

Source: [Beidleman 90]

Table 3-11: Selected International Financial Mechanisms Used for Project Finance

	Time frame of resource transfer	Extent to which project risks are shifted to financier	Extent to which involves concessionary resource transfer
Commercial Bank Loan	Short	Small	Small
Long-term Bond	Long	Small	Small
World Bank Loan	Long	Small	Moderate
IDA Term Loan	Long	Moderate	Large
Ex-Im Loan	Long	Small	Moderate
IMF Compensatory Finance	Short	Moderate	Large
Commodity Futures	None	Large	Small
Commodity Price-Linked Bond	Long	Large	Small
Equity Investment	Long	Large	Small

Source: [Paddock 91]

Table 3-12: Build-Operate Projects in the Middle East
(proposed in 1987)

TURKEY

* Three letters of intent have been awarded for thermal power stations burning imported coal. In order of priority, they are to:

  • A consortium led by Australia's Sea-Pac Control Services, including Japan's Chiyoda Chemical Engineering & Construction Company, the US' Westinghouse Electric Corporation and the local Sabanci Holding. Its proposal is for a 1,200-MW plant costing US$1,200 million at Yumurtalik, with an associated port and coal terminal with a throughput capacity of 10 millions tonnes a year.

  • Two US firms -Bechtel and General Dynamics- with Siemens and Kraftwerk Union, both of Germany, and the local group Enka. It has proposed an $800 million, 960-MW plant at Tekirdag.

  • Three Japanese concerns -Electric Power Development Company (EPDC), Mitsubishi Heavy Industries and Hitachi- which have proposed a 1,050-MW plant at Aliaga, near Izmir. It will cost an estimated $1,000 million.

* Two other thermal plants burning imported coal may follow. They have been proposed by Switzerland's Asea Brown Boveri (capacity 1,200 MW), and France's Alsthom (capacity 1,050 MW).

* The Turkish government has also invited proposals for three BOT highways projects -Izmir to Cesme, Izmir to Salihi, and Izmir to Urla.

PAKISTAN

* Three big BOO power projects with a total output of 1,340 MW are being backed by the World Bank. They are:

  • Two 600-MW stations to be built at Port Qasim or Hub Chowki, near Karachi. They have been proposed separately by Saudi Arabia's Xenel Industries and the UK's Northern Development Corporation, a subsidiary of the UK's Hawker Sideley. The two ventures have said they will build the plants next to each other to make them more cost-efficient in terms of fuel transport and storage, and other shared supplies and services. The World Bank may provide 15-20 percent of the $800 million

total cost as the nucleus of a funding group that will include other multi and bilateral agencies. Financial adviser is the UK's Morgan Grenfell & Company.

• A smaller plant supplied bu coal from an associated mine. This has been proposed by Pyropower-Pakland-Bechtel, a venture including local interests and the US' Bechtel. Bechtel, with another US firm, Peabody Development Company, and the local House of Habib, has submitted proposals to mine the coal using open-cast methods. Bank of America is financial adviser to Pyropower-Pakland-Bechtel.

• Germany's Siemens and the local Habibullah Mines have also submitted a proposal -awaiting ratification- for a small power plant in Baluchistan.

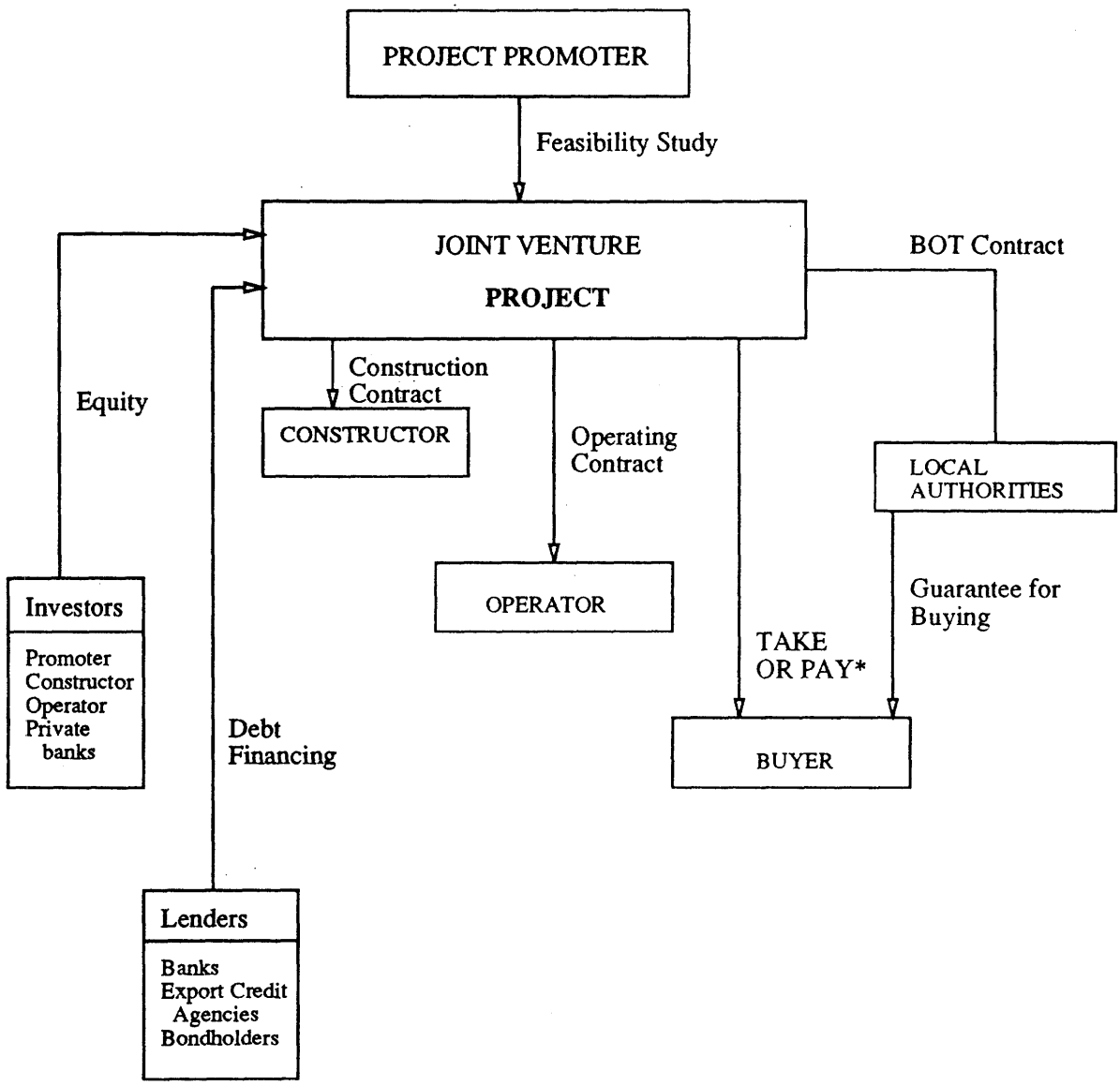
U.A.E. and OMAN

* In the UAE, Consolidated Contractors Company (CCC), an Athens-based, Lebanese-owned concern, has for some time been operating a gas pipeline supplying Dubai government installations at Jebel Ali from Sharjah fields.

* A similar BOT method has been proposed in Oman for a fertilizer project in Sohar.

Source: [MEED-b 87]

Figure 3.1: Participants in B.O.T. Schemes



* Take or Pay: Agreement through which the buyer will buy the output even if he does not need it

Source : [Selwan 90]

Chapter 4

Applications and Problems of Privatization

4.1 Introduction

We have seen that scores of governments throughout the world have announced their intention to foster the role of the private sector in the domestic economy, to dispose of some or all of the public enterprises that they own, and to contract out public service to private operators. It is the beginning of a worldwide rehabilitation program called: Privatization.

In the preceding chapters, I introduced the concept of privatization, and investigated the different methods and techniques used for the implementation of privatization. In this chapter, I will first discuss the areas of application of privatization in both developing and industrial countries. I will focus on privatization of public services: electricity generation, telecommunications, water supply, and transportation. I have chosen to focus on these areas of public services, because the need for privatization and private sector support will most likely arise in these areas in particular in the reconstruction and rehabilitation of Lebanon's infrastructure.

Empirical evidence showing the superiority of the private sector in providing public services is shown. This evidence is primarily drawn from the experience of the United States. However, evidence from other industrial and developing countries is also provided. The experience of Latin American countries in privatizing their public services -with a special emphasis on the cases of Argentina and Mexico- is thoroughly investigated.

Secondly, the problems and difficulties facing privatization programs worldwide are examined. The nature of problems varies from country to country and depends on the precise scope, magnitude, and objectives of the program.

We will see for example that ownership transfer using a public sale of shares method through the local stock exchange is not easily feasible in developing countries, as it is in developed nations like the U.K. or France, which enjoy the existence of a strong and efficient domestic exchange, and a fairly rapid access to major capital markets worldwide. The lack of an efficient stock exchange will thus be one of the difficulties facing privatization programs in developing economies.

Another problem facing privatization is related to the economic environment in which the program is implemented. Triple or double-digit inflation, constant depreciation of the domestic currency, significant public indebtness, and high variability in nominal interest rates, are all characteristics of economic environments in most developing countries; including, unfortunately, my homeland Lebanon, which is struggling to reach the land of macroeconomic stability.

Therefore, unless the economic environment is stabilized, privatization cannot be successfully implemented in developing countries. Most Latin American countries, which embarked in ambitious privatization programs in the mid-eighties, immediatly understood that macroeconomic stability is a key condition for the success of privatization. Until now, a number of Latin American countries have succeeded in stabilizing their economies -Argentina and Mexico in particular- while others (e.g., Brazil) are still struggling with high inflation and rapid depreciation of the national currency.

Other hurdles to privatization include: Political opposition, management and unions opposition, and inadequate legal frameworks. These problems also are most likely to arise in developing countries, although the U.K. has experienced intense political and unions opposition to its privatization program, especially at the outset of the effort in 1979.

Therefore, knowing that most of the problems of privatization described in this chapter are more likely to arise in developing nations, the chapter will rely heavily on the privatization experiences of Latin American, African, and Middle Eastern countries. Those countries present striking similarities with the case of Lebanon. However, the British experience will not be forgotten in this chapter, especially in the discussion of the political and unions opposition to the privatization program. Examples will be drawn also from the U.S.' experience in the privatization of electricity and water supply systems.

4.2 Applications of Privatization

4.2.1 Privatization of Public Services

The public services considered in the following paragraphs are: electricty generation, telecommunications, water supply, and transportation. I have deliberately chosen those areas of privatization because the purpose of this thesis is the evaluation of the role of privatization in the reconstruction of my homeland, Lebanon; and it is precisely in those areas that private sector's support is most likely to arise in rehabilitating Lebanon's infrastructure and public services provision.

The need for privatization and development in infrastructure is enormous around the world, especially in developing nations of Latin America, Africa, and newly democratized Eastern Europe. Recent economic figures and infrastructure needs in Eastern Europe are shown in Tables 4-1 and 4-2.

4.2.1.1. Electricity Generation

One of the major obstacles to the privatization of the electricity supply system is the widespread belief that the industry should be treated as a "natural monopoly", and that electric power must therefore be supplied by the public sector, or at least regulated by it. It can reasonably be argued that electricity transmission and distribution exhibit such economies of scale that they can be regarded as natural monopolies, but the generation of electricity can be carried out either for use by the generating firm or for sale to the public [Roth 87]. There is also the possibilty of cogeneration (an industrial process that produces heat and electricity simultaneously), with electric power being sold for use by the government. Therefore, the potential for privatization arises mainly in the *generation of electricity*, where the power generated is sold to local electric utilities. The reliance on the private sector to build and operate electric power plants has already been carried out in a number of developing countries and LDCs (see Chapter 3). Among those countries are: Turkey, Pakistan, Yemen, India, Bangladesh, and others (see Table 3.12).

In theory, one can envisage a publicly owned and operated transmission and distribution system (grid) buying electricity from competing suppliers at prices that reflect supply and demand forces. This *competition in supply* feature does not appear anywhere in the Thirld World, but legislation passed in the United States in 1978 requires "electric utilities to buy power from certain producers if it is offered at favorable rates" [Roth 87]. The law encouraged the emergence of hundreds of small companies that generate electricity from wind or water power. In this manner, electricity could be provided in the developing world.

One method of ownership that seems to have more attractiveness in less-developed countries than private enterprise is *cooperatives*. Cooperatives are private enterprises that are owned by the users instead of by shareholders

or investors [Roth 87]. Some detractors of cooperatives will argue that they are not all that private; it is true that in the early stages they do not need public support. This is because in the early stages electricity rates are controlled and usually set at below-return rates. But eventually that changes: older systems such as those in Costa Rica, Argentina, and Chile are private. BOT and BOO schemes which were thoroughly examined in Chapter 3, could also be an excellent method of privatization in electricity generation available to scores of developing countries.

4.2.1.2 Telecommunications

In most developing countries, demand for telecommunication services far exceeds supply, as evidenced by the high prices at which telephone lines change hands in cities where such transactions are allowed. A World Bank study posed the question, "Who or what group has decided that telecommunications investment should be constrained relative to demand by closely regulating and controlling inputs to the sector, its organizational structure, and the internal procedures of telecommunications operating entities, and by imposing numerous restrictions under which operating entities must operate ?" It concluded that, rather than the users, it must be the owners, suppliers, and regulators of the services -which in most developing countries are governments [Saunders 83]. Table 4-3 shows the number of telephone lines available per 100 people in Latin American countries. We notice that in most of these countries there are fewer than 10 phone lines per 100 people. That compares with 58.5 lines per 100 in the United States and 44.6 lines per 100 in France [Heywood 91].

In the past, the governments of developing countries and LDCs have generally decided that food, transport, power, health, and other most pressing needs should receive the most emphasis. So long as telephones were viewed as an inessential and largely luxury consumption, investment in the

telecommunications sector received low priority. In the last few years, this perception of the role of telecommunications has been changing, largely because of the explosion of telecommunications activity occasioned by the technological revolution. Modern telecommunications are becoming essential to business activity -initially to compete in the international marketplace and increasingly for domestic business activity as well. This revolution is generating pressure for change in the traditional organization of telecommunication activity and in the priority it receives in the investment world. Where developing countries have such a demand for telephones that individuals wait a year for installation, there is a strong case for allowing a competitive service to operate. A good deal of discussion about reform is going on, with many different mechanisms being examined, to make telecommunications entities more flexible, commercial, and efficient.

Proposals for *full-scale* privatization are extremely rare, even among the most active reformers, because most governments feel that, even if ultimately deemed to be desirable, full privatization is too large a step to be taken all at once [Roth 87]. Some governments are instead seeking *gradual* reform, through which the consequences of each change can be evaluated before the next step is taken. These reforms include :

- Internal reorganization of telecommunications entities, such as changes in procurement, pricing, and management systems.

- Creation of autonomous or semiautonomous government entities to replace government ministries.

- Joint ventures and management contracts with private operators.

- Permission granted to major competitors and users to create alternative systems and connect them to the public network.

Experience with private sector operation of telecommunications in developing countries has been mixed. In a number of countries, government-owned companies have been managed by *foreign* private firms with reasonable success. Private telecommunications companies owned by foreign interests were once common in Latin America, but most were nationalized in the 1960s. Today, Latin American countries are privatizing their telecommunications again (see next paragraph).

In conclusion, we say that the communications revolution requires developing countries to rethink their telecommunications strategies and make appropriate adjustments to meet escalating needs and pressures. Increased commercial orientation for existing PTTs which are still under government control, and an increased role in the near future for the private sector are important and highly desirable components of this adjustment. But care must be urged, as the problems are extremely complex and technology is evolving rapidly. Public interest concerns in telecommunications will always be important, so there will always be a role for the government, but now the private sector should be the driving force in telecommunications provision.

4.2.1.2.1 Telecommunications Privatization in Latin America

Latin America's public telecom networks are underveloped, overstretched, and often in a poor state of repair. According to statistics released in 1991 by the International Telecommunications Union (ITU, Geneva, Switzerland), there are 5.57 phone lines per 100 people in Mexico, and 9.58 lines per 100 people in Argentina. That compares with 58.5 lines per 100 in the United States. A study by the World Bank estimated that $27 billion a year needs to be poured into Latin America telephone networks to meet user demand by the year 2000. Yearly investments in public networks averaged about $4 billion in the late eighties [Heywood 91].

Solving these problems will be very costly for Latin American governments. Since most governments are already burdened with high debts and huge public deficits, they are turning to PTT privatization as a way of financing those much-needed rehabilitation programs. Foreign enterprises are encouraged to form joint-ventures with domestic investors to own and manage Latin America PTTs.

In general, the privatization process is as follows: Governments invite bids for management control and *partial* ownership of their PTT from consortia led by foreign telecom carriers, with financial backing from domestic private investors and international investment banks. A five to seven-year *monopoly* on public services is usually guaranteed, with extensions of up to 10 years if targets for expansion, rehabilitation, and improvement are met [Heywood 91]. During that period, the government usually holds up its involvment in the management of the PTT but retains partial ownership. At the end of the initial operation period, the private monopoly over the national PTT can be halted, and government regulations and policies are enacted to promote competition and encourage entry by competitors. Knowing that Latin America's PTT privatization is fairly recent (Chile was the first country to privatize its PTT in 1987), we are still in the private monopoly period and no competition is noticed in Latin America's privatized PTTs.

As mentioned, Chile set the trend in PTT privatization in 1987, handing over management control and partial ownership of its main domestic carrier, Compania de Telefonos de Chile (CTC), to a consortium led by Bond Corporation of Australia. Bond promised an aggressive modernization program, and from 1987 to 1989 CTC increased the number of installed lines fivefold (from 37,589 to 188,292), raising the proportion of digital lines in Chile's networks to 52%, by far the highest percentage in Latin America. In March 1990, Bond Corp. ran into financial problems elsewhere in the world, and sold a controlling 48% of CTC to Telefonica, the Spanish PTT [Heywood 91].

The dramatic improvement in Chilean telecom has encouraged other Latin American countries to follow suit. Similarly, the handsome profits made by Australia's Bond Corp. have aroused the interest of other foreign investors. Argentina was the first country to follow Chile's example, splitting the main public carrier, ENTEL, into four in June 1990. There are now two regional domestic carriers, both headquartered in Buenos Aires. The southern one, Telefonica de Argentina S.A., is managed by Spain's Telefonica; the northern one, Telecom S.A., is managed by STET, Italy's PTT holding company, and France Telecom.

Next in line was Telefonos de Mexico S.A. (TelMex), which was privatized in December 1990, and is now managed by Southwestern Bell Telephone Company of the United States and France Cable et Radio, a France Telecom subsidiary, in a consortium led by Grupo Carso, a Mexican private concern. The sale of TelMex was the biggest privatization sale in Mexico, and sale proceeds amounted to US$8 billion [Glade 91]. However, the sale was not easy to accomplish. The telephone unions opposed fiercely the transaction fearing that privatization would lead to heavy job losses. Digusted with the poor quality and inefficiency of telephone service in Mexico, the Mexican public pressured the unions to accept the privatization deal, and stood on the side of President Salinas' decision to privatize TelMex. Finally, telephone workers voted for privatization in return for job preservation agreements. It was also agreed that the proceeds generated from the sale are to be used by the Mexican government in social service projects such as housing, health care, and education [Glade 91].

However, in their rush to privatize their PTTs, Latin American governments are neglecting important regulatory issues to guarantee the continuity of foreign interest in PTTs' operation and ownership. For all their potential benefits, PTT privatizations may not be a cure-all for Latin America's troubled networks if not accompanied by clear regulatory policies. For example,

if the profitability of privatized PTTs looks in doubt in the near future, they could become "financial orphans" according to Bjorn Wellenius, an official of the World Bank studying telecom funding in developing nations. The PTTs will be unable to raise funds on commercial markets and cut off from finance meant for governments. Similarly, foreign investors might follow Bond Corporation's example in Chile and decide to take on their profits early, before their hopes for Latin America turn sour. Regulatory policies should be enacted at the outset of the privatization program to prevent such practices, and guarantee the commitment of foreign investors to the privatized PTTs for at least a determined period of time.

Other difficulties which are arising currently, and risk to become more acute in the future, have their source in the lack of a regulatory framework accompanying privatization. In Argentina, a government commission is struggling to resolve questions over what charges the regional carriers should levy for carrying each other's traffic. Access arguments also look likely in Venezuela, where BellSouth Corp. recently paid four times the market price for a concession to run a national cellular radio network, assuming that it would be allowed to interconnect with the terrestrial network now being privatized. In Chile, lack of regulations hinders competition because dominant carriers are not required to give operators even partial access to their networks [Heywood 91].

Recent PTT privatization transactions in Latin America are shown in Table 4-4.

4.2.1.3 Water Supply

Because of a genuine or alleged reluctance to pay for piped water in developing countries, private investors are reluctant to supply the necessary infrastructure. One way of dealing with the problem is to adopt the French

system of "affermage", whereby the infrastructure is financed out of public funds but operated by a private firm. Such systems are to be found in North and West Africa as well as in France, where there are sufficient qualified firms to ensure that cities can always solicit bids. There are different ways of bidding: the company might win a contract by being the one to quote the lowest rate of charge to provide customers with a package of services, or it might be the one to offer the lowest sum for the right to supply these services at prices determined by the government [Roth 87].

