Centro de Estudios Económicos
www.colmex.mx
El Colegio de México, A.C.

Serie documentos de trabajo

PRIVATIZATION IN CENTRAL AMERICA: FOSTERING ECONOMIC GROWTH THROUGH PRIVATE SECTOR DEVELOPMENT

Felipe Larraín and Luis F. López-Calva

DOCUMENTO DE TRABAJO

Núm. X - 2000

Privatization in Central America: Fostering Economic Growth Through Private Sector Development°

Felipe Larraín B.
Universidad Católica de Chile and
Center for International Development at Harvard University

and

Luis F. López-Calva*
Centro de Estudios Económicos
El Colegio de México

Abstract

The privatization experience in the Central American region is the main theme of this paper. Three are the issues that shall be emphasized throughout: the room for microeconomic efficiency gains that privatization opens, the importance of privatization to strengthen the fiscal situation in a sustained manner, and the mistakes that are usually made and must be avoided for the benefits of privatization to realize. A detailed review of the privatization process in the region is carried out using existing data. Some lessons and policy recommendations are proposed. Infrastructure services are identified as the most problematic sector, due to the need of establishing proper and credible regulatory institutions. Small countries like El Salvador, however, have shown the such challenges can be faced with a reasonable degree of success.

Keywords: Privatization, Infrastructure, Central America, Regulation.
JEL Codes: D21, D61, D62, E65.

° This paper will appear as a chapter in the book Economic Development in Central America, edited by Felipe Larraín and published by Harvard University Press.
* We are grateful to Rodrigo Cifuentes, Gerardo Esquivel, Cristina García, Luis Rivas, and Jose Tavares for very useful comments to an earlier draft. We have also benefited from conversations with Martha Arrea, Ricardo Monge and Andrés Rodríguez.

Introduction

During the eighties, most developing countries started to develop market-oriented strategies through the implementation of ambitious structural reform programs. This took place after a long period of state intervention in economic activity and the creation of relatively closed, heavily regulated business environments. An important component of such changes is the transfer of ownership of formerly state-owned assets to private hands and the strengthening of the role of the private sector in the economic activity. Though in many cases triggered by situations of fiscal crisis, privatization programs have, in general, also pursued long-run objectives. These are the enhancing of economic efficiency through more competition in the market place and the creation of an investor-friendly environment as a means to increase the growth potential of the economy. Not all countries, however, have been as ambitious and succesful in their pursuits. As shall be discussed below, country-specific conditions impose different feasibility constraints in terms of technology, market size, political situation, and institutional endowment.

The privatization of the economy consists mainly of transfering the ownership of state-owned enterprises (SOE) to private hands. This is not, however, the only component. The withdrawal of the government from economic activities as owner must be complemented by the establishment of clear market rules, the elimination of artificial barriers to entry and exit into potentially competitive markets, and the creation of appropriate regulatory institutions in sectors with natural monopoly characteristics.[1]

The privatization experience in the Central American region is the main theme of this chapter. Three are the issues that shall be emphasized throughout: the room for microeconomic efficiency gains that privatization opens, the importance of privatization to strengthen the fiscal situation in a sustained manner, and the mistakes that are usually made and must be avoided for the benefits of privatization to realize. The enhacement of efficiency and the improvement of the fiscal position support policies aimed at fostering long-run economic growth thorugh the creation of an investor-friendly environment.

[1] A good example of the interaction between privatization, competition, and deregulation is the case of the privatization of the banking sector in Mexico, where the lack of an appropriate regulatory

This chapter shall first give a birds-eyes' view of the reform in the region, in terms of the participation of public enterprises in economic activity, using a recently proposed "reform index." Then, it presents a review of the theoretical arguments that establish the result that, under reasonably realistic conditions, ownership matters for efficiency. The benefits of privatization, it shall be argued, do not realize only by transferring ownership, for the require important conditions, like the introduction of competition and effective regulation, to be satisfied. One key element for the success of the reform is the privatization method chosen, whose selection is a function of the desired goals and the existing constraints, as discussed in section 4.

Section 5 starts a detailed review of the privatization experience in Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. Privatization transactions, government revenues and specific problems faced in different sectors are thereby analyzed. A discussion of the privatization methods chosen and some examples of good and bad practices follows in section 6. The next section provides evidence of the micro and macroeconomic benefits of privatization in the region. The privatization agenda for the future is discussed in the next section, and the chapter closes with some concluding remarks.

2. Privatization in the Region: A Preliminary Assessment

Central America has also been part of the recent wave of reform. Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua have pursued their own privatization programs, though the timing, speed, methods used, and degree of success differs across countries.