Agricultural production is often constrained due to lack of water, while surpluses exist in neighboring areas. Can large quantities of irrigation water be moved from areas of plenty to areas of shortage? One of the main constraints to activity of this kind is the absence of clear *property rights* for water. If such rights were clarified, it is conceivable that the movement of water over long distances could do as much to stimulate agriculture in India as it already does in California. A transfer of water on the basis of property rights implies payment to the sellers at freely negotiated prices.

A move toward the privatization of domestic water supply by granting property rights has taken place in Kenya [Kia 81]. In some regions, villagers had not been paying the small monthly tax that was to be used to help operate and maintain local water supply systems. Furthermore, frequent acts of vandalism on faucets, drainage facilities, protective fences, and so on made it financially prohibitive and almost physically impossible to maintain many of the public standposts. To overcome this, public water facilities in a few areas were converted to *water vendor* operations, a licensed vendor paying a subsidized rate for the metered water and selling it to users by the container at a slightly higher fee. As a result of the switch to kiosks, vandalism has been greatly reduced, thus saving government funds spent for repair and replacement; a small amount of revenue has been generated; and the rate at which people apply for house connections has increased [Kia 81]. Some people

presumably felt that if they were going to have to pay for water, it might as well be convenient.

4.2.1.4 Transportation

None of the above examples is of actual public sector divestitures; the total transfer of a public service to the private sector is comparatively rare, but there are some cases in transportation. In Mexico, for example, the port of Tampico was given to the workers when the government got tired of paying its deficits. Under worker management, efficiency increased markedly. However, in 1985 Tampico joined Altamira to become once again a public sector complex [Roth 87]. Road maintenance is being contracted out to private firms in countries as dissimilar as Brazil, Nigeria, and Yugoslavia [Harral 85].

A very interesting example of urban bus divestiture occured in Buenos Aires, where in 1951 a national enterprise known as *Transportes de Buenos Aires* took over all bus and rail transport operations. The services deteriorated rapidly both financially and in quality. By 1959 the service was losing the equivalent of US$40 million per year. In 1962 the situation became intolerable, and Transportes de Buenos Aires was dissolved. All the lines except the underground railway were turned over to the private companies that had been operating before 1951. Many of these companies were *empresas* (route associations) of owner-drivers empowered to serve just one route. The empresas governed routes, fares, and schedules, subject to rules determined by the regulating authorities. The vehicles used were typically twenty-three-seat buses, which provided a high frequency of service. Competition was created by the establishement of new empresas that duplicated the routes of existing ones. The Argentinian microbuses still operate profitably and provide a highly praised level of service [Roth 87].

A different approach is seen in Calcutta, where in 1960 all bus services were vested in the Calcutta State Transport Corporation (CSTC). The CSTC suffered from managerial and financial problems and was paralyzed by strikes in 1966. In response to its need for ready cash and to public demand before the 1966 elections, the government of West Bengal sold permits that enabled 300 private buses to be operated. The buses earned a profit, although they charged the same fare as the money-losing CSTC and had inferior routes. By the late 1970s some 1,500 full-size private buses were operating in Calcutta, in addition to about 500 private minibuses. In 1985 the private buses accounted for about two-thirds of all bus trips without subsidy. Meanwhile, the CSTC, which operated similar routes at the same fares, had to be subsidized at the equivalent of $1 million a month by a government desperately short of funds. A similar coexistence of profitable privately owned buses and loss-accruing government-owned ones can be found in Sri Lanka and in the state of New Jersey [Wynne 82].

In conclusion, I mention that of the services examined, electricity generation and telecommunications probably offer the greatest potential for private involvment because of intense demand, the comparative ease of collecting payment, and the poor existing levels of service in most countries. Transportation is also a fertile field for privatization, one that is already being tilled. Water supply, and also, education and healthcare, are more difficult to privatize, because payment by government may be required. But even when services are paid for by the public sector, management of them can still be contracted out to private enterprise. The use of BOT and BOO schemes could be most applied to privatization of electricity generation to build power plants, and in transportation privatization to build highways and bridges. Mexico has recently engaged in a huge highway-building program relying mainly on private sector financing using private toll schemes. This ambitious program is described in the next paragraph.

4.2.1.4.1 Transportation Privatization in Mexico: Private Toll Roads

With over 600 miles of private toll roads in operation and 2,700 miles planned and under development, Mexico is on its way to become a world leader in the number of miles of private toll roads. Even Mexico's rich neighbour, the United States, lags far behind when considering private toll roads. In December 1991, a new federal law was signed to allow private partnerships in highway construction in the U.S. for the first time. California has sized the opportunity with four private toll road projects in the planning stages [Scott 92].

The program in Mexico, which started in 1989, was born of necessity. Most of the bone-jarring 22,000-kilometer (13,750-mile) Mexican highway system desperately needs repairing, improvement, and extension. But government funds are tight. So Mexican investors have been given two- to 10-year concessions to build and operate new highways and bridges. Concession rights to 3,661 kilometers have been sold, and the goal is to build another 2,941 kilometers by 1994 [Scott 92].

The process is as follows: The Mexican government invites bids from consortia of domestic and private firms to build and operate for a given period highways and bridges. The length of the concession varies from 2 to 10 years, depending on the expected profitability and traffic flow figures. The projects must pay for themselves, and the Mexican government will not guarantee in any way the debt servicing of the projects.

Of the 32 Build-operate-transfer (BOT) concessions granted since 1989 - involving 28 highways and four international bridges- only nine projects are finished by now and sections of seven are operating. The completed jobs total 621 miles of highway and two bridges [ENR 92]. Total investment in the program is expected to reach $9.8 billion by 1994. As of 1991, investment

totaled $4.6 billion, 74% funded by the Mexican private sector [ENR 92]. Mexico's public toll road authority, its state-run oil company and state governments made up the balance.

However, in terms of road concessions, most Mexican banks seem to have reached their limit, both in terms of risk exposure and portfolio capacity. Domestic funding appears to be drying up, and the Mexican government is now looking for ways to lure foreign investment in the program. This will not be an easy task knowing that many of the projects are facing technical difficulties in addition to money woes. Many project cost overruns were reported recently. The reasons most widely mentioned are: incomplete, government-supplied engineering, overly optimistic traffic estimates, and government-set tolls, reportedly up to $0.25 per mile on average. This compares with $0.031 per mile on the New York State Thruway [ENR 92].

Although high tolls explain why short concessions can be lucrative, they also induce commuters to reduce their use of the toll road. For example, the 13-mile road between Mexico and Toluca costs about 5 dollars, while one can travel the length of Pennsylvania, which is more than 300 miles, and pay less than 10 dollars [ENR 92]. Mexico's private toll roads are by far more expensive than America's public toll roads, while the income per capita in Mexico is less than 10 times that of the United States.

Once again, the reasons for those difficulties in the implementation of privatization lie principally in the lack of a clear regulatory framework established by the government; and the short preparatory phase which did not allow for a precise estimate of the real domestic financial resources, and the exact technological capability of local engineering firms to prepare reliable feasibility studies. It is not enough to engage and commit itself to privatization. Privatization must be planned, weighted, and evaluated in a very objective manner by the government before embarking in ambitious

privatization programs. The failure of such programs can burden the domestic economy in a harmful way by drying up investments which could be utilized in more socially productive ways in other sectors such as education, health care, and domestic manufacturing.

4.2.2 Empirical Evidence of Private Sector Superiority

Economic theory as well as common sense strongly support the notion that private enterprises should be more efficient and productive than public enterprises. One question remains: Does the evidence support the theory ?

4.2.2.1 Electricity

A comparison of ninety-five publicly owned hydro-electric plants and forty-seven privately owned plants in the United States shows that the cost per kilowatt-hour was 21% higher, on average, for the public than for the comparable private plants [USGAO-b 79].

4.2.2.2 Water Supply

Data from a sample of twenty-four private and eighty-eight public water enterprises in the United States were used to construct a water cost model. It can be concluded from this model that average operating costs per 1,000 gallons of water produced is 25% lower (other cost determinants held constant) when water is produced privately than when it is produced publicly [Crain 78].

4.2.2.3 Streets and Highways

Street and highway maintenance is one of the few functions for which comparative cost analyses are available for private versus public supply in developing countries. A detailed evaluation of the costs of 19 types of road

maintenance functions in Brazil showed that private, contracted-out road maintenance was less costly than that performed by the Brazilian National Highway Department. On a weighted average basis, the cost for these 19 functions was 37% less when they were all supplied by private contractors [Harrol 82].

4.2.2.4 Urban Transportation

Considerable data on the comparative efficiency of private and public transport support the proposition that private suppliers are more efficient than public providers. In Australia, private urban bus systems cost almost 42% less per kilometer than do public systems [Feibel 80]. In West Germany, the nationwide average cost per km. is 160% higher for public urban buses than for private buses [Blankart 79]. In Abidjan, Ivory Coast, private mini-buses cover three times as many vehicle miles per employee as do public buses [Roth 84]. In New York City, the cost per vehicle hour is 10% lower for private than for public buses [Roth 84]. In Istanbul (Turkey), the cost per seat, per kilometer, is about 50% lower for private mini-buses than for public buses [Feibel 80]. In Calcutta, the capacity cost per kilometer is 35% less for the private than for the public buses [Feibel 80].

4.2.2.5 Nationalized Industries

Nationalized industries produce a wide variety of goods and services in Western Europe. When compared with their private counterparts, sales per employee are lower for nationalized firms. Adjusted profits per employee are lower. Operating expenses plus wages per dollar of sales are higher. Sales per dollar of investment are lower. Profits per dollar of total assets are lower. Sales per employee grow at a slower rate. And with the exception of nationalized oil companies, nationalized enterprises typically generate accounting losses [Monsen 83].

4.2.2.6 Garbage Collection

A nationwide study of 1,400 communities in the United States found that, after adjusting for factors that determine costs, private garbage collectors are about 30% less costly than public collectors [Savas 77]. Similar results have been reported for Canada and Switzerland [Kitchen 77].

4.2.2.7 Hospitals and Health Care

The U.S. government, through the Veterans Administration (V.A.), operates the largest health care system in the United States. When compared with private profit and nonprofit systems, the V.A. system is much more costly. For example, the construction cost per bed is 50% higher for V.A. hospitals than for nonprofit hospitals. And the construction cost per bed for V.A. nursing homes is almost 290% higher than for comparable private nursing homes [PrivRep 83]. These cost differences are explained in large part by the fact that the V.A. construction programs are overadministered and wrapped in bureaucratic red tape. For example, the V.A.'s construction administration staff is about 16 times larger on a per-bed basis than comparable private sector staffs, and the length of time from initiation to completion of construction projects is 3.5 times longer for V.A. projects than for private ones [PrivRep 83]. The V.A.'s operating costs are also much higher than those of private hospitals. The average cost at V.A. hospitals is 70% higher per episode for acute inpatient care, 48% higher for surgical care, and 140% higher for nursing home care [PrivRep 83].

4.2.2.8 Administrative Functions

Studies in the United States show that administrative functions are performed at lower cost by private than by public enterprises. For example, the costs of maintaining and pursuing comparable accounts receivable are 60% less

for private firms than for the federal government, and the federal government requires one year or more to obtain a judgment against a bad debtor, whereas private firms require only five months. As a result, the federal government writes off bad debts when they reach $600. The comparable figure for private firms is $25 [USGAO-a 79]. The comparative costs of processing payroll checks represent another disparity. Each check issued by the US Army costs $4.20. The same function is performed by large private enterprises at a cost of $1 [JEC 84]. The cost of processing a claim costs Medicare, the government health insurer, about 26.5% more than it does a comparable private health insurer. Moreover, private claims are processed more rapidly and with fewer errors [Hsaio 78].

4.3 Problems of Privatization

We have seen in the earlier examples of privatization in Latin American countries that privatization is not as easy as it seems. Multiple problems might arise and endanger the continuity of the programs. Those problems are sometimes characteristics of the local economy, and can be very detrimental to privatization if they are not given the adequate weight in assessing the chances of success of a privatization program. Overly optimistic programs can harm the economy more than the previous nationalization and state-ownership policies did.

The potential problems and difficulties most likely to arise at the outset or during a privatization program, are :

- Political opposition
- Management and unions opposition
- Inhospitable investment environment
- Inadequate legal structures
- Under-developed capital markets

4.3.1 Political Opposition

Poltical opposition is one of the most serious problems facing privatization programs. Although, generally, political opponents are active members of the opposition parties (e.g., the Labour Party in the U.K., or the PRD Party of Socialist Cuauhtemoc Cardenas in Mexico), sometimes opposition comes from ongoing or former government members which are or were involved in privatization and express their discontent with the program by resigning from their positions, or by refusing to co-operate with government officials to implement the program.

Political opposition is especially harmful in non-democratic regimes, where the military is generally close to pro-socialism and nationalistic activists, which are prone to defend the "poor" interest, and are very sensitive to the issue of foreign participation in the privatization program. Indeed, we notice that the domestic political constituency for privatization -and especially for divestiture- is small in many less-developed countries. The military is often opposed to privatization in places like Turkey, Brazil, and Argentina, where it initiated many of the public enterprises [Berg 87]. In some countries, half of the industrial sector is run by the ministry of defense, which will certainly be against privatization. Moreover, intellectuals in virtually all of the developing world are against privatization [Berg 87].

In democratic regimes, political opposition does not have a significant impact, simply because the voters can express their dissatisfaction with privatization by casting their votes in favor of the opposing party. Therefore, government officials can regularly "gauge" the people's satisfaction with the process by following closely periodic elections results.

Political opposition may be based on ideology grounds (e.g., pro-nationalization and pro-central planning politicians), or simply driven by self-

interest considerations from government members fearing that privatization will lessen their power and influence on domestic decision-making, by placing key decisions about national resource use and disposition under private control.

4.3.1.1 Political Misconceptions About Privatization

Robert Poole [Poole 87] identifies four political misconceptions about privatization. Those misconceptions are often cited by political opponents to privatization, and constitute the basis of their arguments in their fight against privatization. Poole explains how these arguments are generally presented to the public and gives interesting counter-examples proving that those arguments, although perfectly plausible in the surface, are in reality misconceptions, used in a misleading way by political opponents to privatization. Those misconceptions are :

- *"The service must be provided by the state to ensure that the poor will have access to it."*

This widely believed proposition is one of the major arguments used to defend the provision of public services by the state, often at derisive and heavily subsidized prices. Ironically, such a policy can actually be harmful to the poor. A heavily subsidized transit system, for example, does manage to keep the prices low. But there are numerous other consequences of subsidization: a lack of cost consciousness by management and employees; continuation of little-used routes and toleration of above-market pay scales and inefficient work policies, for instance. The result is often a very costly transit system that is not responsive to changing demands for service. The poor are especially vulnerable because they rely heavily on public transit. Moreover, although the poor receive the greatest benefit from subsidized prices, they

themselves pay many of the taxes used to provide the subsidies through sales or value-added taxes, property taxes (as part of their rent), and corporate taxes (as part of product prices). There is also the huge waste involved in subsidizing the majority of riders, who are not poor and who could readily afford to pay market rates.

A far more efficient alternative is to make use of what the U.S. Department of Transportation calls "user-side subsidies", which entails subsidizing only those users who are too poor to pay market-level prices, and letting everyone else pay the full rate [Poole 87]. The transit system can then be run as a business, presumably by private entrepreneurs interested in getting the job done in the most efficient way. This mechanism is usually accomplished through vouchers. The state can issue transit vouchers, health care vouchers, housing vouchers, or school vouchers, each redeemable only for the designated service, that the service provider can present for reimbursement by the state. The provision of vouchers solves the problem of access by the poor, allowing facilities to open up entire areas to more efficient provision of services by private enterprise.

- *"Public services should be organized for service, not profit."*

This objection is purely emotional or ideological, with little real application to reality. Even the most sensitive -whether it be the skill of a surgeon or the compassion of a clergyman- are rewarded with a regular income. Everyone engages in a trade or profession in order to "profit". What separates productive economies from stagnating ones is the presence or absence of human motivation to devote talents most effectively toward identifying and meeting the real needs of others. This is precisely what entrepreneurship is designed to do. By ruling some areas of life off limits to entrepreneurship, a society denies itself a vital source of innovation and creativity. The desire for profit is what motivates entrepreneurs to seek out

and fill the vast diversity of human needs. There is no dichotomy between profit and public service.

- *"Many public services are 'natural monopolies', so they should be operated by the public sector."*

There are two relevant questions to ask about this assertion. First, are the services in question really "natural monopolies" ? And second, even if they are, is public ownership best ?

All too often, existing providers of a service claim that their field is naturally monopolistic or oligopolistic in order to prevent the introduction of competition. For decades this claim supported public-utility type regulation of airlines, railroads, bus lines, trucking, and taxicab service in the United States [Hanke 87]. But within the past decade significant deregulation has occured in all of these areas, leading to expanding service and lower average prices for the majority of consumers [Poole 87]. Even such traditional public utilities as telecommunications are being opened up to competition, and studies of even limited competition among both electricity firms and cable TV firms show lower costs and greater responsiveness to consumers. Therefore, "we should be very suspicious of claims that a given public service represents a 'natural monopoly', and we certainly should not protect any provider against entry by other would-be providers." [Poole 87].

Even where there is a political consensus that a utility should be provided through a monopoly, it is not all clear that state ownership is the preferred form. American telephone service has generally been acknowledged to be among the cheapest and best in the world. Yet it has always been provided by private -though regulated- franchised monopolies. Most U.S. electricity and most French water supply systems are also provided by the private sector. Poole contends that "the *possibility* of competition in the private

sector is a better protection for consumers than the *guaranteed* monopoly of a public sector bureaucracy, given what we have learned about the relative performance of the public sector versus the private sector in terms of both cost and responsiveness".

- *"There won't be enough suppliers to permit competition."*

The implication of this claim is that only one of a handful of firms will actually be qualified or willing to enter a field, leading to a monopolistic or oligopolistic situation that will harm consumers; hence the status quo of state provision should be maintained.

The first problem with this view is the assumption that a permanent public monopoly is better than a temporary private monopoly. Numerous studies of how bureaucracies actually perform dispel the naive notion that civil servants are more altruistic or enlightened, on the average, than entrepreneurs. And because a public monopoly is generally permanent, consumers have no hope of an alternative if the service is costly or of low quality. Turning the service over to one or a few private firms under conditions that permit competition at least offers the chance of improvements, as new suppliers are ultimately attracted by the monopoly profits being earned by the initial entrant.

But the reality is likely to be even better for consumers. In virtually every field of public service, many possible suppliers exist. For example :

- The employees of a public service agency can form a company and bid for the contract to provide the service (employee buyouts);
- Administrators frustrated by bureaucratic constraints will often be motivated to form companies to do the same work more efficiently;
- Firms in related fields may be attracted by the chance to diversify into

a new area;

- Many labor-intensive public services are ideal start-up businesses for lone entrepreneurs, of which there will always be a good supply if the opportunity to make money is present (garbage collection is an example).

Finally, it is only fair to mention that the political risks to any leadership that heads down the road of privatization are extremely high [Berg 87]. The process of divesting state enterprises involves an admission of *national guilt*, as it were: the great number of white elephants constituting huge deficits means terrible mistakes were made. Divestiture is a very tough political action to take, and very few governments have shown themselves willing to take it [Berg 87]. A story illustrates just how difficult this can be. A methanol/gasohol plant built in Kenya cost a billion Kenyan shillings. It never operated, and the best offer for the plant was 5 million shillings. To accept such a price for this huge piece of machinery and publicly admit that it was a gross failure would have been extremely difficult. And the government, of course, never did.

4.3.2 Management and Unions Opposition

The labor union movement is traditionally strong in developing countries. In Latin America, for instance, a high percentage of the workforce is unionized, and union leaders occupy high positions in the executive and legislative branches [Glade 91].

The most powerful union leaders belong, logically, to the economic sectors that previously enjoyed the benefits of an economic growth strategy based on protectionism, indiscriminate subsidies, and a strong state. If the current trend calls for an immediate reallocation of resources, sectors that feel threatened will resist instinctively. Thus, unions tend to oppose any attempt at reform, including privatization [Glade 91].

In the few recent privatization experiences, the unions and PEs' management generally played an opposition role throughout. Only when under tremendous pressure will union leaders agree to negotiate, to avoid losing all their power. Such pressure is building up in developing countries, where the genral public is disgusted with the poor service and inefficiency of the public sector. For example, we have seen earlier that unions opposition was the main hurdle facing the privatization of *Telefonos de Mexico*, Mexico's national telephone company. It was only after tremendous pressure by the general public, that the telephone union has accepted the deal in return for job preservation agreements. The recent privatization of *Aerolinas Argentinas*, Argentina's national airline company, would have been unthinkable only a short time ago, mostly because of union opposition. The powerful airline union, however, has been forced to accede in a climate of public disgust with poor service and inefficiency [Glade 91].

Unions and management opposition to privatization is encountered in both developing and industrial countries. The unions oppose privatization mainly because they fear heavy job losses after privatization, knowing that overmanning is a problem inherent in all state sectors, and reduction in staff is a logical consequence of divestiture to profit-oriented concerns [Berg 87]. Management is against privatization, again for obvious reasons: they don't want to see their particular interests and privileges shrink away.

The fear of job losses and unemployment is justified. As an example, I show in Table 4-5 the percentage of jobs lost after the privatization of the U.K.'s local authority cleansing system in the early eighties. We notice that around 38% of the previous number of jobs were lost after privatization [Ascher 87].