The experience of El Salvador, for example, is one of relatively small participation of the public sector in productive activities even during the early seventies and a successful privatization experience during the nineties (World Bank, 1995; Morley, et. al., 1999). Costa Rica became a pioneer when the privatization of the Corporación Costarricense de Desarrollo (CODESA) enterprises was announced during the eighties, only to slowdown and become one

---

framework after the transfer of ownership derived in poor performance and lack of competition (López-De-Silanes and Zamarripa, 1995).

of the slowest privatizers in Latin America. [2] In Nicaragua, the participation of the government in economic activities reached its peak during the mid-eighties, as the sandinista revolution established a centrally-planned economy in the country, though it would also become a fast privatizer during the Chamorro government between 1990 and 1995. Honduras has followed a relatively steady privatization of former SOE in competitive sectors but has faced legal constraints to pursue the same policies in infrastructure, constraints that have been overcome until recently. Guatemala, after a successful privatization of its electricity distribution and telephone companies, in terms of the proceeds for the government, has faced severe regulatory problems since 1998, especially in the telecoms sector, due to an apparently poorly designed regulatory institution that is subject to political interference.

As illustrated by the examples above, the assessment of the different experiences varies widely, and can only be understood by analyzing each country's political conditions and recent economic history. As an attempt to measure the extent to which countries have engaged in economic reform, Morley, et. al. (1999) proposed a "reform index."[3] This index has a component that evaluates the privatization effort. It uses as raw data the ratio of value added by SOE to non-agricultural GDP. Normalization is then carried out by taking the highest value of such an indicator in the raw data in the sample minus the value of the ratio for the specific country, dividing it by the difference between the highest and the lowest value in the sample. A higher index is thus interpreted as a "relatively more private" economy. Lora (1997) proposed a different index based on the amount of revenue to the government from privatization transactions. It is easy to find examples where Lora's index can be completely misleading.

Overall, according to the privatization index, in 1995 the "most private" economy in the region was El Salvador, whereas the "least private" was Costa Rica. Table 1 shows the average level of the index in the period 1970-80, 1980-90, and 1990-95. It also shows the level in 1995. The fact that Guatemala shows a reversion in the privatization index between 1980 and 1995, after having reached a low level of state participation in the seventies, could be misleading. This is so because the 1995 figure does not include the privatization of the electricity distribution and telephone companies that took place after that year. Costa Rica is

[2] CODESA, a controlling company of state-owned enterprises in Costa Rica was founded in 1972. The history of CODESA is reviewed in Meléndez and Meza (1993).
[3] The index builds on a previous attempt by Lora (1997). The latter index is not the most appropriate in the case of privatization, for reasons discussed below.

not only the "least private" economy during the period, but also the country that has not carried out any privatization transaction after 1995. The improvement shown between 1990 and 1995 is due to the privatization of the CODESA companies. Unfortunately, information is not available for Nicaragua.

Table 1
Privatization Index

Country	Avg. 1970-80	Avg. 1980-90	Avg. 1990-95	1995
Costa Rica	0.815	0.785	0.750	0.807
El Salvador	0.908	0.923	0.928	0.933
Guatemala	0.970	0.943	0.857	0.813
Honduras	0.850	0.810	0.783	0.791

Source: Morley, et. al. (1999).

Indeed, the case of Costa Rica as a slow reformer is clear not only when compared with the other countries in the region, but also with a larger sample of Latin American countries. Its privatization index has been below the average figure in Latin America for most of the last decade. A different index, that of "economic freedom," as calculated by the *Heritage Foundation*, contains a component that ranks countries by the level of state intervention in the economy, using data on government consumption as a percentage of GDP and the size of the state-owned sector. It then assigns a value between one and five, one being the "most free" country --lowest state intervention-- and five being the "least free." According to that index, in 1996, Guatemala and El Salvador rank again as the "most free" countries of the region with an index of one, whereas Costa Rica, Honduras, and Nicaragua show an index equal to two, i.e., show a higher intervention of the public sector in the economic activities (Heriatge Foundation, 1996).[4] Even though an index of two might appear low, it is important to emphasize the relative position of the five countries under study.

One possible interpretation of the discussion above is that SOE are intrinsically negative from a normative perspective. This is not the right conclusion. The reason why the discussion is important is related to the fact that economies with stronger private sectors show higher GDP growth rates (World Bank, 1998). Privatization is thus only a means to achieve a higher end, that of sustained economic growth. It is then important to start by reviewing the arguments that support the view that indeed ownership matters for efficiency, and thus

[4] There are other factors considered in the overall index of economic freedom that actually change the global rankings, but they shall not be discussed here.

understand the framework within which the privatization experience of the Central American region shall be reviewed.

3. Does Ownership Matter?

The idea that private owneship would induce higher efficiency and a better allocation of resources is not new. Adam Smith wrote in 1776 that

"In every great monarchy in Europe the sale of the crown lands would produce a very large sum of money which, if applied to the payments of the public debts, would deliver from mortgage a much greater revenue than any which those lands have ever afforded to the crown...When the crown lands had become private property, they would, in the course of a few years, become well improved and well cultivated" (Smith, 1776, p. 824).

There has been an extensive set of studies throughout the years aiming at formalizing Smith's intuition with theoretical arguments, and support them with robust empirical evidence.[5] The argument has both microeconomic and macroeconomic implications. The enhancement of microeconomic efficiency is embedded in the statement that under private property, the lands would be "well improved and well cultivated." The macroeconomic implication relates to the improvement of the fiscal situation through debt repayment using the proceeds from the sale of the land. The status of the theoretical discussion in both micro and macroeconomic terms, as well as some pieces of evidence, is shown below.

Microeconomic Perspective

Theoretically, in order for ownership to matter for efficiency, it has to be shown that the decision process at the firm level is somehow distorted. As the decision process consists of two components, namely the objective function and the constraints, the argument must be made along those lines. In addition, the separation of ownership, control, and management of the firms opens other channels through which distortions can be introduced.

[5] For a more complete discussion of the arguments and an extensive list of references, see Sheshinski and López-Calva (1999).

Indeed, the literature can be divided into two groups: the so-called *managerial* perspective, and the *political* perspective. The former focuses on corporate governance issues: lack or imperfect monitoring of the managers under public ownership and non-existence of *take-over* threats that discipline management. Agency problems are at the core of such a set of models. These problems cause the incentives for efficiency to be low-powered under public ownership (Vickers and Yarrow, 1989).

The other view, focused on the role of politics, shows that distortions are introduced both at the level of the objective function (political rather than economic objectives of the managers) and the constraints (the absence of bankruptcy threats that induces a *soft* budget constraint). The objectives tend to be political, or for personal gain, rather than economic, as discussed, for example, in Shapiro and Willig (1990) and Shleifer and Vishny (1996), and the constraints tend to be soft, an idea whose systematic study was started by Kornai (1980, 1986).[6]

The arguments in favor of public ownership have been traditionally based on the existence of market failures. Such is the case of sectors with natural monopoly characteristics.[7] When the market cannot induce the efficient solution, government intervention is needed. This is, however, an argument for government intervention but clearly not one in favor of government *ownership*. As has been shown, proper intervention through regulation can induce second-best outcomes without the need for ownership of the assets by the government.[8] A regulator that has an arms-length interaction with the private firm may induce better outcomes that a publicly owned firm, even under the assumption that the regulator and the decision-maker in the hypothetic public firm are exactly the same individuals who may have the same distorted objectives (Willig, 1993). The latter is the case because of the fact that the "regulator vs. private firm" relationship involves a decision-making process that is subject to a higher degree of public exposure and accountability than the "ministry vs. public manager" interaction.

---

[6] Appendix 1 shows a simple model of the soft budget constraint argument.

[7] A simple definition of natural monopoly is an industry in which average costs are decreasing in the relevant range of demand (usually associated with high fixed, *sunk* costs to start operations). This concept is discussed in more detail below.

[8] An example of this type of an intervention is the imposition price-caps in the spirit of the so-called Vogelsang-Fissinger mechanism, which induces convergence towards Ramsey-pricing in a regulated natural monopoly through (Train, 1994).

From a theoretical perspective, in a world of complete contracts, ownership should not matter. The existence of incomplete contracts due to unforeseen contingencies has been used in favor of state ownership, under a normative view of the government (one that maximizes total welfare). This is the case when "selective" intervention, in the event that unforeseen contingencies arise, allow the government to pursue socially efficient outcomes. That idea, proposed by Williamson (1985), concludes that public ownership is at least as good as private ownership, and could be better. From a positive perspective, when distortions in the objectives of the government are introduced (the political view) the previous argument severely weakens.

As opposed to the normative perspective in which government ownership can achieve socially optimal outcomes through selective intervention, positive models show that ownership matters and that private ownership induces better monitoring of managers, credible take-over threats that discipline management, harder budget constraints, and the pursuit of economic objectives in lieu of political ones. All these models assume the existence of a relatively competitive environment. The empirical implications of such theories can be summarized as:

Micro implication 1: Publicly owned enterprises in competitive environments do not perform better than privately owned companies in the same circumstances in terms of profitability, and could perform worse.

Micro implication 2: One should expect important efficiency gains from the change in ownership structure in competitive sectors.

Micro implication 3: Increases in profitability are not equivalent to increases in efficiency in general. This will only be true in a competitive environment.

Micro implication 4: Fully privatized firms should perform better than firms that have been partially privatized, under the same conditions.

Empirical studies can be divided into three types: case studies of specific firms, country-specific, cross-industry studies, and cross-country studies. The evidence is reviewed in Megginson and Netter (1999) and Sheshinski and López-Calva (1999).