However, if governments anticipate the problem, techniques can be developed for dealing with it. Among the methods that can be used are the following:

• *Contractor preference requirements.* When a public service is first being privatized, the state can require that the company or companies taking over give first preference in hiring to the displaced government workers.

• *Phased-in privatization.* Another option is to implement privatization gradually, usually on a geographical district basis. Public employees displaced by the first privatization can be transferred to other (not yet privatized) districts to fill any vacancies arising from normal attrition (employment turnover in state and local public services can range from as little as 5% to as much as 20% per year) [Poole 87].

• *Worker enterprises.* Government employees in an enterprise slated for privatization should always be given the option of forming a company and bidding for the enterprise in competition with other bidders. This is especially feasible when considering peripheral privatization (i.e., contracting out the provision of goods or services). A variant of this idea is to require a department to bid against outside firms without requiring conversion to corporate status. If the department wins the bidding, it continues to perform the function in accordance with the terms of its bid (which may mean a significant revision of work policies and fewer total employees). If it loses, the work goes to the winning outside firm, which may or may not offer to hire the now displaced workers.

Finally, whenever possible, it is wise to give affected parties a stake in privatization. The compensation of agency administrators can be based on achievement of the maximum level of performance per unit of money spent instead of on the size of the agency (as measured in money and numbers of employees). This gives the administration a tangible incentive to seek out more cost-effective ways to operate, such as contracting out. Similarly, when a state agency is denationalized, the natural fear and opposition of the work force may be overcome if it is given (or allowed to purchase cheaply) shares of stock in

the newly privatized company. ESOPs and pension plans -which were described in Chapter 3- can be established to implement employees' ownership. The transfer of public enterprises to employees has been accomplished with great succes in the U.S. and Great Britain [Poole 87].

One example of a public to private transition in the U.S. involved the contracting out of data processing services in Orange County, California. Orange County is the second-largest county in California; a very large department did all of the data processing for the county government. A number of firms offered bids for a seven-year contract, and the winning firm's bid amounted to something like a 25% reduction in the annual cost compared with county's estimate. In addition, the winning firm offered jobs to virtually all of the existing employees. Clearly, the firm would have a problem if it intended to keep all of the employees but charge the county only 75% of the previous price. It needed to reduce the level of employment within the first few years in order to meet the contract and not go broke. The firm succeeded, using two methods.

One was to offer lateral transfers to other parts of the firm, once it became familiar with the new employees. The firm happened to be the Computer Sciences Corporation, a fairly large provider of computer services in the United States, so there were many job openings throughout the company's operation. The other method was simply to take advantage of normal employment turnover, somewhere between 5 and 10% per year. For the first several years, vacant positions were not filled, and work was reorganized and functions absorbed. Utilizing mainly these two methods, the company was able to cut the work force by about 20% in the first two years of the contract and succeed in meeting the bid price to the county.

The firm was also successful in motivating the employees to work for it, first because the firm had a good reputation in the computer field, and second

because the possibility of transfers to other parts of the company opened up career paths to employees that they would not have had working for the county government. The trade-off was the security of civil service employment for opportunities to do more interesting and different types of work within the company [Poole 87].

4.3.3 Inhospitable Investment Environment

Privatization is about capital investment. And capital investment needs an hospitable economic and monetary environment. Therefore, developing countries must first stabilize their investment environment before launching ambitious privatization programs.

Generally, developing economies registered triple or double-digit inflations in most of the late seventies and early eighties. Living with high inflation has produced adaptive behaviour and expectations, as well as economic policies and institutions, that would seem strange in other circumstances. Therefore, understanding high inflation's effect on the economic environment is essential to understanding why so little privatization has occured in developing countries until now.

A fundamental characteristic of high inflation is that it reduces the time available for economic decisions. Strong oscillations in the inflation rate and the violent price fluctuations they produce also reduce the predictability of key variables and increase uncertainty [Glade 91]. In this environment, long-term investment, which is the main characteristic of privatization-related investment, is only an illusion. Short-term and speculative investments dominate.

Besides high inflation, other economic defficiencies that affect negatively the investment environment hospitable to privatization, are :

• *Rapid depreciation of the national currency.* In developing nations, the national currency tends to be weak and unstable versus hard currencies (e.g., US Dollar, Deutch Mark, Japanese Yen). The weakness of the domestic currency is not in itself a defficiency. However, high variability in the exchange rate of the domestic currency versus hard currencies is a major concern. No long term investment decisions can be made - especially if the expected cash flows are denominated in the domestic currency- if the conversion rate to hard currency is variable. Long term business planning is halted. Furthermore, rapid depreciation contributes to continued capital flight, since only a very high return can cover the risk of holding assets in a weak currency. The stability or relative stability of the exchange rate is primordial to encourage long term planning, and to halt capital flight.

• *Variability in nominal interest rates.* Variability in the nominal interest rate destroys any attempt at fixed-rate financing. Although floating-rate financing can be used, fixed-rate financing is always preferable for long term investments.

• *Weakness of the domestic private sector.* In developing countries dominated by public sector activity, the domestic private sector lacks the enough capital, technical and human resources to undertake a successful privatization program. However, in developing countries with mixed economies, we notice the existence of a relatively strong and capable private sector. Nevertheless, in both cases, the domestic private sector must be assisted with foreign aid and expertise to implement successfully privatization programs.

4.3.3.1 The Need for Foreign Financial Assistance

Because most developing countries lack the capital markets for Western-style privatization, the successes of the United Kingdom are not easily translated to them. However, there is much the developed countries can do to remedy the problem of lack of capital. Indeed, privatization itself could prove an important means of building up capital ownership by both domestic and foreign investors in developing countries and thus spurring further economic growth. This should be an aim to privatization, and policies should be crafted to help achieve it [Young 87].

However, a potential problem can arise in developing countries when asking for foreign capital assistance: Sensitivity and in some cases, antipathy to foreign ownership. This is a legacy of the colonial period, when developing countries' economies were largely controlled by Western interests. Indeed, the desire for domestic ownership of countries was a key factor in the nationalization of many developing countries' enterprises. Thus the takeover of nationalized concerns by foreign interests is not a popular option in most of these countries.

Concerns about capital and foreign ownership can be appeased through *contracting out*, by which the government remains in charge of the public function, but contracts out its operations to qualified firms (for more details about contracting out, see Chapters 2 and 3). This practice should be encouraged and expanded because it saves money, diminishes local sensitivity to foreign involvement, allows scarce resources to be spent elsewhere, and builds indigenous private sector expertise in the provision of the contracted services [Young 87]. Foreign firms under contract in developing countries usually employ indigenous managers who can gain the experience to start their own contracting firms.

Foreign capital can also be attracted through the creation of *free zones* in developing countries without many of the political common problems. Free zones can act as a focus for investment and as a location for private companies, which can provide capital for privatization. They are already proving to be a useful innovation in the developing world, and their number has increased dramatically in recent years [Young 87]. The provision of tax incentives by developed countries for their companies investing in free zones might also be a useful policy.

4.3.4 Inadequate Legal Structures

One factor contributing to the government's inability to act favorably to privatization in the developing world is the lack of an adequate legal framework. Fast and effective legislative proposals encouraging and institutionalizing privatization should be amended. For example, privatization did not take an effective boost in Argentina until President Menem's famous *Enabling Law* in 1989 [Glade 91]. One of the principal features of this law was the institutionalization of private ownership by small investors with the *Program of Shared Property* through which employees could participate in investing and purchasing government enterprises. Another important legislative proposal in Argentina was presented by the Ministry of Economy in 1986. The legislation authorized the executive branch to name companies subject to privatization, with some exceptions in *strategic* sectors -such as natural resources, banking, transportation, and communications- whose privatization would require congressional approval. The legislative proposal would direct proceeds from privatizations and liquidations, supplemented with contributions from the national treasury, toward the creation of a *National Fund for Industrial Modernization* [Glade 91].

In addition to efficient legislation, it is crucial to institute better access to courts by the public, stronger legal protection and law enforcement

mechanisms, and a tax code that does not penalize investment and allows people to have a realistic chance of making money from being entrepreneurs and investing in privatization [Poole 87].

Indeed, privatization depends largely upon the willingness of entrepreneurs to risk their own funds toward developing an enterprise in the hope that it will meet the needs of enough customers to cover the entrepreneur's costs. But the willingness of entrepreneurs and those who lend them money to take those risks depends very much on the legal environment in which they seek to operate. If the law does not contain strong protection for private ownership of property and sanctity of contracts, backed by an impartial, smoothly working judicial system, then entrepreneurship is unlikely to develop and flourish. What entrepreneurial energies remain will likely be channeled into the *underground* or informal economy instead. In many countries, both developed (like Italy) and less developed (like Peru), thriving informal sectors testify to the gross inadequacy of one or more key elements of the legal system [Poole 87].

Finally, in the context of legal structures, I direct attention to the problems of *fraud* and *inefficient tax collection mechanisms*. The problem of fraud in privatization is most likely to occur in countries with "soft" control mechanisms. The inexperience of regulatory agencies in private control mechanisms adds to the likelihood of fraud in privatization. This is the case of Hungary for example, where a major scandal has recently revolved around a dummy corporation, the Quintus Company, set up in Sweden to buy HungarHotels, the owner of most of Hungary's finest hotels and restaurants. The investors included some foreigners, but the deal was managed by HungarHotels' management. Quintus paid a small fraction of the value of the hotels. A legal challenge was mounted to abrogate the articles of incorporation because of apparent fraud. Because Hungary lacked the appropriate statutes, incorporation could not be blocked on this basis. The case went to the

Hungarian Supreme Court where the case was declared void on the basis of technicality [Vernon 88].

Although fraud is an important problem and may have an appreciable effect on the distribution of wealth and income, its economic effects are probably of less importance. Even if fraudulently acquired, the privatized firm should pay taxes. And here we note that inefficient tax collection is an inherent problem of developing countries. Enterprises keep two sets of books, one for the auditors and one for management with *real* figures, many transactions are conducted in cash to avoid taxes, and many active enterprises do not even bother to register with the state. Therefore, the reform of tax collection mechanisms is important for governments implementing privatization with the main objective of improving their resources and heap up their budget deficits.

4.3.5 Under-developed Capital Markets

Historically, capital markets in developing countries have performed poorly. They are under-developed and highly inefficient in allocating capital. In general, there is no organized stock exchanges, no standardized accounting procedures for private companies, or regulated disclosure laws of listed companies; there is no bond market, except for short-term government credit instruments (Treasury Bills); and in practical terms, there is no efficient regulation of securities transactions. Savers demonstrate their lack of confidence in this rudimentary financial system by relying primarily on currency forwards and gold, rather than financial instruments, as the preferred savings vehicle. With limited access and choice when funds were needed, borrowers rely primarily on short-term credit acquired through the banking system. In this financial environment, the implementation of a privatization program is quite difficult even with the best intentions.

In Argentina, for example, the stock market is illiquid, concentrated and manipulated. Average daily trading volume on the Buenos Aires Stock Exchange during 1988 -a strong year- was just $1.5 million. There were fewer than 200 listed companies and total market capitalization at year-end 1988 equalled only 2.4% of Argentinian GNP [Euromoney 90]. Financial observers argue that it is unlikely that the Argentinian capital market can absorb more than 20% of the domestic privatization issues [Euromoney 90]. The balance will have to be taken up by international investors: industrial companies which would work closely with the Argentinian firms and passive investors, traditional stock market investors and specialist funds.

Therefore, a critical question is whether, in an under-developed capital market, governments should embark in privatization programs ? The answer to this question is simple and direct: Yes, governments should privatize simply because privatization in itself is an opportunity for financial market development. Privatization will lead to developed capital markets, and it is not developed capital markets that will lead to privatization. Developed capital markets will enhance the chances of success of privatization, indeed, but will not favor privatization. Capital markets in the U.K. and France were very efficient in the late seventies, although nationalization was booming. It is indeed in 1981 with the election of President Francois Mitterrand (French Socialist Party Chairman) that the bulk of the French nationalizations occured. David Gill [Gill 89] argues: "Privatization programs present a major opportunity to institute the economic and financial liberalization measures and equity market reforms". Moreover, in presenting its privatization program, the Turkish government explained that one of the primary privatization objectives is "to promote the development of the capital markets and to broaden the public's participation in share ownership" [Leeds 88]. Indeed, trading volume in the Turkish secondary market increased from 72 billion Turkish lire in 1984 (before the launching of Turkey's privatization program) to 2,405 billion Turkish lire in 1986 (after the launching of privatization) [Leeds 88].

Therefore, the most obvious impact of privatization on the domestic capital markets is measured in terms of *trading volume*. Besides the Turkish example mentioned above, privatization has had a positive impact on the Egyptians stock exchanges (in Cairo and Alexandria) when President Anouar Sadate implemented the "Infitah" (i.e., economic liberalization) policy in the late seventies. "Infitah" is still implemented and improved by Sadate's successor President Husni Mubarak. Table 4-7 shows total annual dealings on Cairo and Alexandria Stock Exchanges from 1956 to 1987. Trading volume of securities on Istanbul Stock Exchange in 1988/89 is shown in Table 4-8.

However, especially at the outset of a privatization program, mechanisms can be devised that allow the general public to be reached, without a strong and efficient capital market. First, the government can sell shares directly to already large domestic groups or to foreigners. Second, the government can *give* the shares to taxpayers or voters on a pro rata basis as some form of national stock dividend [Gill 89]. This give-away options, along with highly subsidized purchase agreements, however, are not likely to benefit in the short term either the financial markets or the privatized enterprises. Such *gifts*, or near gifts, of shares usually only enhance savings or expand habits of equity buying at the margin, as the shares are usually sold quickly at low valuations by those unused to share ownership to wealthier, more sophisticated investors. This will result in the concentration of ownership in the hands of few wealthy investors. Nevertheless, the government must institute some degree of *fiscal incentive* for domectic share buyers, combined with educational programs for new investors and *fair treatment* of minority shareholders, which can build serious saver interest in shares over the long term. In addition, government must institute new regulations encouraging investment from foreign investors in the domestic market. The Turkish government published on August 11, 1989, the widely acclaimed Decree 32 which declared the securities market in Turkey fully open to foreign institutional and individual investors [Euromoney 89]. Excerpts of the full text

of Article 15 of Decree 32 are shown in Table 4-9. The increased efficiency and trading volume of Istanbul Stock Exchange show that governments, with adequate planning and support from international advisors (e.g., advisors from I.F.C. or renowned investment banks), can succeed in utlizing privatization as a tool to improve domestic capital markets.

The problems of privatization and the adequate solutions are shown in Table 4-10. Table 4-11 shows how selected countries and regions compare in respect to different problems of privatization.

Table 4-1: Main Economic Figures in Eastern Europe, 1989.

Country	GNP (in U.S.$ billions)	Private Savings Deposits (in U.S.$ billions)
Bulgaria	51.2	0.8
Czechoslovakia	123.2	17.9
Hungary	64.6	6.0
Poland	172.4	3.1
Romania	79.8	0.5
Total	**491.2**	**28.3**

Note: • The net hard-currency indebtednesses of these countries were in December 1990 (in US$ billions) :

Bulgaria:	9.8
Czechoslovakia:	6.3
Hungary:	20.3
Poland:	41.8
Romania:	1.3

Source: [Ferriss 91]

Table 4-2: Approximate Infrastructure Gap vs. GNP in Eastern Europe, 1989

(in U.S.$ Billions)

Category	Aggregate Upgrade Cost	Cost Spread Over 8 Years	% of GNP
Telecommunications	57.5	7.2	1.2%
Roads, Rail Transport	45.0	5.6	0.9%
Private Housing Stock	15.1	1.9	0.3%
Electric Power	64.0	8.0	1.3%
Pollution Control	72.0	9.0	1.5%
Total	**253.6**	**31.7**	**5.2%**

Source: [Ferriss 91]

Table 4-3: Telephone lines in Latin America, 1991

Country	Telephone lines per 100 people	Number of leased lines
Argentina	9.58	N.a.
Bolivia	2.50	1,460
Brazil	6.01	24,760
Chile	4.89	1,120
Colombia	6.72	16,314
Ecuador	5.07	57
Guatemala	1.76	N.a.
Mexico	5.57	90,040
Paraguay	N.a.	53
Peru	2.40	3,819
Uruguay	12.72	N.a.
Venezuela	7.77	13,686
France	44.6	N.a.
United States	58.5	N.a.

Source: [Heywood 91]

Table 4-4: PTT Privatization in Latin America

Country	Main carriers	Managed by	Investment plans
Argentina	Telecom S.A.	STET (Italy) France Telecom	$900 million in 1991-92
	Telefonica de Argentina	Telefonica of Spain	
Chile	CTC	Telefonica of Spain	$1.457 billion in 1991-96
	ENTEL of Chile	Telefonica of Spain	
Mexico	TelMex	Southwest Bell France Telecom	$5.4 billion in 1991-92
Venezuela	CANTV	To be announced	T.b.a.

Note: • Argentina's PTT privatization took place in June 1990, Chile's in 1987 and 1988, Mexico's in December 1990, and Venezuela's in September 1991.

Source: [Heywood 91]

Table 4-5: U.K.'s Local Authority Cleansing Privatization: Job Losses

Area	Previous number of jobs	Jobs after privatization	% loss
Wirral	456	254	44
Southend	297	213	28
Merton	176	95	46
Eastbourne	140	90	36
Milton Keynes	104	74	29
S. Oxfordshire	59	43	27
Tandridge	58	37	36
Taunton Deane	43	22	49
Mendip	35	24	31
Total	**1368**	**852**	**38**

Source: [Ascher 87]

Table 4-6: General Overview of Privatization in Latin America, 1970-1991

Argentina	Despite his efforts, Raul Alfonsin (1983-89) privatized few enterprises, but Carlos Menem's administration has already raised $3.232 billion through privatization.
Bolivia	Since 1985, state enterprises have been decentralized or transferred to regional bodies, but no companies have been privatized.
Brazil	Government raised $200 million in revenues through privatization in the period 1981-89. No companies have been privatized since 1989.
Chile	Between 1973 and 1975, the restitution of 360 companies provided government with a revenue of $1 billion. Between 1975 and 1980, the sale through public auction of 90 companies and 16 banks produced $1 billion. The implementation of the "Popular Capitalism" program in 1985 through 1988 raised $1.564 billion.
Colombia	Timid program. The state development bank sold its holding in the local car assembly plant to Renault of France.
Mexico	Government raised $2.31 billion through February 1991 with the privatization of Telefonos de Mexico, Compania Mexicana de Aviacion, and Macocozac, S.A. These companies make up the bulk of the privatization to date, and another 124 smaller companies were privatized in 1989 and 1990.
Peru	Until 1989 privatization was limited to a few cases where plants were handed over to employees. In 1989-90, government raised approximately $6 million through privatization.

Source: [Cardoso 91]

Table 4-7: Total Annual Dealings on Cairo and Alexandria Stock Exchanges

(in millions of Egyptian pounds)

Year	Cairo	Alexandria	Total
1956	57	25	82
1958	67	45	112
1961	23	16	39
1963[1]	5	1	6
1977	6	2	8
1982	8	1	9
1984[2]	107	2	109
1987	230	27	257

Notes:
1. In 1963, President Gamal Abdel-Nasser instituted the bulk of Egypt's nationalizations.
2. In 1984, the Egyptian government instituted on a large scale the "Infitah" (i.e., economic liberalization) policies.

Source: [Al-Ahram 88]

Table 4-8: Trading Volume of Securities on Istanbul Stock Exchange, 1988-1989

(Trading Volume in Turkish Lira million)

Month	Stocks		Corporate Bonds	
	1988	1989	1988	1989
January	25,552	7,168	84,665	131,490
February	23,971	9,760	70,155	113,510
March	17,765	26,115	95,700	125,506
April	13,776	15,917	66,838	153,906
May	13,168	36,827	71,444	162,931
June	7,941	113,850	79,297	402,244
July	5,720	45,440	64,979	345,154
August	5,587	60,496	79,921	269,522
September	10,655	245,222	125,558	239,639
Total	**124,135**	**560,795**	**738,557**	**1,943,402**
Daily Average	**660**	**2,967**	**3,928**	**10,283**

Source: [Euromoney 89]

Table 4-9: New Rules for Foreign Investors in Turkey

There is now no restriction on foreign investors in Turkey. The issue of repatriation of funds was finally resolved on August 11, 1989, when the government, in a resolution published Decree 32 in the *Official Gazette*. It declared the securities market open to foreign institutional and individual investors.

The act redefined a communique passed in July 1988 that allowed only foreign mutual funds to have access to the equities market. Incorporated into this wide-ranging legislation intended to liberalize Turkey's financial markets, one particular article permits Turks to buy foreign securities, while foreigners can buy Turkish securities listed on the Istanbul Stock Exchange.

The stocks and bond markets are now completely open to foreign investors with *guaranteed* repatriation of any profits. Excerpts of the full text of Article 15 of Decree 32, entitled "Securities" follows:

> "Persons resident abroad (including investment companies and investment funds established outside the country) are permitted to purchase and sell any and all types of Turkish securities quoted on the exchange utilising the intermediation of financial institutions, pursuant to the provisions of the Turkish Capital Market Law, and to repatriate the proceeds earned on trading in such instruments and from the sale of the same by banks and special finance institutions. Persons residing in Turkey are also permitted to buy securities listed on the exchange through banks ans special finance houses and transfer abroad the proceeds accruing from such transactions involving the said securities. Banks and brokerage houses are required to provide the ministry with quarterly reports and information concerning such transactions. In the event that persons resident abroad who purchase shares under the scope of the present resolution of a company incorporated in Turkey wish to participate in the corporation's board of directors of the general assembly or to interfere in the operations of a corporation in any way, such a desire will have to be duly registered pursuant to the provisions of the Foreign Capital Law."