The empirical evidence overwhelmingly supports the micro implications. Country specific data and cross-country data show that privatized firms improve their profitability after the sale, even controlling for macroeconomic and industry specific factors (LaPorta and López-De-Silanes, 1998; Boubarki and Cosset, 1998). This result is robust to different definitions of the profitability indicator. Deregulation policies --such as the elimination of restrictions to foreign direct investment and trade barriers-- have been shown to speed up the convergence process of firms to industry standards (LaPorta and López-De-Silanes, 1998). The same results hold for improvement in efficiency indicators. The evidence for Central and Eastern European countries is also consistent with micro implications 1 and 2, and the *political view* --that says that political intervention undermines firm performance-- seems to be confirmed by the available data (Claessens and Djankov, 1998; Frydman, 1998).

LaPorta and López-De-Silanes (1998) carry out a decomposition of the increase in profitability in privatized firms. They use data from 218 enterprises in 26 different sectors, enterprises that were privatized between 1983 and 1991. Two criticisms usually made to privatization are addressed through such an analysis, namely that profitability increases are not related to efficiency gains but to higher prices, and that productivity grows because of massive layoffs. In fewer words, critics claim that profitability increases appear at the expense of society. As partial evidence against that view, the analysis concludes that only 10% of the increase in profitability can be explained by higher prices, 33% comes from workers layoffs, and 57% from productivity gains.

Boubarki and Cosset (1998) introduce controls for the type of market structure and for the cases of partial vs. full privatization and provide evidence in favor of implications 3 and 4. Profitability increases are not reflected in similar efficiency gains in less competitive markets. Also, efficiency improvements are relatively higher in the cases of full privatization. Moreover, Galal, et. al. (1994) carried out an analysis of the privatization experience of twelve firms in four countries.[9] In eleven out of the twelve cases, the net welfare gains were positive.[10] In all the cases, except one, the welfare change for the buyers was positive.[11]

[9] These countries are the United Kingdom, Chile, Malaysia, and Mexico.
[10] The estimated surplus change was never negative for workers, whereas the change in consumer surplus was negative in five cases (four airline sales and one telephone company).
[11] The exception was "Mexicana de Aviacion" in Mexico.

The evidence seems to confirm the microeconomic implications of the models. Ownership indeed matters, according to the empirical evidence. Private ownership, when disciplined by a reasonably competitive environment, tends to result in socially preferred outcomes.

Macroeconomic Perspective

There are far less studies that analyze the macroeconomic effects of privatization. The most important reason why this work has not been done extensively is the difficulty to isolate the effect of privatization from other events that have an influence on aggregate measures. We would expect to observe certain trends, but the causality is weak.

The literature contains a few theoretical models linking the reform at the microeconomic level --including privatization-- with macroeconomic performance.[12] There are, however, country studies that show data on the interaction between privatization transactions and macroeconomic variables.[13] Implications can be derived, however, from a theoretical perspective. These implications are that, *ceteris paribus*, privatization:[14]

Macro implication 1: improves public sector's financial health (lower deficits, lower debt).

Macro implication 2: reduces the net transfer to SOE's in the aggregate. These transfers become positive if the government actually starts collecting taxes from privatized firms.

Macro implication 3: has a positive impact on the development of the financial sector.

Macro implication 4: has a negative effect on employment in the short-run, a positive effect in the medium and long-run.

The effect of privatization on public sector deficits has different channels. First, SOE tend to operate with losses, which are eliminated after the sale. Second, the proceeds from the

---

[12] An important work in this area is Blanchard (1997), analyzing transition economies.

[13] World Bank (1995) shows macro data for several countries. Mansoor (1992), Marcel (1989), Larraín and Vergara (1993), Luders and Hachette (1993), Lefort and Solimano (1993), and López-De-Silanes (1993) are country-specific studies. An interesting theoretical discussion is Mackenzie (1998).

[14] Of course, the data has to be seen as *mutatis mutandis* instead.

sale can be used to buy back debt and thus reduce interest payments. Third, increases in profitability are reflected in higher tax collection for the government.

As reviewed in Sheshinski and López-Calva (1999), using data from World Bank (1998), the budget deficit shows the expected trend on average, i.e., it declines during the reform period (from around 7% of GDP to 3.5%). Low-income countries, which are on average less aggressive privatizers during the period 1975-96, still show a significant deficit on average (about 5% of GDP). Privatization seems to have represented an important policy tool for fiscal reform.

The net transfers to SOE's have declined and actually become negative for high-income and middle-income countries. In high-income countries, there is a surplus of about 0.5% of GDP. These groups of countries also show a lower participation of SOE in economic activity. This shows that not only have the subsidies been reduced, but also the government has started to collect taxes from previously money-losing firms.[15] Only in the case of low-income countries that net subsidies have continued, which is consistent with the fact the SOEs overall balance in those countries is negative.