Source: [Euromoney 89]

Table 4-10: Problems of Privatization and Adequate Solutions

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1. POLITICAL OPPOSITION

Solutions:
- Gain international support
- Show initial success
- Rapid, positive results
- *"Capitalismo Popular"* (targeting small investors)
- Vouchers (targeting the poor)

2. MANAGEMENT AND UNIONS OPPOSITION

Solutions:
- Worker enterprises (possible technique: ESOP plans)
- Contractor preference requirements (give first preference in hiring to displaced workers)
- Phased-in privatization (gradual implementation on a geographical basis)

3. INHOSPITABLE INVESTMENT ENVIRONMENT

Solutions:
- Control inflation (bring it down to one-digit annual inflation, or less than 15% per year)
- Stabilize the exchange rate (stop the depreciation of the national currency)
- Stabilize nominal interest rates (because high variability destroys any attempt at fixed-rate financing)
- Halt capital flight (however, do not control or limit the free flow of currency)
- Strenghten domestic private sector (encourage private ownership)
- Encourage foreign capital (institute adequate regulations and eliminate restrictions)

4. INADEQUATE LEGAL STRUCTURES

Solutions:
- Speed up legislation (amend adequate legislative proposals)
- Institute better access to courts
- Strenghten legal protection and law enforcement mechanisms
- Institute favorable tax code (give fiscal incentive for investing in privatization)
- Control fraud (institute supervisory boards)

5. UNDER-DEVELOPED CAPITAL MARKETS

Solutions:
- Increase efficiency (organize stock exchanges and regulate disclosure laws of listed companies)
- Institute standardized accounting procedures for listed companies
- Protect minority shareholders (institute "fair treatment" rules)
- Give fiscal incentive for equity investment (decrease tax rate on capital gains)
- Bring in international advisors (from I.F.C. or renowned investment banks)

Source: Developed by author of thesis.

Table 4-11: Problems of Privatization: Country and Region Comparisons

Type	U.S.A.	U.K.	Latin America	Eastern Europe	Lebanon
Political Opposition	Weak	Moderate	Strong	Strong	Moderate
Employees Opposition	Moderate	Strong	Strong	Moderate	Weak
Inhospitable Investment Environment	Weak	Weak	Strong	Strong	Strong
Inadequate Legal Structures	Weak	Weak	Moderate	Strong	Moderate
Under-Developed Capital Markets	Weak	Weak	Moderate	Strong	Strong

Source: Developed by author of thesis.

Chapter 5

Lebanon, Past and Present

5.1 Introduction

In 1991, Lebanon lived its first year of military stability after a devastating war which lasted sixteen years (1975-1990). Indeed, hopes are very high today among the Lebanese population and political leadership that the country has finally taken the road of peace.

However, the path of recovery and prosperity is long and arduous. From 1975 to 1990, battles have raged on every part of the Lebanese territory, causing more than 110,000 deaths, enormous physical destruction, and the collapse of the economy. The amount of destruction and that of sixteen years of foregone development are hard to quantify. In the summer of 1984, the former U.S. Ambassador to Lebanon, Reginald Bartholomew, estimated the reconstruction bill to amount to U.S.$ 33.2 billion [Majdalani 88]. An evaluation sponsored by Lebanon's Council for Development and Reconstruction (CDR) and studied by Lebanese E&C Dar El-Handassah estimated the costs of reconstruction to U.S.$ 33 billion in 1985. This figure adjusted for 1991 prices yields U.S.$ 42 billion approximately [ComLevant-b 91]. If we take into account damages occured between 1985 and 1990 the reconstruction bill amounts to nothing less than U.S.$ 50 billion.

Therefore, in all cases, it is clear that Lebanon will need large sums of capital for reconstruction, and the main objective of this thesis is to investigate

the potential sources for financing the reconstruction bill. Today, in early 1992, with the slowness and uncertainty of international and Arab financial supports, it appears that the Lebanese private sector is most likely to be the major source of financing. Indeed, on July 23, 1991, the government-sponsored CDR urged in an emphatic press statement the Lebanese private sector to participate actively in the reconstruction of the nation:

> "Knowing that the availability of foreign funding for the reconstruction of Lebanon -beginning by Beirut's Central District and the country's infrastructure- is still uncertain, we urge the Lebanese people and officials to work on every effort to secure the adequate environment for the encouragement of Lebanese capital and investment. The Lebanese diaspora established all over the world is strongly invited to play an important role in the reconstruction of the nation."
>
> Council for Development
> and Reconstruction
> Beirut, Lebanon
> *Source:* "L'Orient-Le-Jour",
> July 23, 1991

The Lebanese private sector is strong. However, due to the unstable and highly volatile investment environment currently prevailing in Lebanon, the majority of the Lebanese private capital is invested or saved outside the country. Capital flight has prevailed since the outset of the depreciation of the Lebanese pound against hard currencies in early 1984. Moreover, the rounds of violence of 1989 and 1990, coupled with the highly publicized bankruptcies of some major Lebanese banks (Bank Almashrek, Banque du Credit Populaire, Banque Trad-Credit Lyonnais, and others), have further encouraged capital flight and installed a climate of lack of confidence and doubt in the economic viability of the country.

The Lebanese "diaspora" is established all over the world, with a major presence in Europe, North and Latin America, Africa, and the Arab countries. Dr. Khalil Makkawi, Lebanese Ambassador to the United Nations, estimated

in a lecture at Harvard University on March 30, 1992, the private holdings in hands of Lebanese individuals and institutions around the world to amount to U.S.$ 40 billion approximately [Makkawi 92].

This thesis will investigate the potential contribution of the Lebanese private sector in financing the reconstruction of Lebanon. In this chapter, I will provide an overview of facts about Lebanon. The economic systems of pre-war and present Lebanon are examined. Special emphasis is placed on monetary and structural indicators, and the different sectors of the Lebanese economy. Chapter 6 deals with the issues of private sector participation and the role of privatization in the reconstruction of Lebanon. Prospects for privatization are proposed, and government and private sector contributions to the success of Lebanon's recovery are examined.

5.2 Historical Background

In November 1941, the French Mandate over Lebanon was officially ended and independence put into effect in 1943. In September 1943, the Lebanese Parliament freely elected the first President of the Republic, promulgated a national Pact ("Al-Mithak-al-Watani) to which all the minority groups comprising the entire population of Lebanon affixed their signatures. This Pact established a set of guiding rules for self-government, requested the evacuation of French troops stationed on Lebanese soil and became the effective national binding instrument which freely united the Lebanese people.

Under the mandate however, French and Arabic were both made official languages. Administrative and judicial organs were improved, the local currency was tied up to the French franc and sericulture was revived. New entrepreneurs in pursuit of profits mobilized savings and took risks, notably in commerce. The 1.2 million Lebanese emigrants sent capital and fresh ideas to their relatives to invest at home [Mallat 73]. The commercial market of

Beirut took such a business scope, mainly because of its strategic location, that it soon became a world center known for its triangular trade, its transit to the inner Arabic countries and its gold transactions. By 1944, the French had forged a business-like relationship between the two republics of Syria and Lebanon for the purpose of expanding the economic growth and future integration of both countries. Common interests relating to frontier control, tobacco monopoly, customs union, and concessionary companies were established and operated in both hands [Saba 61]. A commission administered the revenues from these interests in the ratio of 40% to Lebanon and 60% to Syria. Soon Syria developed a *protective policy* while Lebanon committed itself to a policy of *free trade.*

On December 31, 1946, the long struggle for complete independence and sovereignty was achieved. The French troops evacuated Lebanon leaving behind them large reserves of foreign exchange. In March 1950, the dispute over the customs union with Syria reached its peak and the accord was dissolved. Lebanon instituted then its own and independent economic policy. Since that date, the Lebanese economy became as close to the classical *laissez-faire* model as one can expect in the modern world. Meyer, in his 1958 book *'Middle Eastern Capitalism'* expressed it in these words: "Lebanon today is held as one of the world's few remaining citadels of truly laissez-faire capitalism" [Meyer 58].

From 1950 to 1965, the Lebanese Republic has traveled quite a distance towards the solution to its knotty economic and social problems -inherent in its geography, inherited from its history and resultant from the heterogeneous ethnic and religious composition of its population. It has witnessed a remarkable average rate of economic growth and an adequate reform in the public administration up to the mid-sixties; since then economic growth has been more difficult to achieve, inflation more threatening and economic downswings more acute [Mallat 73]. The 1970 population estimate denoted

that it is an over-populated small nation with a density of about 210 inhabitants per Km^2, a total Lebanese population of 2,109,000, a total resident population of 2,650,000, and a per capita income of 500 U.S. dollars [Mallat 73]. In comparison to most of the Middle East, Lebanon seemed much out of a place. It does not "look, think, vote, or behave like any of its neighbors" [Gaskill 58]. In an area famous for flat, broiling, hot waterless deserts, Lebanon stood out like a vast oasis, with cool mountains, a refreshing climate, plenty of water, green forests and so much social, cultural and religious activity that it has become an international center. Its outgoing disposition and its lead in the adoption of Western and Arab education gave it a high level of education greater skill and more versatility that can be found in other parts of the region. In the early seventies, Lebanon indeed had one of the highest standards of living and was one of the best educated lands in the East with 92% of its people literate -roughly the rate of illetracy among most of its neighbors [Mallat 73].

5.3 Economic Structure Before the War

Lebanon was mainly a services economy and remains so until today. In 1970, trade, finance, and related services accounted for 72.8% of Net National Product (i.e., total income generated). Agriculture accounted for barely 9.1% of NNP, and industry and construction together amounted to 18.1% of NNP [Mallat 73]. Table 5-2 shows the percentage shares of NNP by categories of economic sectors in Lebanon from 1950 to 1970. In terms of growth, Lebanon's economy fared fairly well at 6.3% average compound growth rate in the 1950-1970 period, raising the per capita real income of the Lebanese people at a yearly average of 4.1% [Mallat 73]. Economic growth rates in Lebanon in the 1950-1970 period are shown in Table 5-3.

5.3.1 Trade and Services

Trade and services dominated Lebanon's economy, accounting for about three quarters of total income in the early seventies. More specifically, it is a trade economy with 31% of total income concentrated in the commercial sector alone. About 60% of the total income accruing from this trade came solely from external trade -i.e., imports and transit trade [RecStat 71]. It should also be noted that the above trade estimates exclude incomes accruing from the heavy triangular trade transactions as well as the huge counterband exchange which was responsible for a significant source of income to the nation.

However, the share of trade between 1957 and 1963 dropped remarkably due to protectionist policies of the neighboring Arab countries which were developing their own means for servicing their imports directly from abroad rather than through Lebanese intermediaries. After 1963, the value of transit trade recovered hesitantly, to rise again drastically after the 1967 six-day war. The value of transit trade passed from 957 million Lebanese pounds (LL) in 1967 to 1,272 million LL in 1970 [RecStat 71].

Also, Syria, Jordan, Turkey, and Iraq were developing their own harbors and competing with Lebanon for transiting goods to the inner lands. Parallel trends were also visible in finance as these countries gained strength and self confidence in their dealings in the international financial markets. Nevertheless, before the start of the war, the main gaining sectors of the Lebanese economy have been in commerce, banking, real estate, tourism, service and government [Mallat 73].

5.3.2 Industry

The growth of the industrial sector in Lebanon is relatively recent and dates back to the late fifties. Before that period, there were no large factories

except for tobacco, natural silk, and a few handicraft works. During the 1950-1970 period, the Lebanese government showed concern for the lack of manufacturing in Lebanon, and began implementing various measures aimed at promoting industrial development. Most of these measures unfortunately were of a selective nature and had only limited results. The most outstanding of these was the raising of tariffs on some competing goods, the exemption of import duties on industrial equipments, spare parts and raw materials, and the exemption from income tax of the first five years on all new industrial ventures [Yafi 62].

In result, industrial output has expanded at a fairly rapid pace in the 1950-1970 period, contributing on the average a share of 13.6% of the NNP by 1970 [Mallat 73]. Rapid as the industrial growth seemed to be in absolute terms, it remained questionable in relative terms, for compared to its share of the NNP, it was 13.5% in 1950 and moved up to 13.6% in 1970; thus having no impact on the structure of the economy. Indeed industrialization as such did not occur in Lebanon for industrial investment has been throughout the post-war period irregular, whismical and with no definite planning [Mallat 73].

In terms of the various groups of industries, food and beverage, textile and its derivatives, and non-metallic mineral industries alone accounted respectively for 59% of the total number of enterprises, and 49% of the value added for 1964. This very structure in the industrial sector still existed in 1970, with a heavy concentration of the industrial sector in the food, the textiles and the non-metallic industries. Table 5-4 shows the industrial census in Lebanon in 1964.

5.3.3 Agriculture

Lebanon has three distinct land areas: the littoral, the Mountain and the Bekaa Valley. The littoral consists of narrow plains stretching about 125 miles

from North to South of Lebanon and averaging 1.5 miles in width. The Mountain consists of two parrallel chains, the Western chain or "Mount Lebanon" that stretches 125 miles from North to South and averages 30 miles in width; and the Eastern chain or anti-Lebanon that stretches along the same line from North to South of Lebanon reaching occasional peaks of 8,500 feet. The Bekaa Valley separates the two chains of mountains but is more of a plateau than a real valley since it is at an altitude of 2,850 feet. It stretches 66 miles from North to South and attains a width of seven miles.

In the 1950-1970 period, about 45% of the Lebanese manpower was involved in agriculture, and about half the population relies on that sector for its livelihood [Mallat 73]. As a result, Lebanon has been commonly classified as an agricultural country. However, on the basis of national income Lebanon may not fit well in this classification since the total agricultural produce does not exceed one-tenth of the NNP. Also worth mentioning is the fact that this low share of the agricultural sector is not necessarily indicative of the level of personal income in the rural areas of the nation, as many of those engaged in agriculture had also other sources of income. Moreover, even if the Litani Water Project (South Lebanon) is fully utilized, the natural possibilities of agricultural income will remain limited by the small size of arable land in Lebanon [Mallat 73]. The lack of *extensive* agriculture would still remain the main handicap. *Intensive* agriculture is the only solution and efforts in this direction in the post-war period have shown remarkable results in the cultivation of fruits and vegetables. In 1950-1970, agricultural income increased by almost 100%, mainly due to technical improvements and know-how, going from 206 million LL in 1950 to 401 million LL in 1970 [Mallat 73]. Table 5-5 shows land cultivation figures in Lebanon in 1964 and 1969.

5.4 Lebanon Today

Sixteen years of war caused enormous damages to the Lebanese economy. While no official statistics are available, estimates show that there was a sharp reduction in GDP accompanied by a sharper reduction in investment spending. Lebanese statistician Fernand Sanan estimated the Lebanese GDP in 1990 to U.S.$2.137 billion; while if the war did not occur, and following the post-war 8.7% annual growth rate on average, the GDP in 1990 should have been around U.S.$13 billion [Sanan 91]. The loss is indeed overwhelming. Table 5-6 shows the evolution of the Lebanese GDP from 1974 to 1990.

5.4.1 The State of the Economy

Today, Lebanon's economy is in an unpleasant shape. Constant depreciation of the Lebanese pound (LL), hyper-inflation, and increasing capital flight create a highly unstable economic environment in Lebanon, at a point where in late 1991, the majority of the population was doubtful in the chances of economic recovery. Those doubts were confirmed most recently in 1992, when the Lebanese pound lost more than 40% of its value in less than three weeks in March 1992. Following a decision of the Lebanese Central Bank to stop supporting the national currency against hard currencies, the population rushed to buy U.S. dollars, causing the LL to fall from 879 LL for one U.S. dollar in early March 1992 to 1,350 LL for one U.S. dollar in late March 1992. Table 5-7 shows the deterioration of the exchange rate of the Lebanese pound against the US dollar from 1983 to April 1992.

However, some positive signs must be noted. First, 1991 was the first year of military stability since 1975, and the Lebanese GDP moved up from about U.S.$ 2.2 billion in 1990 to about U.S.$ 3.3 billion in 1991. The annual inflation rate dropped from 84.7% in 1990 to 50% in 1991 [Orient-1b 92]. It

reached a peak of 727.4% in 1987 (see Table 5-8)[ComLevant-a 91]. Second, agricultural and industrial exports grew by 74.3% from 1990 to 1991 (U.S.$ 214 million in 1990 to U.S.$ 373 million in 1991) [AudiBank 91]. Third, the relative peace recorded in 1991 encouraged many Lebanese expatriated all over the world, to return to their homeland bringing in capital and hard currencies. Fourth, construction activity posted a sinificant increase in 1991 compared to 1990. According to the Lebanese Association of Engineers, 8,236 construction permits were issued by the Association in 1991, versus 2,859 permits in 1990. These permits were for 6.1 million square meters in 1991, compared with 2.2 million in 1990 [AudiBank 91]. Fifth, the Port of Beirut and Beirut International Airport showed notable improvements in total activity in 1991 compared to 1990 and 1989. Total number of incoming and departing passengers at Beirut's airport was up to 825,764 in 1991. It was only 637,000 in 1990 and 220,000 in 1989 [ComLevant 92]. Beirut's port received 2,225 ships in 1991 which handled a total of 3,098,600 tons of goods [Orient-1a 92]. The Port of Beirut was closed in 1990 and 1989. The volume of activity in the Port and Airport of Beirut in 1991 is shown in Tables 5-9 and 5-10 respectively.

Nevertheless, the current indebtedness of the Lebanese public sector, the continuing high inflation, and the recent depreciation of the Lebanese pound confirm that the economy is still in a very fragile state. As of September 30, 1991, the internal indebtedness of the Lebanese public sector amounted to 2,184 billion Lebanese pounds (94.3% of GDP) [ComLevant-c 91]. This public debt is growing at a high rate knowing that it was only 1,583.3 billion Lebanese pounds as of end 1990. Table 5-11 shows the total indebtedness of the Lebanese public sector in 1990 and 1991.

Furthermore, the bad shape of the Lebanese commercial banks -which constituted the back bone of private sector activity in the seventies- has added to the complexity of the situation.

The banks' problems began in 1983, when all the factors that had allowed the banking sector to adapt in the early years of the war (1975-1983) disappeared. The money of the Palestinian Liberation Organization (PLO) deserted the Lebanese financial institutions after the 1982 Israeli invasion, the Arab aid for reconstruction came to a stop and remittances dwindled to $40 million per year -less than half the amount transfered before 1983- because of both an economic slowdown in the Gulf region and a continuing instability in Lebanon.

Hence, since 1983, and because of the reasons mentioned above, the banks started to face a host of problems. The accumulation of bad debts is an example of these problems. Starting in 1975-76, a large number of commercial, industrial, and other establishments sustained damages which made it difficult and sometimes impossible for them to meet their debt obligations. In other cases, collateral had become devalued leaving loans uncovered. As a result of all this, there has been a rise in the proportion of bad debts in the portfolio of most commercial banks [Iskandar 84]. Such debts were estimated in 1986 at around 30 to 40 percent of total loans outstanding [Ecochiffres 86]. However, bankers have stopped hounding their clients for overdue loans because the collaterals are also devalued. Rather than showing losses on their books they prefer to carry bad debts indefinitely [NYTimes 84].

Another problem facing Lebanese banks is the scarcity of safe investment outlets on the domestic market. In the prevailing situation of economic instability and political uncertainty, banks have generally faced growing difficulties in locating safe and profitable investment outlets in the local private sector [Majdalani 88]. The alternative is to subscribe heavily to the low risk-low return treasury bills regularly issued by the Lebanese government to finance its expenditures. In addition, many banks have resorted to alarming speculation in the foreign exchange market. The failure in 1985 of the First Phoenician Bank, contained by a swift action on the part of

Lebanon's Central Bank, was largely caused by risky speculative operations in the foreign exchange market [El-Khazen 85].

The First Phoenician failure was followed by a succession of failures from 1987 to 1991. The most notable failures were that of Bank Almashrek, Banque du Credit Populaire, Banque G.Trad-Credit Lyonnais, Mebco Bank, and most recently Banque Libano-Bresilienne which liquidated itself in early 1992 [Orient 92]. Besides the reasons for banks failure mentioned above, one additional reason for failure could be that the number of commercial banks operating in Lebanon -84 banks- is quite large relative to the size of the market. In the early eighties, this was not really a problem since most banks were able to acquire a share of the growing market. However, with the economic slowdown that started in 1983, competition among banks increased in order to maintain their share of the declining volume of banking activity. In this climate of intense competition, a number of banks have made imprudent or unguaranteed loans while others have offered high rates of interest to attract depositors.

Mr. Nadim Salem, Lebanese Minister of Public Works, that I interviewed on July 31, 1991, argues that "it is better to have a banking sector in Lebanon with 30 or 40 strong and healthy banks than to have 80 banks with half of them being in a very weak position, on the edge of failure". Mr. Salem added: "The future economic environment will require a high level of effectiveness and banking excellence to succeed and only the most efficient and healthy banks will survive. All over the world, the banking sector is consolidating and the Lebanese banking sector is not an exception" [Salem 91]. Table 5-12 shows the deposits of the private sector in Lebanese banks in 1989-1991. The consolidated balance sheet of commercial banks in Lebanon for 1990 and 1991 is shown in Table 5-13.

5.4.2 The Reconstruction Efforts

Reconstruction will be the major task on the agenda of the Lebanese government and population at least for the next decade. The country is overwhelmingly destroyed after 16 years of war, and no economic recovery can be envisaged without considering first the rehabilitation of the nation's infrastructure, rebuilding the devastated districts and towns, and the return of the displaced population to its villages.

Today, in 1992, reconstruction efforts are restricted to the most urgent: rehabilitating the infrastructure. A considerable amount of work has been done in the last two years in the areas of electricity generation and distribution, water supply, and telecommunications. However, although some positive results are being recorded, the infrastructure -or more specifically, public services- are still deficient in many aspects. Electricity is supplied only 12 or 18 hours per day, water is supplied one day out of three, and telephone, telex, and postal services function in a very arbitrary manner. Nevertheless, the situation is by far better than two years ago, when electricity, water, and telephone services were completely halted.

In July 1991, the Minister of Hydraulic and Electric Resources, Mohammad Youssef Baydoun, estimated the cost of the rehabilitation of electricity supply to amount to U.S.$210 million [Orient-7 91]. He also indicated that until July 1991, no portion of this amount was provided to the Electricité du Liban (EDL), Lebanon's unique electricity company, which is at 100% under state control.

A mega-reconstruction project in Beirut's Central District (BCD) is likely to take off in late 1992. Indeed, on June 1, 1991, the Lebanese government issued the official Decree No. 1273 entitled "The Beirut's Central District Project", and presented the decree for approval by the Lebanese parliament.

After a first rejection in July 1991, the parliament voted in favor of the decree in September 1991. The project is mainly driven by private capital as outlined by the Lebanese Minister of Finance, Dr. Ali El-Khalil, that I interviewed on July 30, 1991: "The BCD project is principally a private project, and the Lebanese government's role in this project is limited solely to some regulatory and general policy questions" [El-Khalil 91]. Dr. El-Khalil added: "Knowing that the Lebanese government, i.e. the public sector, is unable to finance mega-reconstruction projects like the BCD Project or other infrastructure rehabilitation requirements, we strongly encourage the private sector's participation in the reconstruction efforts" [El-Khalil 91].

The BCD Project is supervised by the CDR, studied by a joint-venture of Lebanon's Dar El-Handassah and the U.S.' Bechtel Corporation, and financed by private sector's funds. The area of Beirut's Central District is about 1.3 million square meters, of which 550,000 m^2 could be build, after deducting roads, public gardens, and parkings [ComLevant-a 91]. I will describe thoroughly this project in Chapter 6 which examines the role of the private sector in the reconstruction of Lebanon.

Unfortunately, other districts devastated by the 16-year war have not been considered for reconstruction yet. Those districts are: Aley and Bhamdoun Districts in the Lebanese mountain and East-Saida and Jezzine Districts in South Lebanon. Private developers are probably waiting to see how successful the BCD Project will be, before embarking in other mega-ventures. Nevertheless, in considering the needs for reconstruction, we should not omit in any case those important districts.

In conclusion of this chapter, I should mention that current reconstruction efforts are not proceeding easily. Multiple problems are facing these efforts, and the Lebanese private sector is still very cautious in investing in the reconstruction program. The major difficulty is related to the high

degree of uncertainty concerning Lebanon's political future. Moreover, the structural problems that the Lebanese economy is facing today constitute also a major hurdle facing investment in reconstruction. I investigate these difficulties in detail in Chapter 6, and provide possible solutions that could be implemented to insure the continuity and viability of Lebanon's reconstruction program.

Table 5-1: Lebanon Facts and Figures

Area: 10,452 Square Kilometers (4,015 Square Miles)

Population: 2,655,000 in 1990

Capital and Largest City: Beirut

Other Major Cities: Tripoli, Saida, Tyr, Zahleh, and Baalbeck.

Population of Beirut Metropolitan Area: 1,250,000 million in 1990

Political System: Democratic, Parliamentary

Economic System: Liberal, "Laissez-faire"

National Currency: Lebanese Pound (L.L.)

Gross Domestic Product (GDP): 1990: U.S.$ 2.137 billion
1991: About U.S. 2.80 billion

Exchange Rate on April 15, 1992: 1410 L.L. for one U.S. dollar

Boundaries: North and East: Syria
West: Mediterranean Sea
South: Israel

Principal Activities: Commerce, Banking, and Services

Languages: Arabic, French, and English

Major Universities:
- American University of Beirut (AUB)
- "Université Saint-Joseph" (USJ)
- "Université Libanaise" (UL)

Source: Developed by author of thesis.

Table 5-2: Percentage Shares of Net National Product (NNP) in Lebanon by Categories of Economic Sectors, 1950-1970

Category	1950	1957	1964	1970
Primary Activity				
Agriculture	19.7	15.8	11.8	9.1
Secondary Activity				
Industry and Construction	17.6	15.2	18.4	18.1
Tertiary Activity				
Trade, Real Estate, Transport, Finance, Services, Government	62.7	68.7	69.8	72.8

Source: [Mallat 73]

Table 5-3: Growth Rates in Lebanon by Tranche of 5 Years, 1950-1970

Periods	% Average growth rate of NNP at wholesale constant price	% Average Increase in per Capita Real Income
1955-55	7.4	4.8
1955-60	4.4	1.8
1960-65	13.6	9.7
1965-70	2.8	0.2
1950-60	5.9	3.3
1960-70	8.2	4.9
1950-70	**7.0**	**4.1**

Source: [Mallat 73]

Table 5-4: Industrial Census in Lebanon (1964)

Industry	Number of firms	Total Employment	Cash Receipts (LL 000's)	Value Added (LL 000's)
All Industries	2,099	41,093	862,500	312,300
1. Food and Beverage	534	8,237	241,689	60,201
2. Textiles and Derivatives	395	9,840	110,562	46,145
3. Non-Metallic Minerals	302	5,731	86,855	42,833
Total of Items 1 + 2 + 3	1,231	23,808	439,106	149,179
Percentage of Total (%)	59	52	51	49

Source: *Recensement Industriel au Liban*, 1964.

Table 5-5: Land Cultivation in Lebanon: 1964 and 1969

Types of Produce	Area Cultivated in Hectares (Ha)		Value of Produce (in million LL)		Productivity by Ha. (in tons)	
	1964	**1969**	**1964**	**1969**	**1964**	**1969**
Cereals	91,700	53,815	25.4	11.4	5.1	3.1
Vegetables	41,495	46,504	57.6	85.7	317.4	288.7
Industrial Produce	11,800	17,826	23.6	46.3	87.3	69.8
Fruits	86,179	81,617	234.5	210.0	173.4	121.9
TOTALS	231,174	199,762	341.1	353.4	583.2	483.5

Source: *Le Receuil de Statistiques Libanaises*, Ministry of Planning, Republic of Lebanon, 1970-1971.

Table 5-6: Evolution of the GDP in Lebanon (1974-1990)

Year	GDP (in LL billion)	GDP (in US$ million)	GDP Projections (in US$ million)[2]
1974	8.1	3,479	3,479
1975[1]	8.2	3,573	3,782
1976	6.1	2,125	4,111
1977	10.2	3,324	4,469
1978	11.4	3,858	4,858
1979	14.6	4,502	5,280
1980	19.0	5,530	5,739
1981	22.6	5,239	6,238
1982	24.3	5,139	6,781
1983	25.4	5,619	7,371
1984	27.8	4,270	8,012
1985	42.6	2,594	8,709
1986	103.5	2,697	9,467
1987	400.0	977	10,291
1988	910.0	2,224	11,186
1989	1313.0	2,645	12,159
1990	1500.0	2,137	13,217

Notes:
1. The Lebanese war began in 1975.
2. Projections were made assuming that GDP would continue growing at the 1974 annual average rate of 8.7%.

Source: [Sanan 91]

Table 5-7: Average Exchange Rate: Lebanese Pound (L.L.) vs. U.S. Dollar, 1983-1992

Year	L.L. per one U.S. Dollar
1983	4.52
1984	6.51
1985	16.42
1986	38.37
1987	224.74
1988	409.23
1989	496.50
1990	701.76
1991[1]	879.00
1992[2]	
• January 2, 1992	879.00
• January 31, 1992	879.00
• February 28, 1992	879.00
• March 16, 1992	1040.00
• March 31, 1992	1200.00
• April 15, 1992	1410.00
• April 23, 1992	1540.00

Notes:

1. In 1991, due to the intervention of the Central Bank of Lebanon, the exchange rate was stable during the last two months of the year at 879.00 L.L. per one U.S. Dollar.
2. On March 16, 1992, due to the shortage in its hard currency reserves, the Central Bank decided to halt supporting the L.L. against the U.S. Dollar. As a result, the L.L. lost around 80% of its value in forty days, dropping from 879 L.L. per one U.S. Dollar on March 13, 1992, to 1540 L.L. per one U.S. Dollar on April 23, 1992.

Source: [Sanan 91] and [ComLevant 92]

Table 5-8: Inflation in Lebanon (1974-1991)

Year	Inflation Rate
1974	11.1%
1982	19.6%
1987[1]	727.4%
1988	155.0%
1989	70.0%
1990	84.7%
1991	50.0%

Note: 1. In 1987, inflation in Lebanon reached its peak in the modern history of the country: 727.4%.

Sources: [ComLevant-a 91] and [Orient-1b 92]

Table 5-9: Activity in the Port of Beirut Since Its Re-Opening on March 15, 1991

Month	Number of Ships	Amount of Goods (in tons)	Cash Receipts (in LL millions)
March 1991	46	144,300	2,625
April 1991	144	244,000	9,009
May 1991	220	353,500	15,348
June 1991	232	286,300	19,045

Source: [ComLevant-a 91]

Table 5-10: Activity in Beirut's International Airport in 1991.

Month	Passengers		
	Arrivals	Departures	Total
January	21,579	23,555	45,314
February	11,810	14,057	25,867
March	19,762	19,685	39,447
April	24,913	24,159	49,072
May	26,210	24,055	50,265
June	49,551	28,850	78,401
July	62,409	39,825	102,234
August	54,015	68,936	122,451
September	42,227	67,374	109,601
October	31,020	37,675	68,765
November	28,602	30,672	59,274
December	41,074	33,979	75,053
Total (1991)	**413,412**	**412,452**	**825,764**
Total (1990)	300,678	337,266	637,944

Source: [ComLevant 92]

Table 5-11: Internal Debt of the Lebanese Public Sector in 1990-1991

Year	Cumulative Internal Debt (in L.L. billions)
1990	1,583.3
1991	
• As of March 31	1,745.6
• As of June 30	1,774.1
• As of September 30	2,184.0

Source: [ComLevant-c 91]

Table 5-12: Private Sector Deposits in Lebanese Banks, 1989-1991

(in Lebanese Pounds millions)

	1989	1990	Sept. 1991
Deposits of Residents			
• in Lebanese pounds	750,771	930,468	1,433,183
• in hard currencies	1,519,774	2,557,204	3,109,390
Total	2,270,545	3,487,672	4,542,573
Deposits of Non-Residents			
• in Lebanese pounds	43,490	64,177	N.a.
• in hard currencies	126,972	211,954	N.a.
Total	170,462	276,131	353,694

Source: [ComLevant-c 91]

Table 5-13: Consolidated Balance Sheet of Lebanese Banks, 1990-1991

(in Million Lebanese Pounds)

	1990	As of Sept. 1991
Reserves	178,002	266,954
Claims on Private Sector	1,548,259	1,944,678
Claims on Public Sector	688,400	1,098,584
Other Claims	2,374,502	2,608,002
Fixed Assets	57,825	78,938
Other Assets	88,457	113,112
Assets = Liabilities	**4,935,445**	**6,110,268**
Deposits of Residents	3,487,672	4,542,573
Deposits of Public Sector	26,120	45,080
Deposits of Non-Residents	276,131	353,694
Other Deposits	437,709	302,059
Capital	103,932	129,462
Other Liabilities	603,881	737,400

Source: [ComLevant-c 91]

Chapter 6

Privatization in Lebanon

6.1 Introduction

Many recent developments converge today to make the Lebanese private sector the major and most likely source of finance for the reconstruction of the country.

First, the highly destructive Gulf war of January-February 1991 has shifted the priorities of the Arab world. Kuwait, Iraq, and Iran (after the 8-year Irak-Iran war) are heavily destroyed, and reconstruction plans costing billions of dollars are being considered. Therefore, the 1983 CDR study which relied primarily (around 75% of the total cost) on Arab and foreign funds in the form of grants and *soft* loans to finance the reconstruction of Lebanon [CDR 83], is not realistic today. Although some Arabic countries, especially Saudi Arabia which sponsored the Taef Peace Agreement in 1990, are still promising to assist Lebanon in its efforts, we cannot rationally expect that this assistance will be substantial enough to provide a solid base of finance for reconstruction. Furthermore, the promised payments of the 1979 Tunis Pledge, fell short of the commitments. As of the end of 1991, and out of the U.S.$2 billion of grants promised by the Arab states in November 1979, less than U.S.$450 million were actually disbursed to Lebanon [El-Khalil 91].

Second, the difficult economic conditions in Eastern Europe and the former Soviet Union, are shifting the priorities of the EEC and the United

States. The newly established European Bank for Reconstruction and Development (EBRD) is still investigating its funding sources and raising capital. Therefore, we expect that the EEC and the U.S. will give first priority to assist Eastern Europe and the former Soviet Union. Although some European grants and loans were committed to Lebanon in 1991 (U.S.$60 million [El-Khalil 91]), here also, we cannot rationally expect the financial assistance of the EEC and the U.S. to be substantial enough to provide a solid base of finance for Lebanon's reconstruction efforts.

Therefore, it is safe and rational to argue today that Lebanese must rely primarily on their own resources to rebuild their country. And knowing that the Lebanese public sector is in a state of *quasi-bankruptcy*, the resources we are talking about here are that of the Lebanese private sector.

This chapter will investigate the role of the private sector in the reconstruction of the country. First, an overview of the capabilities of the Lebanese private sector is provided. Second, prospects for privatization and private sector's participation are examined. Special emphasis is placed on infrastructure, public services, and mega-reconstruction projects. Third, the potential problems likely to arise and discourage private investment are investigated, and possible solutions to these problems are proposed.

6.2 The Lebanese Private Sector

Compared to neighboring Arab countries, Lebanon has a strong private sector. Indeed, since its independence in 1943, Lebanon has adopted a liberal economic policy based on *laissez-faire* principles, which gave a lot of freedom to the private sector in developing its capabilities. The private sector was the driving force of the Lebanese economy. This contrasted sharply with state-planning policies adopted by neighboring Arab nations like Syria, Egypt, and Iraq, where the public sector controlled the majority of economic activities.

As a result, the Lebanese private sector developed tremendously, and came to dominate all aspects of economic life in Lebanon. The superiority of the private sector over the public sector in the pre-war period was overwhelming, and was best expressed by A.J. Meyer in his 1958 book entitled *'Middle Eastern Capitalism'*: "Lebanon today is held as one of the world's few remaining citadels of truly laissez-faire capitalism" [Meyer 58].

The private sector dominated trade, industry, agriculture, tourism, banking, and almost any other category of economic activity. No significant presence of the public sector was recorded in those areas, despite the socialist wave that invaded the Arab countries in the early sixties and led to the bulk of the Syrian and Egyptian nationalizations of industry, agriculture, and commerce. Lebanon remained insensitive to this wave.

The only activity which escaped private sector control was "public services" (i.e., electricity, water, telecommunications, public works, and community services). Those services were and are still provided solely by the Lebanese state in a monopolistic manner. A 1989 study by Peter Heller and Christian Schiller of the I.M.F. found that the Lebanese government's aggregate subsidies to the public services sector amounted to 20% of total government expenditures in the late eighties [Heller 89]. Today, and with the increasing difficulties faced by the State of Lebanon in providing those subsidies, serious thoughts are being given to the privatization of public services. This possibility will be investigated later in this chapter.

Today, in 1992, and after sixteen years of war, the Lebanese private sector is still by far more resourceful than the public sector. While the public sector has posted a record high Lebanese Pounds 2,184 billion indebtedness in September 1991 [ComLevant-c 91] and the Lebanese Central Bank has seen its reserves of hard currencies shrink to U.S.$ 550 million in April 1992, the

Lebanese private sector is estimated to hold U.S.$ 40 billion saved and invested mainly outside the country [Makkawi 92]. Private sector deposits in Lebanese banks amounted to Lebanese Pounds 4,900 billion in September 1991 [ComLevant-c 91].

However, when we talk about the Lebanese private sector, it is useful to distinguish between the domestic private sector and the Lebanese *diaspora* (i.e., Lebanese citizens established outside Lebanon). The Lebanese diaspora is established all over the world with major presence in Europe, North America, Latin America, Africa, and the Middle East. While no official statistics exist, the diaspora population is estimated at around 4,000,000. The disapora includes citizens who fled their homeland fifty years ago, in the mid-twentieth century, and Lebanese who fled their country after the recent rounds of violence in 1989 and 1990.

The 16-year war affected solely the domestic private sector. Capital losses due to the war amounted to U.S.$4,746 million in the 1975-1983 period (see Table 6-1) and U.S.$531 million in 1989-1990 (see Table 6-2). The Lebanese diaspora was not affected by the war and its holdings grew to U.S.$40 billion, saved and invested outside the country.

Therefore, when we consider the Lebanese private capital as a source of funds for the reconstruction of the country, it is rational to think first about the capital of the Lebanese diaspora saved and invested in foreign countries. Domestic private capital is scarce today, and capital flight is continuing at a rapid pace, especially after the recent steep depreciation of the Lebanese Pound against the U.S. Dollar in March and April of 1992 (see Table 5-7).

6.3 Prospects for Privatization in Lebanon

As mentioned above, the Lebanese public sector has no tangible presence in the majority of economic activities in Lebanon like manufacturing and industry, agriculture, commerce, tourism, and financial services. Those sectors are overwhelmingly controlled by the Lebanese private sector, and no single state-owned enterprise is operating in those areas.

However, the State of Lebanon controls in a monopolistic manner "public service" activities like electricity generation and distribution, water supply, telecommunications, public works, mass-transportation, and community services (i.e., postal services, garbage collection, and street cleaning).

Therefore, prospects for privatization in these areas are high. Indeed, the lack of public resources necessary to rebuild and rehabilitate those vital services, heavily damaged after sixteen years of war, makes privatization a very plausible solution to provide adequate financial and technical resources to undertake the badly needed rehabilitation works.

Besides privatization of public services, privatization schemes and private sector support are needed in the mega-reconstruction projects that should be undertaken in Lebanon's most devastated districts: Beirut's Central District, Aley and Bhamdoun Districts in the Lebanese Mountain, and East-Saida and Jezzine Districts in South Lebanon. Those districts are vital to Lebanon's economic activity knowing that Beirut's Central District was the financial and commercial center of the country, Aley and Bhamdoun Districts contained the bulk of Lebanon's hotels and summer resorts and were the principal attraction of foreign and Arab tourists, and East-Saida and Jezzine Districts were the link between the capital Beirut and the South of the country. The prospects for privatization in Lebanon are shown in Table 6-3.

6.3.1 Privatization of Public Services

Today, public services in Lebanon are in a poor state and are functioning in a very arbitrary manner. Electricity is provided 12 to 18 hours per day, water is supplied one day out of three, telephone, telex, and fax services function very poorly, public transport is non-available in many parts of the country, and postal services and other community services like garbage collection for example, are almost non-existent.

Since early 1989, private sector provision of these services was noticed in some parts of the country especially in the capital Beirut and Mount Lebanon. However, this *private* provision is done on a small scale, in a very anarchical way, and is very expensive to be afforded by low-income and middle-income families. For example, one minute of international calling to the United Sates provided by a small private operator through satellite costs five Dollars in week-days and four Dollars in the week-ends. This is very expensive indeed when we know that the minimum wage in Lebanon is 125,000 Lebanese Pounds per month or the equivalent of 85 U.S. Dollars. Therefore, five minutes of calling costing 25 Dollars constitute about one-third of the minimum monthly wage !!!

This small-scale provision of public services was improvised by some Lebanese entrepreneurs, and was not undertaken following specific planning and regulatory policies. It is running in parallel with state provision. Furthermore, no co-ordination with the Lebanese government, who owns the totality of public services networks, was made, and today some highly respected Lebanese government officials are claiming that private operators are illegal and are hindering the rehabilitation work undertaken by state agencies and enterprises. When we look at examples of public services privatization in other parts of the world, which were undertaken following strict regulatory and consumer protection policies, we conclude indeed that the anarchical

privatization occuring today in Lebanon is unacceptable and cannot constitute a long-term or even medium-term solution to the troubles of Lebanon's public services.

As outlined in the preceding chapters of this thesis, privatization is not an easy procedure, and should be implemented following clear regulatory and policy frameworks. Adequate planning and co-ordination between the public and private sectors is necessary before any attempt to privatize. Feasibility studies (technical and financial), regulatory procedures, control mechanisms (to prevent prohibitive pricing), official contracts, and long-term commitments are all primordial to insure the success of privatization.

In the following paragraphs, I will investigate the possibility of privatizing the Electricité du Liban, Lebanon's state-owned electricity company, and the privatization of the Lebanese PTT services. The choice between ownership and peripheral privatization options is examined, and the current financial needs of the Electricité du Liban and the PTT are exposed.