Stock market capitalization has shown a steady increase in all country groups between 1987 and 1997. Even in low-income countries it has gone from 8% to 18% of GDP, on average. This trend has been accelerated since the early 90s, when privatization transactions started at a faster pace. As discussed below, the larger the firm the more likely it is that such a firm is privatized through the stock market. Thus, the effect on stock market capitalization is limited by the size of the firms to be privatized and the initial conditions of financial sector development (Megginson, et. al., 1998).

The effect of privatization on unemployment is ambiguous. Unemployment rates vary widely across countries, regardless of whether they have privatized or not. The macro instability introduced by the Mexican crisis in 1995 and subsequent problems in East Asia can partly explained the different patterns, as well the particular features of stabilization plans in different countries, like the strict management of the exchange rate in Argentina. Even the microeconomic evidence is mixed in this respect. For country cases, it has been argued that

[15] There might be a bias here in the sense that money-losing firms are the candidates to be privatized first.

employment in privatized firms on average decreased (LaPorta and López-De-Silanes, 1998), while cross-country evidence of publicly traded companies shows an increase in average employment (Megginson, et.al., 1994). The latter sample may contain a selection bias because the firms that are publicly traded tend to be larger, more successful firms than the average.

4. Successful Privatization and Ways to Pursue It

When designing privatization policies, a key variable to achieve the desired objectives is the privatization method used. In general, the literature on privatization and its potential benefits discusses very briefly the relevance of the privatization method used by the government. It is very important to emphasize, however, that the privatization method plays a very important role in the achievement of the expected gains.[16] The method must be chosen by looking at the specific objectives in the privatization process, as well as the constraints that governments face: political and institutional, and the market structure under which the firms will operate after the sale (López-Calva, 1998).

The privatization methods that shall be briefly discussed are mass privatization through *vouchers*, direct sales to strategic investors, public offerings of shares in the market, mixed sales --a combination of the previous two methods-- and concessions.[17] The privatization transaction is the transfer of control rights from the public to the private sector. In all cases --except for concession arrangements and management contracts, it involves a transfer of ownership.

When the decision to privatize is made, governments pursue specific objectives and have to consider the existing constraints. An objective that is often overemphasized is the maximization of proceeds from the sale, which is only a short-run objective whose main advocate tends to be the ministry of finance. From the perspective of microeconomic

[16] Aharoni (1991) in fact argues that no evaluation is valid without a careful look at the objectives and methods in a country-specific basis.

[17] Other methods considered in the literature, like *liquidation* of companies and *joint ventures* with the private sector, are not considered. The former is not a real privatization, whereas the latter is just a special case in which the government retains partial control of the company. We shall not discuss management contracts because the assignation method is similar to a concession, the latter being much more widely used in practice. For evidence on management contracts and the international experience, see Nellis (1991) and World Bank (1995).

efficiency, investment attraction, and growth, the maximization of proceeds is not the first objective and has to be subjected to a long-run perspective.[18]

There are four general objectives that governments pursue when engaging in privatization programs: i) to achieve higher *allocative* and productive efficiency; ii) to strengthen the role of the private sector in the economy; iii) to improve the public sector's financial health; and iv) to free resources to be allocated in other important areas of government activity (usually related to social policy).

The first two objectives clearly have a normative rationale. The first one is related to the increase in aggregate surplus by increasing output and lowering prices (*allocative* efficiency), as well as through a more efficient use of resources within the firm (productive efficiency). The second has to do with the creation of well-functioning markets and an investor-friendly environment in the economy. The two objectives related to public sector finance, the reduction of borrowing requirements and the reallocation of expenditure towards social policy areas, have been shown to influence the decision to privatize in a decisive way (López-De-Silanes, Schleifer and Vishny, 1997).[19] In general, governments tend to avoid getting into the privatization stage until the fiscal situation forces them to do so. This occurs despite that a better financial situation of the government helps design a better scheme. The fiscal pressure during privatization might distort the process through excessive revenue requirements (Rogozinski, 1998).

The objective of maximizing the proceeds from privatization has to be subjected to a higher priority: improving microeconomic efficiency. In inherently competitive markets the objective of proceeds maximization is less problematic than in the case of sectors with natural monopoly characteristics where the future revenue of the private company is a function of the regulatory framework imposed. An unexpectedly high price paid for a company that will be under price regulation in the post-privatization stage might imply a guarantee by the government.

[18] In principle, if the maximization of proceeds is the main and only objective, every SOE should be converted into a legal monopoly and sold as such, for that would maximize the willingness to pay of potential buyers. That clearly goes against the microeconomic objectives.

The restrictions that governments face when launching a privatization strategy can be grouped into three main areas: market structure, political scenario, and institutional endowment.

The market structure in which firms will operate in the post-privatization stage is a key factor to consider in the design of the sale. The market structure is determined by the technological characteristics of the industry, the demand for the good or services, and the legal restrictions to entry and exit. In terms of the legal restrictions we will assume that a deregulation strategy will accompany the privatization process. The two technical factors determining the market structure will be the technology and demand conditions. The sale of state-owned enterprises in markets that are inherently competitive (a high degree of *contestability*) should be a *one-shot* interaction between the government and the potential buyers. The post-privatization period will involve only a consistent competition policy, which is not sector-specific, and the creation of a well-functioning market. In that sense the maximization of revenue for the government during the sale is an acceptable objective because the valuation of the firm by the private investors will take into consideration their capability to generate profits in a competitive environment.

In the case of sectors with natural monopoly characteristics, the sale process is more complicated. An appropriate regulatory framework has to be established and announced before the sale. Clear rules and credible regulatory contracts are key to the success of the process. There are three conditions have been suggested as determining the need of regulation in a specific market. First, there has to be a situation with natural monopoly characteristics in the relevant market; second, important entry barriers (high *sunk* costs) must be present; and third, the demand has to be such that there is room for important monopoly rents to be extracted by the firm.[20] Under these conditions, privatization will succeed only if the proper regulatory setting and clear rules are announced prior to the sale process.

[19] Even though we can find normative arguments to justify these two objectives (mostly based on redistribution objectives), they tend to play a fundamental role in a positive sense: governments under fiscal distress tend to privatize more aggressively.

[20] Some authors (Vickers and Yarrow (1989), for example) consider that the three conditions can be summarized by a proper definition of natural monopoly: *decreasing average costs in the relevant range of demand*. However, the latter definition does not emphasize the *sunk* nature of the fixed costs, which determines their relevance as a barrier to entry and creates room for opportunistic behavior through expropriation of investments by the government.

The second relevant constraint has to do with the political environment. This is relevant in terms of the privatization method that will be chosen in at least two dimensions. First, transparency plays a very important role in enhancing political acceptability, and second, the way of dealing with the insiders in the process affects the outcome of the sale. More competitive and open processes will be politically more acceptable, whereas a successful arrangement with the insiders --especially unions-- opens more options during the sale by, for example, bringing more potential buyers and making the bidding process more competitive.[21]

Finally, the third constraint involves the institutional endowment of the country. An efficient, competitively neutral, and properly enforced competition policy is required. In addition, a thorough deregulation program must be implemented in order to eliminate artificial entry and exit barriers in potentially competitive activities. In natural monopoly sectors, as explained above, the creation of effective and independent regulatory institutions is required. As country case studies have shown, a credible and independent judiciary, as well as proper checks and balances between the executive and legislative power increase considerably the likelihood of success (Levy and Spiller, 1997). That itself is a major institutional reform for many developing countries.

Some countries face constitutional restrictions that impose limits to foreign ownership and/or private ownership in specific sectors, which reduces the set of available options for the privatization agency. Moreover, the degree of development of the local financial sector, especially the stock market, can lead to very different sale methods in order to avoid financial distress (Rogozinski, 1998). The absorbing capacity of the financial sector must be carefully assessed.

Table 2 shows a summary of the privatization methods and shows when it is more convenient to use one or the other.

[21] Regarding the labor issues in privatization, see Haltiwanger and Singh (1996) and Kikery (1995).

Table 2

Privatization Methods: A Summary

	Mass Privatizatio	**Direct Sale through negotiation**	**Direct Sale/Competitive Bidding**	**Public Offering**	**Mixed Sale[a]**	**Concessions[b]**
OBJECTIVES						
Enhance Micro Efficiency		✔ Provided deregulation and opening	✔ Provided deregulation and opening	✔ Provided deregulation and opening	✔ Provided deregulation and opening	✔ Provided proper regulation
Maximize Revenue	x	✔	✔	Under-pricing	✔ Proper Timing	
CONSTRAINT						
Political Acceptability	✔		✔		✔	✔ Properly designed
Transparency		X	✔	✔	✔	✔
Market Structure Competitive		✔	✔	✔	✔	
Market Structure Natural Monopoly	x	X		x		✔
Development of Capital Market	Not a Constraint	Not a Constraint	Not a constraint	✔ Considering absorption capacity	✔ Considering absorption capacity	Not a constraint
Size: Small Firms		✔	✔			
Size: Large firms	✔			✔	✔	

Source: López-Calva (1998).

✔ = recommended.

x = not recommended

a/ We assume that the first stage is carried out through a competitive bidding.

b/ We assume that they are assigned through competitive bidding.