6.3.1.1 Privatization of the Electricité du Liban

The Electricté du Liban (EDL) is Lebanon's sole electricity company. It is at 100% state owned, and is responsible for the generation, transmission, and distribution of electricity on the Lebanese territory. Before the start of the war, EDL was a profitable and efficient enterprise, providing non-stop electricity to every square mile of the territory.

Today, after 16 years of war, EDL is in a poor state. Enormous damages occured in the power plants, transmission cables, and distribution networks. The Lebanese Minister of Electric and Hydraulic Resources estimated in July 1991, the cost of rehabilitating EDL to U.S.$210 million [Orient-7 91]. He also indicated that as of July 1991, this amount was not allocated to the ministry.

Moreover, the current indebtedness of the EDL is substantial. As of end 1991, the amount of debt denominated in hard currencies was U.S.$273 million, and debt denominated in Lebanese Pounds amounted to L.L.37 billion [Aldestef-a 91]. Table 6-4 shows the current indebtedness of the EDL. The rehabilitation projects needed to upgrade and modernize EDL are shown in Table 6-5.

The major financial difficulties faced by EDL today could be summarized as follows :

- Unavailability of loans considering the already high debt to equity ratio (D/E) of EDL, and lack of equity resources.

- Devaluation of the local currency versus hard currencies which significantly decreased the purchasing power of EDL, and resulted in the discontinuation of development projects.

- Decrease in revenues due to thefts, lack of necessary spare parts, illegal connections to the distribution network which still prevent EDL staff from collecting more than 10% of its revenues [Yehya 92].

- Lack of metering equipment which is compelling EDL to charge new subscribers using a flat rate which does not reflect accurate consumption costs [Yehya 92].

An outright ownership privatization of EDL is difficult. First, the private buyer must absorb around U.S.$318 million in debt, which is definitely not an attractive proposal for any rational investor. Second, strong political opposition to the sale of EDL is likely to arise and discourage any potential buyer. Finally, the limited profits that EDL is expected to generate considering the enormous capital requirements needed to upgrade and modernize the company would not attract private investors.

Nevertheless, two possible alternatives to ownership privatization could be implemented to attract private investors: One is a policy of *peripheral* privatization of EDL, and the other is a policy of *incremental* privatization using BOT or BOO schemes.

Peripheral privatization (or privatization of operations) is feasible. The State of Lebanon would retain ownership of EDL and assume the liabilities of the company, and contract out selected operations performed currently by EDL to private operators. Those operations could include: maintenance and control of EDL equipment, upgrading EDL distribution network, and collection of EDL revenues. The profit-oriented motivations of private operators will result in a better maintenance for a lower cost especially if contracting out maintenance is done on a competitive basis, more effective upgrading work, and more efficient collection schemes especially if the operators are compensated for their collection activities on a "commission" basis: the more they collect revenues from EDL customers, the more their final compensation will be.

A second proposal for EDL privatization is that of an incremental privatization in new generating capacity. As shown in Table 6-5, EDL needs an addition of 650 megawatts of generating capacity in the near future. The new power plant (or plants) could be build, operated and owned by private concerns. This privatization in generating capacity method was successfully implemented in other developing countries like Turkey and Pakistan (see Chapter 3), and there is no reason why it cannot be successfully implemented in Lebanon. BOT and BOO schemes, which were thoroughly described in Chapter 3, could be utilized. Joint ventures between Lebanese construction companies (e.g., Dar El-Handassah) and international engineering companies (I will propose here the U.S.' Bechtel which successfully undertook many BOT projects in Turkey -see Table 3-12) could be created to act as sponsors to the BOT or BOO projects. The World Bank could also provide a financing assistance to the project. In this context, I can think about the World Bank's

Private Sector Energy Development Fund (PSEDF) which was established in the late eighties and is currently the most significant international lending program for financing private energy projects. Indeed, at present, this Fund lends $3 to $4 billion per year to developing countries to upgrade their energy infrastructures [Landry 91]. The time of the concession could range from 15 to 20 years depending on the investment costs of the project, and the power generated would be sold to EDL. With this privatization technique, we would remove the burden of power plant construction and operation from EDL, and the private sector would be given the chance to participate in the rehabilitation of the Lebanese electricity system without having to absorb the high debt in EDL balance sheet and the modernization costs required to upgrade the old EDL plants. EDL will still have the responsibility of these necessary expenditures, but at least the enormous burden of a 650 MW power plant investment costs is removed.

6.3.1.2 Privatization of the Lebanese PTT System

As is the case with the electricity system, the Lebanese PTT system was significantly damaged during the sixteen years of war. Today, the telecommunications networks, telephone stations, and PTT administrative buildings are in a poor state. Telephone service is halted in the majority of the Lebanese territory, telex and fax services necessary to link Lebanon to the rest of the world are functioning in an random manner, and postal services are almost non-existent. In late 1991, Lebanon's PTT Ministry estimated the costs of rehabilitating the PTT network to amount to L.L.200 billion (or the equivalent of U.S.$240 million at year end 1991). The Ministry considered that rehabilitation works are most urgent and should be undertaken in the 1992-1995 period. The L.L.200 billion would be allocated in the following way: L.L.25 billion in 1992, L.L.40 billion in 1993, L.L.60 billion in 1994, and L.L.75 billion in 1995 [Aldestef-b 91]. Table 6-6 shows the PTT Ministry's rehabilitation program for 1992-1995.

However, as is the case with electricity, these capital requirements are difficult to find in the government budget. And even if the government can provide a part of this amount or any additional amount required in the future, it is clear that an efficient and complete rehabilitation program cannot be totally sustained with solely government funds. The participation of private capital is required.

Here, the method of privatization that I propose could be similar to PTT privatizations undertook in Latin American countries ("Telefonos de Mexico" in Mexico, ENTEL in Argentina, etc..) that I thoroughly examined in Chapter 4. The scheme could be the following: The Lebanese government would retain ownership of the PTT System and contract out the operations to private operators. The government would not have to disburse any funds in this scheme, it is the sole responsibility of the private operator to efficiently collect fees from the customers to cover its costs plus an acceptable profit level. The operator could be formed by a joint venture of Lebanese investors and a foreign PTT company that would bring in the necessary technical know-how and facilitate access to international networks. In Latin America, because of cultural and language links, Telefonos of Spain was the main foreign operator to bid for the PTT in conjunction with local private concerns. In Lebanon, I would suggest France Telecom who was active in bidding for Latin American PTTs, and is likely to be interested in operating the Lebanese PTT in conjunction with the Lebanese private sector, knowing that the cultural and historical links between Lebanon and France are very solid. Indeed, France Telecom has currently a number of French engineers and technicians working with Lebanese PTT staff to rehabilitate the PTT network.

Nevertheless, we can also imagine a competitive bidding scheme for the operation of Lebanon's PTT system. France Telecom and any other major telecom carriers would form joint ventures with Lebanese investors and bid competitively for the system. The current presence of the U.S.' Bechtel who is

undertaking in joint venture with Lebanon's Dar El-Handassah the study of the BCD project, could encourage AT&T or Southwestern Bell of the United States for instance, to step in and bid for the Lebanese PTT. The handsome profits realized by major telecom carriers in Latin American privatizations (see Chapter 4) would encourage the participation of these telecom carriers in the bidding process. If it was successfully undertaken in Latin America, I cannot see why it cannot be successfully implemented in Lebanon.

6.3.2 Privatization in Mega-Reconstruction Projects

Enormous capital requirements are needed to rebuild Lebanon's devastated districts. The reconstruction of Beirut's Central District alone could cost U.S.$10 billion approximately. To this figure we should add the capital requirements needed to rebuild other devastated districts, namely: Aley and Bhamdoun Districts in the Lebanese mountain, and East-Saida and Jezzine Districts in South Lebanon.

However, in those mega-reconstruction projects, the financial input of the State of Lebanon (i.e., the public sector) will be very limited, and it is also the Lebanese private sector -with an additional input from the Arab and foreign investment community- that is the most likely source of capital. Indeed, it is in this spirit that Decree No. 1273 of June 1991, which describes the legislative basis of Beirut's Central District Project, was drafted. The private sector is expected to be the driving force of the project. The government's input is limited to regulatory and policy questions. In my interview with Lebanon's Minister of Finance in the summer of 1991, the minister was very clear on this point: "The BCD Reconstruction Project is a private project. The Lebanese government's role in this project is limited strictly to some regulatory and general policy questions" [El-Khalil 91].

The scheme of the BCD project is as follows: A private real estate company ("Société Foncière et Immobilière") is officially created and approved by the Lebanese Parliament through Decree No. 1273. The company will be the legal entity on which the project is based: it will "own" Beirut's Central District. The capital of the company will be evenly divided (50/50) between *fresh-money* input from Lebanese, Arab anf foreign investors, and real assests input from the current property owners in Beirut's Central District. Both the investors who are providing cash and the property owners who are giving up their property rights will receive common stock (i.e., equity participation shares) on a *pro rata* basis in the ownership of the real estate company. Those shares could be traded at any time in Beirut's Stock Exchange or any other exchange where the shares could be listed.

The company is thus responsible for developing, rebuilding, and operating the project. First, the infrastructure of the BCD area is rehabilitated. Second, the destroyed buildings and facilities are rebuild or renovated, depending on the properties' degree of destruction. Third, the company undertakes to promote, develop, and sell the new properties. The old owners of the properties are given first priority in re-acquiring their estate if they wish to do so. Thus, they sell their shares in the secondary market and from the sale proceeds they acquire back their property. It is clear that the net proceeds of the sale will not be enough to cover the entire purchase price of the property, otherwise the company will make no profits and no investor will invest in the fresh money part of the capital in the first place. The old owner will have to pay a "premium" which is the cost of rebuilding and rehabilitating his property. Of course, the old owner can choose not to buy back its property, in which case the property is sold to any interested third party.

An implicit BOT scheme is included in Decree Law No. 1273 of the BCD Project concerning the rehabilitation of the BCD's infrastructure :

"The Lebanese government could authorize the private operation by the real estate company of the newly rehabilitated infrastructure of the BCD area. This private operation will be allowed for either a limited or an unlimited period of time. In the case of a private operation of the infrastructure of the BCD area, the Lebanese Treasury is exempted from any rehabilitation expenses associated with this infrastructure."

Article 2, Clause C, Point #8
Decree No. 1273, Republic of Lebanon

This is indeed a BOT scheme *in disguise*. The private real estate company will rebuild at its own expenses the infrastructure of Beirut's Central District and operate this infrastructure for a specific period of time to recover its costs. In this case, the Lebanese government is exempted from any construction or rehabilitation expenses. BOT schemes described in Chapter 3 of this thesis coincide exactly with this scheme.

In an appendix to this thesis, I provide a complete translation of Decree Law No. 1273, where all the clauses related to foreign ownership in the BCD, public estates preservation, and infrastructure ownership are covered.

In the following sections of this chapter, I will examine the potential problems and difficulties likely to arise in Lebanon and endanger privatization and private sector's participation in the reconstruction of the country. We will see that, although the financial input of the public sector is likely to be limited, its planning and regulatory inputs are not. The government must be an active player in reconstruction, and a passive -though hospitable- attitude is not acceptable. The government's input is principally required in: shaping the adequate environment to encourage private investment; stabilizing the economy through necessary structural adjustments in its budgeting and public expenditures policies; developing Beirut's Stock Exchange; eliminating political interference in economic activities; and strengthening Lebanon's legal structures.

6.4 Problems of Privatization in Lebanon

The problems of privatization related specifically to developing nations that we examined thoroughly in Chapter 4, are all likely to arise in the case of Lebanon. Indeed, inhospitable and weak economic environment, political opposition, unadequate regulatory structures, and under-developed capital market, are all characteristics of the current environment in Lebanon.

Therefore, privatization in Lebanon will not proceed without encountering major difficulties related to: (a) lack of confidence and high uncertainty about Lebanon's political future; (b) unstable and weak economic environment characterized by high inflation, steep depreciation of the Lebanese pound, growing difficulties of Lebanese commercial banks, and significant public debt; (c) unadequate regulatory structures characterized by the weakness of the Lebanese legal system, lack of planning and supervisory boards, and inefficient regulatory mechanisms; and finally, (d) under-developed capital market, knowing that Beirut's Stock Exchange is probably among the least efficient exchanges in the Middle East region today.

In this section, I will investigate Lebanon's problems and their impact on private investment in reconstruction. Possible solutions that could eliminate or lessen the influence of those problems are also proposed.

6.4.1 Weakness of the Economic Environment

Lebanon today is facing the most difficult economic problems of its entire modern history. In October 1991, the *Wall Street Journal* ranked Lebanon 118th among 130 countries according to its "global risk" (see Table 6-7). This compares with a ranking of 23rd for Malaysia, 49th for Saudi Arabia, 66th for Egypt, and 70th for Syria. Only 12 countries had a lower ranking than Lebanon, among these countries were Ethiopia (123rd), Iraq (126th), and

Somalia (128th). This was Lebanon lowest ranking since World War II.

On April 23, 1992, the Lebanese pound attained a record level of depreciation against the U.S. dollar: 1540 L.P. for one U.S. dollar. Only two months earlier, in February 1992, the exchange rate was 879 L.P. for one U.S. dollar (see Table 5-7). Thus, the Lebanese pound lost almost 100% of its value in two months. Furthermore, inflation is soaring. Indeed, knowing that Lebanon is primarily an "import" economy, the majority of the goods consumed by the population are imported and their price is directly tied to the U.S. dollar exchange rate. With the steep depreciation of the Lebanese pound, prices soar automatically in a frenzy manner.

On April 20, 1992, an extensive report published by a commission comprising Lebanon's most knowledgeable economists, designated three major reasons for Lebanon's economic misery: (1) a growing and uncontrollable public debt which attained record levels recently (see Tables 5-11 and 6-8 for internal and external public debt respectively); (2) a careless public expenditures policy practiced by the Lebanese government, where huge amounts of money are spent for political and military purposes, without proper consideration to the most urgent needs in other sectors of the economy like infrastructure, housing, health care, agriculture, and industry; and finally, (3) a significant *overmanning* in the ministries and the public sector's administrations. This overmanning was estimated by the report to 20% approximately of the current number of public sector's employees. Thus, the commission recommended the layoff of at least 20% of current public sector's employees.

Therefore, it appears clearly that such an economic environment, will not encourage privatization and private investment in the reconstruction of the nation. As mentioned in the preceding chapters of this thesis, privatization is about long term capital investment, and long term investment needs a reliable and stable economic environment. No long term -or even medium term- capital

planning is feasible in an inflationary environment. In the contrary, inflation enhances short term and speculative investment decisions, knowing that private investors will seek high rates of return and rapid profits to compensate for the uncertainty inherent in inflationary environments. Moreover, foreign investment is totally halted in unstable economic conditions. The high variability of the exchange rate will result in increasing difficulties in assessing the value of future cash flows and profit remittances converted in hard currencies. Finally, the recent poor ranking of Lebanon in the Wall Street Journal's countries risk assessment is likely to further discourage not only foreign investment, but also private investment by the Lebanese diaspora established outside Lebanon.

Thus, the present economic picture in Lebanon is bleak. What are the eventual solutions that should be implemented to prevent the discouragement of private investments in reconstruction? Although this question is best answered by economic experts, I will suggest in the following three possible solutions and steps that can enhance the chances of success of privatization and private sector's participation in the reconstruction of Lebanon :

1. Stop careless government expenditures. Government waste in politically-oriented expenditures, and spending on the Lebanese armed forces should be reduced. Although it is believed that the strengthening of the military will reinstall confidence in the future of the nation, spending on infrastructure, housing, health care, and education, is by fare more urgent today than military spending. Private investors want to have roads, bridges, airports, harbors, and telecommunications. As mentioned earlier in this chapter, private investors will most likely be the major source of finance in rebuilding this infrastructure, nevertheless, the input of the Lebanese public sector -especially at the outset of the reconstruction program- is necessary to encourage private investors to proceed with the program. If the government begins first by rehabilitating airports and harbors for example, then the private sector is encouraged to

invest jointly with the public sector in the construction of highways and power plants. It is important that the government makes the first step.

2. Stabilize the exchange rate and reduce inflation. If it is not possible to recover the lost value of the Lebanese pound against hard currencies, we should at least stabilize the exchange rate and halt depreciation. It is not a low or high exchange rate that hinders private investment, its is the *high volatility* of this rate that is most disastrous to investment decisions. Once this rate is stabilized and allowed to move with certain "reasonable" limits, then investment can proceed. Long term planning is enhanced and reliable previsions about cash flows and profit remittance levels can be established.

Consequently, once the depreciation of the Lebanese pound is halted, the inflation would be significantly reduced. Lebanon is an import-oriented economy, and the consumers price index (CPI) is directly related to the exchange rate of the Lebanese pound versus hard currencies.

3. Eliminate overmanning in the public sector. The commission of economic experts noticed that the Lebanese public sector was overstaffed by 20%, and suggested that this overstaffing should be reduced or eliminated as soon as possible.

We have seen that overmanning tends to be a characteristic of the public sector in many countries -both developed and developing-, and the figure of 20% seems also to be a raisonable figure for public sector's average overmanning worldwide (see Chapter 4). We have also seen that the first impact of privatizing a public enterprise is on the level of employment, knowing that the private operators eliminate this overmanning as soon as they take over the public business. This reality was the rationale behind public sector's employees opposition to privatization. They feared heavy job losses and they were right.

In Lebanon today, the government would significantly reduce the burden of a soaring public debt if he takes the painful but courageous and necessary step of eliminating overmanning in the public sector. We would not be enhancing efficient allocation of resources if we would be paying 120 people for doing a job that 100 people can do. Overmanning should be eliminated.

6.4.2 Political Opposition to Privatization in Lebanon

Knowing that Lebanon has always adopted liberal economic policies allowing extensive freedom to the private sector, political opposition to privatization in Lebanon is not intense. Nevertheless, I would describe political opposition in Lebanon as moderate not weak because of the notable opposition of some important government figures to privatization in the public services sector in particular.

Indeed, privatization of public services is not welcomed in all political circles in Lebanon. Public services are regarded as *strategic* sectors of the economy, and many political leaders discourage the idea of transferring the operations or ownership of these activities to the private sector. Zaher El-Khatib, current Minister of Administrative Reform, is among those. In an interview to a local newspaper in July 1991, Mr. El-Khatib strongly opposed the idea of privatizing public services in Lebanon [Magazine 7-91]. He argued that public services should remain under state control, and that privatization would lead to a monopolistic abuse by the private sector which would not fairly preserve the rights of the citizens. Moreover, the concentration of private wealth among few individuals in Lebanon, knowing that the Lebanese middle class was seriously hurt by the recent economic crisis, means that the likely players in privatization are very limited, and wide public participation would not occur. Nevertheless, Mr. El-Khatib welcomed the idea of privatizing specific public services like ports and airports for instance. He proposed the creation

of *mixed enterprises* (i.e., enterprises jointly owned by the public and the private sector) to manage Lebanon's airports and harbors.

On the other hand, some political figures in Lebanon are encouraging the idea of privatization of Lebanon's public services. Among those is Roger Dib, Minister of State, who is strongly in favor of privatizing public services. Mr. Dib argues that privatizing such services as electricity, water, telecommunications, and public transportation, would reduce the burden on the public budget by eliminating the subsidies that the state is currently providing to those services. Moreover, privatization would provide the necessary capital for rehabilitating Lebanon's public services, which capital is not available with the public sector presently. Finally, Mr. Dib estimated that roughly 20 to 25% of the public payroll charges would be reduced if public services are privatized [Orient-7 91].

Therefore, we notice that political opposition to privatization of public services is moderate. Some are in favor, some are not. However, privatization in other sectors of the economy is welcomed by almost every political leader in Lebanon. Indeed, privatization in public works and mega-reconstruction projects is not only welcomed but encouraged by the Lebanese political class in an unanimous way. All agree that the private sector is likely to be the major driving force in the reconstruction of Lebanon's devastated districts and in the development of large public works projects. Mr. Ali El-Khalil, Minister of Finance, and Mr. Nadim Salem, Minister of Public Works, that I met in the Summer of 1991, were indeed strongly in favor of private sector's participation in reconstruction, and did not believe that any political party in Lebanon would oppose such a move. The private sector should play an important role in reconstruction.

However, what is mostly encouraged by Lebanon's political leaders is Lebanese private capital. Foreign private capital is not as zealously welcomed,

and a strong sensitivity against foreign ownership exist within some political parties.

When we talk about foreign capital, we should distinguish between Arab private capital and international or non-Arab private capital. Arab private capital is welcomed in almost an identical way than Lebanese private capital. Some sensitivity against Arab ownership exists but it is not widespread and is not likely to be a major hurdle facing Arab private investment in reconstruction. On the other hand, like most developing nations which were under colonial control in the beginning of the century, Lebanon is sensitive to foreign, non-Arab private capital. This sensitivity is decreasing at a rapid pace today, especially after the collapse of Communist regimes in Eastern Europe, but it still exists.

In the following, I propose some possible solutions to political opposition to privatization in Lebanon. These solutions are primarily drawn from the experience of other developing nations in privatization :

1. Encourage Lebanese-foreign joint ventures. Joint ventures between Lebanese and foreign, Arab or non-Arab, private concerns are strongly encouraged. This will eliminate political sensitivity to foreign ownership and enhance the expertise of the Lebanese private sector. Indeed, by teaming up with an experienced and well-known international party, the Lebanese private sector will gain a significant exposure to foreign know-how. This exposure is particularly important today, knowing that the Lebanese private sector was practically cut from the rest of the world during the last 16 years of war. Recent developments in information technology, communications, and globalization of business, have not yet reached the Lebanese private sector, and a joint venture with a foreign party would certainly enhance necessary transfers of technology, know-how, and expertise.