Privatization through *vouchers* is a way to deal with low political acceptability, but goes against good corporate governance after the sale. In inherently competitive sectors in which competition and antitrust policy has been put in place, public offerings or mixed sales are recommended for large firms. For small firms with few potential buyers, direct sales are a more cost-effective method. Those direct sales can be carried out through either a competitive bidding process or a negotiated sale. Negotiated sales --only recommended when the bidding process would not be competitive enough for a very specific reason-- should be avoided whenever possible. They result in lower revenue and lower political acceptability. Competitive assignation mechanisms are always recommended.

In the case of natural monopoly sectors, the regulatory policy and the expected performance of the firm should be clearly specified before the sale takes place. Concessions through a competitive bidding have proven a very efficient privatization method that should be considered in those cases (*competition for the market*). The most important element of a concession contract is the way risk is distributed to minimize the room for opportunistic behavior and renegotiation that shifts the burden from users to taxpayers. The government should only give guarantees for those risks that are shown to be policy-driven and not commercial. The most common schemes are BOT and BOO concession contracts.[22] Uncertainty in demand conditions and the degree of observability of assets are variables that determine the convenience of one over the other --less uncertainty and more costly observability of assets favor BOO schemes.

The election of an appropriate privatization method should lead to efficiency gains, provided that the required institutional reforms are carried out. These reforms include trade liberalization and deregulation in order to create a more competitive environment, as well as the creation of credible and independent regulatory mechanisms in natural monopoly sectors.

5. The Privatization Experience in the Region

The privatization activity in Central America has been intense during the nineties. With the exception of Costa Rica, where the privatization of CODESA ended during the early part of the decade and the privatization activity stalled, all the countries launched ambitious programs in the last ten years. In 1997, the World Bank estimated that the privatization transactions in low-income Latin American countries, including the five countries in question, amounted to at least 0.7 billion dollars. During the same year, the total proceeds for the Latin American region as a whole were 33.9 billion dollars, 51% of the total privatization revenues

[22] BOT stands for "Build, Operate, and Transfer," and BOO for "Buil, Own, and Operate." For a more detailed discussion of these methods, see chapter 11 in this volume.

in developing countries.[23] Even though the participation of the proceeds obtained by the Central American countries does not represent a big share of the total in Latin America, they undoubtedly represent an important source of revenue for these countries, given the size of their economies. Table 3 shows an estimate of the cumulative privatization revenue between 1988-1997 as a percentage of 1998 GDP for these countries.

Nicaragua, El Salvador, and Honduras reported a relatively dynamic privatization activity between 1988 and 1997. Costa Rica shows the smallest number of privatization operations.[24] The experiences vary from country to country. Not only do the starting point and the speeds vary across countries, but the privatization methods used also differ.

As can be seen in the table, the proceeds have represented important sources of revenue for the government. Also, they have attracted investment for the economy, in the case of private participation in infrastructure. The comparison with the GDP in 1998 is only to give an idea of the importance of the proceeds relative to the size of these economies. In spite of the lack of detailed information regarding the use of the proceeds, in most cases they have been used to buy back public debt (IMF, 1998).

Costa Rica shows a negative amount of proceeds in table 3. The explanation for this is that in the estimate only the net revenue from the sale process is considered, as opposed to the revenue generated by the acquisition of the CODESA enterprises by the Fideicomiso de Inversiones Transitorias (FINTRA).[25] The difference between those two figures represents the net losses from the whole operation, as explained below. Finally, the proceeds for Honduras are likely to be underestimated, as the figure only includes those transactions reported in the World Bank database.

---

[23] The proceeds in Brazil were 18.7 billions, in Mexico 4.5 billion, Argentina 4.4 billion, and Colombia 2.9 billion.

[24] The most commonly used source of information on privatization transactions and proceeds is the World Bank database on privatization transactions. In the case of these five countries, such a source clearly underestimates the proceeds, due to a poor reporting by the respective countries. According to that source, the total proceeds between 1988 and 1997 are US 50.8 million in Costa Rica, US 30 million in Guatemala, US 74 million in Honduras, and US 130.2 million in Nicaragua. No transactions are reported in El Salvador.

[25] FINTRA is a fund created to support industrial restructuring and mainly financed by USAID.

Table 3
Privatization Proceeds
(Estimated Lower Bound)
(million dollars)

Country	Total from transactions (1988-1998)	Private participation in infrastructure[a]	Percentage of 1998 GDP[b]
Costa Rica	-148.5[c]	160.0	-1.4
El Salvador	861.0	518.5	7.3
Guatemala	1,442.0	1,643.2	7.6
Honduras	74.0	95.0	1.4
Nicaragua	330.2	48.0	15.6
Total	2,558.7	2,464.7	5.2

Source: Authors' estimate based on World Bank (1998), Meléndez and Meza (1994), World Bank PPI Database, and IMF (1998).
a/ This column includes data on privatization transactions in infrastructure sectors, as well as Greenfield projects. There is thus an intersection between the two first columns and they cannot be added.
b/ This column considers only the total from the transactions without private participation in infrastructure.
c/ A detailed discussion of the reasons why the proceeds are negative in Costa Rica is in the text, section 5.