2. *Ratify laws to encourage foreign ownership.* The impact of sensitivity to foreign ownership would be reduced if adequate legislation encouraging foreign ownership is ratified. The example of neighboring Turkey, which had a strong sensitivity to foreign ownership, and successfully eliminated this sensistivity by enacting efficient laws encouraging foreign ownership (see Chapter 4), could be followed. Legislation could encompass ownership of real estate, financial assets (e.g., common stock and corporate bonds), and operating subsidiaries. If Turkey, which had a far less liberal economy than Lebanon, succeeded in attracting foreign capital, Lebanon should be able to do so.

3. *Create vouchers to replace subsidies in public services.* Most political opponents to privatization of public services in Lebanon, view public subsidies necessary to preserve the poor's interest and access to those services. A 1989 study by the I.M.F. found that the Lebanese government's aggregate subsidies to public services amounts to roughly 20% of annual government expenditures [Heller 89]. Subsidies are mostly noticed in electricity, public transportation, and essential goods provision, like bread for instance. Those subsidies are very costly today, their elimination and public services privatization would significantly reduce public debt levels. To preserve the access of the very poor to privatized public services, the state can issue vouchers redeemable only for a designated service, that the service provider can present for reimbursement by the state. In this way, we would be "subsidizing" only those users who are too poor to pay market-level prices, and letting everyone else pay the full rate of the service.

6.4.3 Regulatory and Legal Structures in Lebanon

Due to the war, Lebanon's legal system has been functioning sporadically in the last sixteen years. Besides physical damages that occured in the country's courts and administrative buildings, more serious damages occured in the judicial system and procedures themselves. People lost their

habit to resort to courts and legal procedures to resolve their disputes. Disputes are left hanging indefinitely, and even if a dispute is solved *legally*, the court verdict is rarely respected. Furthermore, legislation in Lebanon is slow. The approval of Beirut's Central District project which is vital to the unity and economic viability of the nation, took approximately six months to be ratified by the Parliament.

However, we have seen in the preceding chapters that efficient and fast regulatory procedures are a key element for the success of privatization. The private sector must be able to rely on clear and efficient procedures that guarantee investments, rates of return, profit remittances, property ownership, and non-interference by political parties in economic activities. Moreover, no government entity exists to guarantee investments by domestic and foreign investors against political, economic, or simply military risks. Back in January 1977, the government of Lebanon has tried to create an official entity to guarantee investment in Lebanon against non-business-related risks. It instituted through Decree Law No. 3 of January 15, 1977, a public agency named the National Investment Guarantee Corporation (NIGC).

The function of NIGC was to insure new investments in tangible fixed assets effected in Lebanon after the issuance of the said law. The risk to be covered by the insurance was strictly political, and "was limited to direct damages caused by the war, civil insurrection, and all acts of violence which are public in nature" [Ghattas 85]. Other types of risk such as the risk of government expropriation, currency inconvertibility, and nationalization were not covered by this policy as they were supposed to be of little relevance to Lebanon's case [Majdalani 88]. Eligibility for insurance was given a broad base both in terms of types of institutions seeking coverage and in terms of the citizenship of the investor. Both foreign and domestic investors were eligible for NIGC insurance.

However, one major flaw of NIGC was that risk coverage was set to be denominated in Lebanese pounds. No guarantee against the depreciation of the Lebanese pound was given back then. This could be easily understood, knowing that in 1977 and until late 1983, the Lebanese pound was quite stable, and moved against hard currencies within fairly reasonable limits. No one in 1977 predicted the steep depreciation of the Lebanese pound that we have seen since late 1983, where the Lebanese pound depreciated from about 4 L.P. for one U.S. dollar in late 1983 to 1540 L.P. for one U.S. dollar today. In percentage terms, this yields a depreciation of roughly 40,000% !! This compares with a depreciation of less than 25% from 1977 to 1982 (3.00 L.P. for one U.S. dollar in 1977 versus 3.68 L.P. for one U.S. dollar in 1982).

Therefore, another structure incorporating currency depreciation risk must be set for NIGC today if it is to be effective in guarantying private investments in Lebanon. I admit that this is not an easy task to accomplish, and this is why all activities of NIGC have been halted since late 1983. Nevertheless, if we are thinking of attracting foreign capital and Lebanese private capital invested outside the country to be invested in reconstruction projects, it is necessary to provide a guarantee against currency depreciation risk. I strongly believe that this one of the most important risks facing private investments in Lebanon today. Latin American nations immediatly understood that controlling inflation and halting depreciation was a key to attracting private investments. Some of them were quite successful in stabilizing their economy (see Chapter 2). I can cite particularly Mexico and Argentina which fought recently a winning battle against inflation and depreciation. They did so by instoring "austerity" policies. The main features of austerity policies were: (a) freezing salary increases in every sector of the economy; (b) reducing public expenditures in a drastic way, and limiting expenses to "most urgent" cases; (c) instoring restrictions on foreign imports which are considered as non-vital to the economy (e.g., clothes and luxury products); and, (d) encouraging domestic exports by lowering export tariffs and increasing quotas. Austerity

plans worked successfully in Mexico and Argentina, and we can say today that those countries are on the right track to economic stability. They fought and won their battles against inflation, soaring public debt, and home currency depreciation.

In addition to efficient regulations and policies to re-establish economic stability in Lebanon, other laws and regulations should be enacted instituting: better access to courts by the public, stronger legal protection and law enforcement mechanisms, efficient tax collection schemes, efficient anti-fraud mechanisms, and finally, a tax code that encourages investment (e.g., investment tax credits and accelerated depreciation schedules), and allows investors to have a realistic chance to earn adequate returns on investment in reconstruction projects.

6.4.4 Lebanon's Capital Market

Unfortunately, Beirut's Stock Exchange -Lebanon's sole exchange- is inefficient and illiquid. As Tables 6-9 and 6-10 show, trading volumes are low and the number of listed companies is very small. Furthermore, there is no regulated disclosure laws for listed companies, no standardized accounting procedures, no specialized investment banks, no corporate bond market, except for short-term government credit (Lebanese treasury bills); and in practical terms, there is no efficient regulation of securities transactions. Consequently, Lebanese savers show their lack of confidence in this rudimentary financial market by relying primarily on Certificate of Deposits (CDs) as the preferred savings vehicle. Borrowers rely primarily on short-term credit acquired through commercial banks.

In this financial environment, the implementation of privatization is quite difficult. For example, one feature of Beirut's Central District reconstruction project that we described earlier in this chapter is that private

investors can trade their shares at any time in Beirut's Stock Echange. This implicitely assumes that the market will remain liquid at any time, and a seller can immediatly find a buyer and *vice verca*. Is that assumption rational? My answer is no. The historical behavior of Beirut's Stock Exchange does not allow us to make such a critical assumption. Our market is under-developed, and cannot easily absorb the number of shares that are going to be issued for private investors in the BCD Project.

In the following, I propose a number of steps that can be implemented to enhance the efficiency and liquidity of Beirut's Stock Exchange:

1. Institute regulations for securities transactions. Securities transactions should be regulated and supervised by an independent commission to prevent fraud and illegal transactions. One cannot imagine the New York Stock Exchange for example without the Securities Exchange Commission (SEC), or the Bourse de Paris without the Commission des Operations de Bourse (COB). Those supervisory boards are necessary to install confidence among small and large investors in securities investment, and institute fair treatment and public disclosure rules.

2. Give tax incentives for securities investment. For both domestic and foreign investors, tax incentives can be devised to enhance securities buying. A low capital gains tax would enhance common stock buying, and a low fixed income tax would enhance corporate bonds buying. Furthermore, deferred tax schemes can be implemented for small investors to enhance their participation in securities buying. Specific sets of tax incentives targeted to small investors were implemented in Chile for instance following a goverment decision to enhance small investors share-buying and participation in privatization. The plan entitled *"Capitalismo Popular"* was indeed very successful in achieving its objectives (see Chapters 2 and 3).

3. Encourage share-buying by foreign investors. Turkey's widely acclaimed Decree Law No. 32 of August 1989, which opened Turkey's securities market to institutional and individual foreign investors, was the key in the tremendous increase in trading volume at Istanbul's Stock Exchange (see Chapter 4). The decree regulated and instituted foreign participation in domestic shares buying. Moreover, international investment banks and brokerage houses relied on the *official insurance* of the decree to step in and participate heavily in the activities of the exchange, bringing in much needed foreign capital for investment in Turkey's privatization program.

A similar regulation could be instituted in Lebanon to encourage domestic share-buying by Arab and foreign investors. The official guarantee of such a decree is crucial. Although, and contrary to the case of Turkey, the Lebanese government has never imposed restrictions on the free flow of currency in and out the Lebanese borders, it is always useful to officialize the rules governing foreign investments in Lebanon. Foreign investors are not satisfied by the historical track record of a developing country, they tend to be constantly sceptical, requiring official decrees and regulations to rely on.

4. Bring in international advisors. Advisors from the I.F.C. and major investment banks played a key role in shaping the *renaissance* of Istanbul's Stock Exchange. New trading techniques, information systems, accounting standards, and disclosure laws were instituted, allowing the exchange to be more efficient, liquid, and compatible with international standards. The crowd of new technologies, plus the fact that the activities of Beirut's Stock Exchange were practically frozen in the past sixteen years, require the input of international advisors in updating and reorganizing the exchange. An efficient and liquid capital market is the stimulus of private investment, and Beirut's Stock Exchange should be ready to play a major role in financing the reconstruction of the nation.

Table 6-1: Capital Losses Due to the War, Period Considered: 1975-1983

Sector	Losses (in U.S.$ million)	Description of Casualties
Housing	756	11,200 lodgings destroyed.
Tourism	252	65 hotels in Beirut and the Mountain region (40 in 1975-76 and 25 in 1982).
Commerce and Services	1,953	13,400 commerces, offices and public equipment in commercial districts.
Industry	315	300 plants and factories.
Agriculture	210	F.A.O. estimates.
Public Equipment	840	Roads, harbors, airports, telecommunications, electricity and hydraulic networks, schools and hospitals.
Miscellaneous	420	Raw materials, finite products, vehicles, and other properties.
TOTAL	**4,746**	

Source: [ComLevant-b 91]

Table 6-2: Capital Losses Due to the War, Period Considered: 1989-1990

Sector	Losses (in U.S.$ million)	Description of Casualties
Housing	16	22,000 lodgings (5000 completely destroyed).
Commerce and Services	20	1000 commerces and offices, 16 bank branches, 240 garages and gas stations.
Industry	50	620 plants and factories (partially or completely destroyed).
Public Equipment	25	• Roads, airports and ports
	100	• Telecommunications
	99	• Hydraulic networks
	100	• Electricity networks
	40	• Schools and hospitals
Miscellaneous	180	Raw materials, finite products, vehicles, and other properties.
TOTAL	**531**	

Source: [ComLevant-b 91]

Table 6-3: Prospects for Privatization in Lebanon

A. Public Services:

- Electricity System ("Electricité du Liban")
- Water Supply ("Office des Eaux de Beyrouth")
- Telecommunications (Lebanese P.T.T.)
- Public Transportation ("Office des Transports Communs")
- Community Services (postal services, garbage collection, and street cleaning)

B. Reconstruction Mega-Projects:

- Beirut's Central District (B.C.D. Project)
- Aley and Bhamdoun Districts (Mount Lebanon)
- East-Saida and Jezzine Districts (South Lebanon)

C. Public Works

- Highways and Roads (Private Toll Roads)
- Ports and Airports

Notes:

- The names appearing between quotation marks are the official denomination in French of the state agency or enterprise responsible for providing the public service.
- Two areas of public service in Lebanon are provided by both the public and the private sector: Education and Health Care.

Source: Developed by author of thesis.

Table 6-4: Indebtedness of the Electricité du Liban (1991)

• Foreign Debt	U.S.$38 million
• Debt to Foreign Suppliers	U.S.$20 million
Internal Debt:	
• Due to the Central Bank	U.S.$90 million L.L.1,084 million
• Due to the C.D.R.	U.S.$125 million L.L.150 million
• Due to the Treasury	L.L.35,150 million
TOTALS:	
• Debt denominated in U.S.$	U.S.$273 million
• Debt denominated in L.L.	L.L.37 billion

Note: As of end of 1991, L.L.37 billion were equivalent to U.S.$45 million approximately. Therefore, total indebtedness of the EDL by the end of 1991, amounted to U.S.$318 million approximately.

Source: [Aldestef-a 91]

Table 6-5: EDL Rehabilitation Requirements (1991)

• Power plants construction: Increasing the generating capacity by 650 MW.
• Rehabilitation of the 150-66 KV main transmission lines.
• Rehabilitation of the Central substations in Jamhour, Bsalim, and Bouchrieh.
• Reinforcement of the Medium Voltage Transmission System.
• Construction of new substations and transmission lines in the Bekaa valley (East Lebanon) and Zahrani area (South Lebanon).

Notes:

- Today the generating capacity of EDL is as follows: 790 MW in Zouk Mikhael (East Beirut), 348 MW in Jyeh (South Lebanon), 150 MW in Litani (South Lebanon), and 20 MW in Batroun (North Lebanon). The Zouk and Jyeh plants rely on fuel for their energy resources. The Litani and Batroun plants are hydro-electric power plants.
- Transmission is provided by a 150 KV air network and 66 KV of underground cables in Beirut. Distribution is provided through 33 KV, 15 KV, and 11 KV networks.

Source: [Yehya 92]

Table 6-6: Lebanese PTT Rehabilitation Costs (1992-1995)

(in Lebanese Pounds Billion)

	1992	1993	1994	1995
• Purchase of equipment to the stations	5	8	8	19
• Installation of the networks and upgrading	10	18	30	30
• Purchase of property, construction, and building equipment	2	4	4	5
• Network extension work and rehabilitation of international networks	5	5	9	11
• Introduction of the "Cellular Phone" system	5	5	9	10
TOTAL	**25**	**40**	**60**	**75**

Source: [Aldestef-b 91]

Table 6-7: Ranking of Countries According to Their "Global Risk" (1991)

Rank	Country
1	Switzerland
2	Luxemburg
5	Germany
8	Japan
9	U.S.A.
16	United Kingdom
23	Malaysia
30	Spain
32	Mexico
49	Saudi Arabia
66	Egypt
70	Syria
71	Iran
71	U.S.S.R.
104	Kuwait
118	**Lebanon**
121	Zaire
123	Ethiopia
126	Iraq
127	Sudan
128	Somalia
129	Liberia

Source: *The Wall Street Journal*, October 2, 1991.

Table 6-8: External Debt of the Lebanese Public Sector, As of October 31, 1991.

(in U.S.$ million)

Lender	Total Debt	Debt Paid	Debt Remaining
World Bank	21.2	21.2	-
European Bank	12.6	12.6	-
Arab Fund	23.3	23.3	-
Abu Dhabi Fund	6.7	-	6.7
Belgium	0.7	0.7	-
France	124.6	95.5	29.1
Germany	10.1	10.1	-
Italy	118.2	-	118.2
U.S.A.	41.5	-	-
TOTAL	**254.0**	**100.0**	**154.0**

Source: [ComLevant 92]

Table 6-9: Operations of Beirut's Stock Exchange, 1964-1982

Year	Number of Traded Stocks (rounded)	Value of Traded Stocks (in LL million)
1964	857,000	81
1965	368,000	29
1966	191,000	14
1967	152,000	8
1968	41,000	5
1969	26,000	2
1970	101,000	10
1971	127,000	14
1972	387,000	43
1973	350,000	52
1974	285,000	50
1977	43,000	7
1978	101,000	22
1979	90,000	12
1980	19,000	2
1981	7,000	0.6
1982	34,000	3

Source: [Ghandour ND]

Table 6-10: Stocks Listed on Beirut's Stock Exchange (1983)

Company	No. of Stock Issued Till July 1983	No. of Traded Stocks in 1982	
Lebanese Cement	5,760,000	5,845	(90)
White Cement	1,500,000	2,481	(42)
Eternit	768,000	2,792	(39)
Kadisha	230,000	1,138	(207)
A.B.C.	91,500	-	(28)
SOLIVIR	1,200,000	-	(44)
Financière et Immobilière du Port de Beyrouth	190,698	376	(272.5)
O.K.A.L.	250,000	19,875	(115)
Nahr-Ibrahim	180,000	160	(77.5)
Uniceramics	135,000	250	(310)
Générale Financière du Liban	108,000	335	N.a.
Lebanese Oils	N.a.	100	N.a.
Casino du Liban	360,000	100	(110)
Naas-Bickfaya	150,000	40	(34.5)
Faraya-Mzar	N.a.	50	N.a.
Union Nationale	15,000	10	(502)
Gestion et Exploitation du Port de Beyrouth	190,698	118	(176.5)
Compagnie Libanaise de Teléphérique	45,000	40	(90)
CIL-Immobilier	280,000	-	N.a.
El-Bared	80,000	-	(142)
BonJus	80,000	425	(135.5)
SODECO	20,000	-	N.a.
Lecico	130,000	100	(645)

Note: Figures between brackets indicate the 1983 average stock price in Lebanese pounds.

Source: [Ghandour ND]

Table 6-11: Attitude of Lebanese Businessmen With Respect to Profit Levels.

Attitude that would be taken	Number of men	Percent of total
• Would withdraw only if there were outright losses, with no hope of improvement.	84	40.6%
• Would withdraw if profits dropped to a positive figure well below the lower end of the range of adequate profit levels.	63	30.4%
• Would withdraw if profits dropped to zero.	31	15.0%
• Would withdraw as soon as profits drop below the lower end of the range of adequate profit levels.	11	5.3%
• No reply	18	8.7%
TOTAL	207	100%

Source: [Majdalani 88]

Table 6-12: Ranking of Lebanese Commercial Banks According to Their Total Deposits (1990)

Bank Name	Deposits (in L.L. billion)
1. Banque du Liban et d'Outre-Mer	297
2. Arab Bank Limited	289
3. Banque Libano-Francaise	227
4. BNPI	209
5. Byblos Bank	164
6. Société Générale	161
7. Banque de la Mediterranée	158
8. Beirut-Ryad Bank	157
9. Banque de Beyrouth et des Pays Arabes	155
10. Banque Audi	154

Source: [ComLevant-c 91]

Table 6-13: Board of Directors of the Council for Development and Reconstruction (CDR), 1991.

President	Fadl Chalak
Vice-Presidents	Ibrahim Chamseddine
	Butros Labaki
Secretary General	Nuhad Baroudi
Members	Nadra Abou-Khater
	Imad Chatila
	Ali Dandache
	Hagop Demerjian
	George Maroun
	George Samaha
	Yahia Sankari
	Walid Takiddine

Source: [Samaha 91]

Table 6-14: Recent Construction Activity in Lebanon (1991)

Region	Construction Permits (in square meters)	Percentage
Beirut	264,800	9.47%
Mount Lebanon	833,900	29.80%
North Lebanon	655,500	23.43%
South Lebanon	748,900	26.77%
Bekaa Valley	294,900	10.53%
Total	**2,798,000**	**100.00%**

Source: [ComLevant-a 91]

Table 6-15: Real Estate Activity in Lebanon (1990)

Real Estate Register Area	Number of sale transactions	Total sale price (in LL)
Beirut	1,944	25,391,963,400
Baabda	2,485	21,731,724,800
Metn	1,761	15,870,931,700
Kesrouan	2,964	37,341,524,500
North Area I	4,569	7,691,277,780
North Area II	4,112	7,665,763,900
Bekaa	4,316	6,199,485,370
Nabatieh	2,452	1,843,980,240
Saida	4,724	10,443,021,400
Total	**29,327**	**134,179,673,090**

Note: In 1990, the average exchange rate of the Lebanese pound (LL) against the U.S. dollar was 700 LL for one U.S. dollar. Thus, 134,179,673,090 LL yielded roughly U.S.$200 million in 1990.

Source: [ComLevant-a 91]

Chapter 7

Conclusion

The main objective of this thesis was to investigate the role of privatization techniques and private sector's capital in the reconstruction of Lebanon. We have seen that private sector's contribution is essential, but not unique. Even with limited financing resources, the government of Lebanon should play a major role in: shaping the adequate investment environment to encourage private capital inflow; stabilizing the Lebanese economy through necessary structural adjustments in the government's budgeting and public expenditures policies; eliminating political interference in economic activities; reforming and reorganizing Beirut's capital market; and finally, strengthening Lebanon's legal and regulatory structures. In Chapter 6, I proposed several recommendations that could help in formulating and implementing those necessary reforms.

The experiences of other developing nations in attracting private investment in construction and development were very insightful in formulating those recommendations. Some developing countries like Turkey, Pakistan, Argentina, and Mexico were fairly successful in implementing the initial phase of their economic reform and development plans. Others -like Brazil and Peru- were not as successful and are still struggling with poverty, high inflation, and slow -and sometimes negative- economic growth. Nevertheless, both *winners* and *losers* were an essential source of informations for this thesis.

However, the case of Lebanon is somewhat different from that of other developing countries. Lebanon has unfortunately the unique features of being currently under military occupation, and suffering the devastating impact of sixteen years of war. Therefore, one realistic conclusion that could be drawn from this thesis is that attracting private capital for investment in Lebanon's reconstruction will not be an easy task. Indeed, the feasibility of the recommendations of this thesis is challenged by a number of questions concerning Lebanon's political and economic futures that remain unanswered today. Lebanese-Israeli talks that started in Washington in October 1991, have not yet reached any tangible solution to the territorial conflict opposing Lebanon to Israel. International and Arab financial support to Lebanon's reconstruction efforts is slow and limited. First, the establishment of the long-awaited Arab Fund for the Reconstruction of Lebanon which was initially scheduled for September 1990, was suspended after the Iraki invasion of Kuwait on August 2, 1990 [El-Khalil 91]. Second, the importance of the economic crisis in East Europe and the former Soviet Union is diverting the EEC's and United States' support away from Lebanon. Last but not least, the acute economic difficulties, which are prevailing currently in Lebanon, are hindering any possibility for long-term investment in the Lebanese economy.

Those problems are indeed overwhelming, making me a little bit pessimistic and sceptical about the feasibility of a large-scale participation of the Lebanese *diaspora* -which is likely the major source of Lebanese private capital- in the reconstruction of the country. However, Lebanon is the land of miracles, and the Lebanese people have shown during their tumultuous history a great amount of dynamism and creativity. The domestic private sector has resisted superbly sixteen years of devastating battles on every square mile of the Lebanese territory. Lebanese entrepreneurs which are present in every part of the world -North and Latin America, Europe, Africa, and the Middle East- have established an impressing track record of successes.

Today, Lebanon is relying on both its domestic private sector and the Lebanese diaspora to be the driving forces in reconstruction. I hope that this thesis contains useful insights that could help in shaping the adequate environment to attract private investments in Lebanon. I admit that the feasibility of many of the recommendations of this thesis depends to a large extent on factors external to the will of the Lebanese people, nevertheless, it is our primary responsability to rebuild our nation. The public sector, the private sector, and the diaspora, must unite to accomplish another Lebanese miracle. Our country was once called the "Switzerland" of the Middle East, and I strongly wish that it will regain this title as soon as possible.

Appendix A

Decree Law No. 1273
Beirut Central District Project

On June 1, 1991, the President of the Republic of Lebanon, Mr. Elias Hraoui, issued Decree Law No. 1273 entitled "Real Estate Companies: Beirut's Central District Project". The decree was approved by the Lebanese Parliament on a second vote in September 1991, after an unfavourable initial vote in July 1991.

The following is the English translation of Decree Law No. 1273, which was issued in Arabic, Lebanon's official language.

A.1 Article One

The Council for Development and Reconstruction (CDR) is authorized to control directly, or in conjunction with any other governmental agency, municipality, or private real estate company created following Article 21 of the Urban Plan of the Republic of Lebanon, the execution of reconstruction projects in any region or district of the Lebanese territory. The CDR is further authorized to expropriate the land of the project.

A.2 Article Two

If the execution of a reconstruction project is to be undertaken in conjunction with a private real estate company (the company), the creation of this company will be authorized by a decree law issued by the Lebanese government. The decree will expose details of the internal structure and regulations of the private real estate company. The initial status of the company could include temporary clauses, permitting outset of operations of the company before complete resolution of all pending cases of property ownership disputes between the company and former owners, tenants, or operators of the property.

The following clauses apply to the real estate company :

A.2.1 Clause A

The ownership of the company could include, in addition to Lebanese private investors, private investors from the Arab countries represented as institutions or individuals. Private investors -Lebanese and Arab- will contribute to the *fresh money* portion of the capital of the company. The company's capital could be fixed in a foreign currency other than the Lebanese pound (LL). However, at the time of the initial subscription to the capital of the company, the fresh money (i.e., cash) portion could not exceed the real assets contributions of the former property owners in Beirut's Central District area.

The company is exempted from all "transfer taxes" on real assets. The company is further exempted from all "income taxes" to be paid to the Lebanese government, and that for a period of ten years beginning at the time of the initial subscription to the capital of the company.

After the sale, the common stock of the company will be immediatly traded in the secondary market of Beirut's Stock Exchange. The company is allowed to buy back up to 10% of the total shares outstanding without the necessary reserves condition applied to Lebanese corporations.

The company is given full authorization to fill up with earth the sea-shore on the West side of Beirut's Central District. This newly created land will be jointly owned by the Lebanese government and the private real estate company. The new land will be developed in conjunction with the CDR.

A.2.2 Clause B

The real estate company is exempted from the legislation of Article One of the law regulating foreign (including Arab) ownership in Lebanon, under the following conditions :

1. At least two-thirds of the members of the Board of Directors of the company should be Lebanese citizens.

2. The internal statute of the company should include a clause restricting any private investor -Lebanese national or foreign national- of owning more than 10% of the outstanding shares of the company. The wife or husband of the investor and all his or her legal heirs constitute one legal person.

A.2.3 Clause C

The following rules and procedures shall govern the valuation of the properties included in the capital of the company :

1. The decree authorizing the creation of the real estate company must be published in the Official Journal of the Republic of Lebanon and in at least three private Lebanese newspapers. A list of the properties to be included in Beirut's Central District project must also be published.

2. A Valuation Committee of the first instance including a judge of Lebanon's first instance courts, a civil engineer with at least 10 years of relevant professional experience, and a real estate valuation expert, shall prepare the first valuation report.

3. The nomination of the members of the first instance Valuation Committee shall be published in the Official Journal. The committee will invite every property owner in Beirut's Central District area to submit by writing any proposition or complaint that he or she may have about the valuation of the property, and that within at most two months after the outset of the activities of the committee.

4. The valuation report prepared by the first instance Valuation Committee shall be submitted to a Higher Valuation Committee nominated by the Lebanese Council of Ministers. The Higher Valuation Committee shall include a judge of the Beirut Court of Appeals, a civil engineer with at least 20 years of relevant professional experience, and a real estate expert. The Higher Valuation Committee will review the first valuation report and any eventual complaints of the property owners. However, the valuation report prepared by the Higher Valuation Committee is final and indisputable.

5. Consequently, properties of Beirut's Central District area are subscribed as real assets contribution to the capital of the real estate company, and that within at most six months after the publication of the final report of the Higher Valuation Committee.

6. The company shall rehabilitate and build -at the expenses of the Lebanese Treasury- the roads and public squares and gardens of Beirut's Central District. Those public areas will remain under state ownership. The company is authorized to own the rest of the pre-1975 public areas. However, the total area of the newly rehabilitated public property should be at least equal to the area of public properties existing in Beirut's Central District prior to 1975.

7. The company shall rehabilitate and build -at the expenses of the Lebanese Treasury- the infrastructure of Beirut's Central District (water and electricity supply networks, telecommunications networks, public parkings and garages, etc..).

8. The Lebanese government could authorize the private operation by the company of this newly rehabilitated infrastructure. This private operation would be allowed for either a limited or unlimited period of time. In the case of a private operation of the infrastructure of Beirut's Central District, the Lebanese Treasury is exempted from any rehabilitation and construction expenses associated with this infrastructure and due to be paid to the real estate company.

A.3 Article Three

The rent and lease contracts of all property claimants in Beirut's Central District are still considered valid, even if the property supporting rent or lease contracts was completely destroyed as a result of the war operations occuring in the area between the dates of February 16, 1975 and June 1, 1991.

A.4 Article Four

The special decrees pertaining to the implementation phase of this Decree No. 1273, shall be issued later by the Council of Ministers of the Republic of Lebanon.

A.5 Article Five

This Decree No. 1273 will be published on June 1, 1991 in the Official Journal of the Republic of Lebanon.

The President of the Republic of Lebanon,
His Excellence, Mr. Elias Hraoui
June 1, 1991

References

[Aldestef-a 91] Aldestef.
Rapport sur l'Electricité du Liban.
Aldestef, no. 10, December 1991.

[Aldestef-b 91] Aldestef.
Programme des Télécommunications au Liban.
Aldestef, no. 10, December 1991.

[Ascher 87] Ascher, Kate.
The Politics of Privatization: Contracting Out Public Services.
Saint Martin's Press, New York, 1987.

[AudiBank 91] Audi Bank.
Quarterly Economic Report.
Audi Bank, Beirut, Lebanon, Fourth Quarter 1991.

[Baker 90] Baker, Richard C.
Project Financing for Cogeneration Projects.
Public Utilities Fortnightly, March 15, 1990.

[Berg 87] Berg, Elliot.
The Role of Divestiture in Economic Growth.
in "Privatization and Development", ed. Steve H. Hanke, Institute for Contemporary Studies, 1987.

[Beidleman 90] Beidleman, Carl, Donna Fletcher, and David Veshosky.
On Allocating Risk: The Essence of Project Finance.
Sloan Management Review, 47, Spring 1990.

[Blankart 79] Blankart, C.B.
Bureaucratic Problems in Public Choice: Why Do Public Goods Still Remain Public Choice.
ed. K.W. Roskampo, Cujas Publishers, Paris, 1979.

[Breyer 82] Breyer, S.G.
Regulation and Its Reform.
Harvard University Press, Cambridge, 1982.

[Cardoso 91] Cardoso, Eliana.
Privatization Fever in Latin America.
Challenge, September-October 1991.

[ComLevant-a 91] Le Commerce du Levant.
Special Economie 1991: Les Perspectives de l'An 2000.
Le Commerce du Levant, No. 5260, July 25, 1991.

[ComLevant-b 91] Le Commerce du Levant.
Reconstruction du Liban: Le Grand Dossier.
Le Commerce du Levant, No. 5264, September 19, 1991.

[ComLevant-c 91] Le Commerce du Levant.
Special Banques 1992.
Le Commerce du Levant, No. 5271, December 26, 1991.

[ComLevant 92] Le Commerce du Levant.
1992: L'Heure des Bilans et l'Année des Défis.
Le Commerce du Levant, No. 5272, January 16, 1992.

[Crain 78] Crain, M.W., and A. Zardkoohi.
A Test of the Property Rights Theory of the Firm: Water Utilities in the United States.
Journal of Law and Economics, October, 1978.

[DeChalendar 84] De Chalendar, Jacques.
Introduction Generale Sur Les Relations Entre l'Etat et Les Entreprises Publiques en France.
Ministere de l'Economie, des Finances et du Budget, Paris, 1984.

[DeHoog 84] DeHoog, Ruth.
Contracting Out for Human Services: Economic, Political, and Organizational Perspectives.
State University of New York Press, Albany, 1984.

[Economist 91] The Economist.
Latin America's Economic Reform.
The Economist, October 19, 1991.

[El-Khalil 91] El-Khalil, Ali.
Interview with the Author of Thesis.
Beirut, Lebanon, July 30, 1991.

[El-Khazen 85] El-Khazen, Farid.
Lebanon's Economy After A Decade of Turmoil: 1975-1985.
American-Arab Affairs, Spring 1985.

[El-Naggar 89] El-Naggar, Said.
Privatization and Structural Adjustment in the Arab Countries.
ed. Said El-Naggar, International Monetary Fund, Washington, 1989.

[ENR 92] Engineering News Record.
Mexico Privatization Needs Billions.
ENR, March 23, 1992.

[Euromoney 89] Euromoney.
Turkey: The Slpeeping Bourse Wakes Up.
Euromoney, November 1989.

[Euromoney 90] Euromoney.
Argentina's Menem Goes Private.
Euromoney, January 1990.

[Feibel 80] Feibel, C., and A.A. Walters.
Ownership and Efficiency in Urban Buses.
Staff Working Paper No. 371, The World Bank, Washington, D.C., February 1980.

[Ghandour ND] Ghandour, Roula.
Potential for Developing a Capital Market for Lebanon.
Unpublished MBA Project, Not Dated (ND), American University of Beirut, Lebanon.

[Ghattas 85] Ghattas, Emile.
Domestic Investment Insurance in Lebanon: A Daring Appeal for Revival.
Management International Review, Volume 25, 1985.

[Gill 89] Gill, David.
Privatization: Opportunities for Financial Markets Development.
S. El-Naggar ed., IMF, Washington, 1989.

[Glade 91] Glade, William.
Privatization of Public Enterprises in Latin America.
ed. William Glade, International Center for Economic Growth, 1991.

[Grant 91] Grant, Richard D.
Financing in the 1990s.
in "Infrastructure Finance Forum", Institutional Investor, September 1991.

[Hammer 89] Hammer, Richard, Hans H. Hinterhuber, and Julius Lorentz.
Privatization: A Cure for All Ills ?
Long Range Planning, Volume 22, December 1989.

[Harrol 82] Harrol, C., E. Henriod, and P. Graziano.
An Appraisal of Highway Maintenance by Contract in Developing Countries.
The World Bank, Washington, D.C., March 3, 1982.

[Heller 89] Heller, Peter S., and Christian Schiller.
The Fiscal Impact of Privatization, With Some Examples from Arab Countries.
ed. Said El-Naggar, International Monetary Fund, Washington, 1989.

[Heywood 91] Heywood, Peter, and Stephen Saunders.
Competition Si!: Privatized PTTs Signal New Dawn for Latin American Telecom.
Data Communications, September 1991.

[Hsaio 78] Hsaio, W.
Public versus Private Administration of Health Insurance: A Study in Relative Economic Efficiency.
Inquiry, December 1978.

[Iskandar 84] Iskandar, Marwan, and Elias Baroudi.
The Lebanese Economy in 1982-1983.
Middle East Economic Consultants, Beirut, Lebanon, 1984.

[JEC 84] Joint Economic Committee.
Privatization of the Federal Government.
J.E.C., US Congress, Washington, Government Printing Office, 1984.

[Kay 86] Kay, John A., and David J. Thompson.
Privatization: A Policy in Search of a Rationale.
Economic Journal, 96, March 1986.

[Kay 87] Kay, John A.
The State and the Market: The UK Experience of Privatization.
Occasional Papers, No. 23, Group of Thirty Publisher, New York and London, 1987.

[Kensinger 88] Kensinger, John W., and John D. Martin.
Project Finance: Raising Money the Old-Fashioned Way.
Journal of Applied Corporate Finance, Fall 1988.

[Kitchen 77] Kitchen, H.M.
A Statistical Estimation of an Operating Cost Function for Municipal Refuse Collection.
Public Finance Quarterly, January 1977.

[Landry 91] Landry, Edward J.
Supplying Power to LDCs.
in "Infrastructure Finance Forum", Institutional Investor, September 1991.

[Lee 91] Lee, Christopher H.
Public-Private Partnerships.
in "Infrastructure Finance Forum", Institutional Investor, September 1991.

[Magazine 7-91] Magazine.
Zaher El-Khatib: Non à la Privatisation des Services Publics au Liban.
Magazine, Beirut, Lebanon, July 20, 1991.

[Majdalani 88] Majdalani, Fadi M.
Financing the Reconstruction of Lebanon.
Master's Thesis, M.I.T., January 1988.

[Makkawi 92] Makkawi, Khalil.
The Reshaping of Lebanon.
Lecture at Harvard University, March 30, 1992.

[Mallat 73] Mallat, Raymond A.
Seventy Years of Money Muddling in Lebanon: 1900-1970.
Aleph Press, Beirut, Lebanon, 1973.

[Mallat 86] Mallat, Raymond A.
Crash 1986: Financial Management for Lebanon's Economic Salvation.
Levant Press, Beirut, Lebanon, 1986.

[Marston 87] Marston, Lance.
Preparing for Privatization: A Decision-Maker's Checklist.
in "Privatization and Development", ed. Steve H. Hanke, Institute for Contemporary Studies, 1987.

[MEED-a 87] Middle East Economic Digest.
Pakistan Powers Ahead With Privatization Plan.
Middle East Economic Digest, September 26, 1987.

[MEED-b 87] Middle East Economic Digest.
A Private Solution to the Development Dilemma: Build-Operate Projects in the Middle East.
Middle East Economic Digest, October 3, 1987.

[Meyer 58] Meyer, A.J.
Middle Eastern Capitalism.
Harvard University Press, Cambridge, 1958.

[Monsen 83] Monsen, J.R., and K.D. Walters.
Nationalized Companies: A Threat to American Business.
McGraw Hill Press, New York, 1983.

[Moore 85] Moore, J.
The Success of Privatization.
Speech when opening Hoare Govett Ltd's new City Dealing Rooms, Treasury Press Release, 107/1985.

[Nair 88] Nair, Govindan, and Anastasios Filippides.
State-Owned Enterprises and Public Sector Deficits in Developing Countries: A Comparative Statistical Assessment.
World Development Report, World Bank, Washington, 1988.

[Nellis 89] Nellis, John R.
Public Enterprises in Sub-Saharan Africa.
World Bank Discussion Paper, No. 1, World Bank, Washington, 1986.

[NYTimes 84] The New York Times.
Beirut Economy Still Squeaks By.
The New York Times, April 29, 1984.

[Orient 7-91] L'Orient-Le Jour.
Roger Dib Préconise la Privatisation des Services Publics au Liban.
L'Orient-Le Jour, Beirut, Lebanon, July 20, 1991.

[Orient 92] L'Orient-Le Jour.
Une Première au Liban: La Banque Libano-Brésilienne Décide de S'Autoliquider.
L'Orient-Le Jour, Beirut, Lebanon, January 17, 1992.

[Paddock 91] Paddock, James.
Notes on Project Financial Contracts and Innovation.
Lectures in "Construction Finance", M.I.T., Spring 1991.

[Pandis 92] Pandis, Haralabos N.
Financial, Organizational and Technology Strategies for Wastewater Treatment Projects in Small and Medium Size Coastal Municipalities in Greece.
Master's Thesis, M.I.T., January 1992.

[Pirie 88] Pirie, Madsen.
Privatization.
Wildwood House Press, London, 1988.

[Poole 87] Poole, Robert.
The Political Obstacles to Privatization.
in "Privatization and Development", ed. Steve H. Hanke, I.C.S., 1987.

[PrivRep 83] President's Private Sector Survey on Cost Control.
Report on Privatization.
Government Printing Office, Washington, 1983.

[Ramanadham 87] Ramanadham, V.V.
Studies in Public Enterprise: From Evaluation to Privatization.
Frank Cass Press, London, 1987.

[Reinhardt 91] Reinhardt, William G.
Infrastructure Innovations.
in "Infrastructure Finance Forum", Institutional Investor, September 1991.

[Roth 84] Roth, Gabriel.
Competitive Urban Transportation Services.
The World Bank, Washington, April 16, 1984.

[Roth 87] Roth, Gabriel.
Privatization of Public Services.
in "Privatization and Development", ed. Steve H. Hanke, Institute for Contemporary Studies, 1987.

[Salem 91] Salem, Nadim.
Interview with the Author of Thesis.
Beirut, Lebanon, July 31, 1991.

[Samaha 91] Samaha, George.
Interview with the Author of Thesis.
Beirut, Lebanon, August 1, 1991.

[Sanan 91] Sanan, Fernand.
1992: Le Difficile Décollage.
Le Commerce du Levant, No. 5271, December 26, 1991.

[Savas 77] Savas, E.S.
Policy Analysis for Local Government: Public vs. Private Refuse Collection.
Policy Analysis, Winter 1977.

[Scott 92] Scott, David C.
Mexico Takes Capitalist Road to Spur Highway-Building.
Christian Science Monitor Magazine, March 30, 1992.

[Selwan 90] Selwan, Fadi.
The Build-Operate-Transfer Model for Construction Projects: Issues and Application to Turkey and France.
Master's Thesis, M.I.T., May 1990.

[Short 84] Short, Peter.
The Role of Public Enterprises: An International Statistical Comparison.
ed. Robert H. Floyd and Peter Short, International Monetary Fund, Washington, 1984.

[Sundquist 84] Sundquist, J.L.
Privatization: No Panacea for What Ails the Government.
in "Public/Private Partnerships: New Opportunities for Meeting Social Needs", ed. H. Brooks, Ballinger Press, 1984.

[Swann 88] Swann, Dennis.
The Retreat of the State: Deregulation and Privatization in the UK and US.
The University of Michigan Press, Ann Arbor, 1988.

[Uddin 91] Uddin, Fasih.
Pakistan: Developing the Physical and Social Infrastructure.
in "Infrastructure Finance Forum", Institutional Investor, September 1991.

[USGAO-a 79] U.S. General Accounting Office.
The Government Can Be More Productive in Collecting Debts by Following Commercial Practices.
Government Printing Office, Washington, February 1979.

[USGAO-b 79] U.S. General Accounting Office.
Increased Productivity Can Lead to Lower Costs at Federal Hydroelectric Plants.
Government Printing Office, Washington, May 1979.

[Vernon 88] Vernon, Raymond.
The Promise of Privatization: A Challenge for American Foreign Policy.
ed. Raymond Vernon, Council on Foreign Relations Books, New York, 1988.

[Walters 89] Walters, Alan.
Liberalization and Privatization: An Overview.
ed. Said El-Naggar, IMF, Washington, 1989.

[World Bank 86] The World Bank.
World Development Indicators.
World Bank, Washington, 1986.

[Yafi 62] Yafi, Toufic.
Industrial Credit in Lebanon.
"L'Economie Libanaise et Arabe", Beirut Chamber of Commerce, June 1962.

[Yehya 92] Yehya, Mounir.
Rehabilitation of the Electricity System in Lebanon.
Lecture at M.I.T., Reconstruction in the Middle East Seminar Series, Spring 1992.

[Young 87] Young, Peter, and Madsen Pirie.
Development With Aid: Public and Private Responsibilities in Privatization.
in "Privatization and Development", ed. Steve H. Hanke, Institute for Contemporary Studies, 1987.