The Starting Point and the Status After the Reform

There are severe data availability restrictions in terms of the aggregate data on SOE activity. Using data from the World Bank (1998), IMF (1998), and local sources, some data can be recovered. The figures are shown in table 4.

Even after a process of public sector restructuring and privatization, SOE's share in GDP is still relatively high in Costa Rica. Honduras and Nicaragua show an important reduction, consistent with the fact that those countries have been the most aggressive privatizers. As a means of comparison, SOE activity as a percentage of GDP is between 4 and 6% in high-income countries and between 5 and 6% in middle-income countries. In both of the latter cases the figure corresponds to 1997, after an initial average in 1979 of 12% in middle-income and 15% in high-income economies (World Bank, 1998).

Table 4
SOE activity in the region, 1985-1996

COUNTRY	SOE activity as % of GDP[a]		SOE credit as % of gross domestic credit[b]		SOE investment as % of total inv		Overall balance before transfers[c]	
	85-90	90-96	85-90	90-96	85-90	90-96	85-90	90-96
Costa Rica	8.1	8.0	35.0	n.a.	8.5	11.0	1.9	2.0[a]
El Salvador	1.8	n.a.	3.2	0.1	7.1	n.a.	-0.3	1.2
Guatemala	1.9	2.1	n.a.	n.a.	6.7	5.2	0.1	0.5
Honduras	5.5	3.5	n.a.	n.a.	15.1	n.a.	-0.9	3.0
Nicaragua	40.0	4.0	43.2	13.1	n.a.	n.a.	n.a.	-1.3[c]

Source: World Bank (1998), unless otherwise indicated.
a/ For Costa Rica 1990-96, the figure is estimated based on "El Estado de la Nación," San José, Costa Rica, 1998; in El Salvador and Guatemala 1985-90, this is a lower bound, considering only selected major enterprises only; for Nicaragua, the figures are estimates based on World Bank (1998), ECLAC (1996), and IMF (1998); in Honduras 1990-96, this is an estimate based on IMF (1998).
b/ For Costa Rica 1985-90, the figure is from Meza (1999).
c/ The figure for Honduras 1990-96 only includes the balance of the monopoly enterprises in electricity and telecoms (IMF, 1998); for Nicaragua 1990-96, this is an estimate based on data from World Bank (1998) and IMF (1998).

Costa Rica, whose privatization experience consists of the sale of the CODESA enterprises, shows practically no reduction in the share of SOE activity in GDP, from 8.1% to 8.0%. The share of SOE employment in total employment, for which the only data available are for Costa Rica, falls from 8.3% to 6.6%. High-income countries have, on average, between 2 and 3% of their total employment in SOE. The reason for this is that the most important SOE in Costa Rica are yet to be privatized as of 1999: the electricity and telephone company (ICE), two of the biggest banks (BICSA and BCR), the monopoly insurance company (INS), the oil refinery (RECOPE), and the National Liquor Company (FANAL).

El Salvador shows a very low share of SOE activity in GDP since the beginning of the period, the lower bound being 1.8%.[26] Nicaragua, and Honduras are leading in terms of the reduction of SOE activity in GDP. The case of Nicaragua is of course one of a complete change in economic strategy and thus shows some dramatic changes. It is interesting to see the available figures on state firms' participation in total credit. In Costa Rica, for example, this figure is higher than 30% --and by 1985 was even higher than 40%-- which can tell us something about how the state companies crowd out private firms in the credit market. A significant reduction has taken place in Nicaragua in this respect, where the share of the credit that goes to SOE went down from 43.2% to about 13% after the reform.

In terms of investment as a proportion of GDP, the figure actually increases in Costa Rica from 8.5 to 11%. Those countries for which there is information about SOE overall balance show a mixed situation. In El Salvador the losses reached a bottom in 1990, representing around 1% of GDP, turning into a surplus between 1990 and 1996. In Costa Rica the enterprises that remain in public hands were permanently producing a surplus. In the case of Nicaragua, there is a deficit of 1.3% of GDP in the 1990-1996 period.

The figures in terms of operating balance can be misleading. In the case of Honduras, for example, most of the public companies were privatized in potentially competitive sectors and the ones that remained in public hands are monopoly utilities companies. The surplus is thus the result of a distortion. This is also the case in Costa Rica, where the surplus generated by SOE comes from monopolistic positions in electricity, telephones, insurance, and even alcoholic beverages. Moreover, these figures only show accounting results, without considering important economic costs. The potential economic costs include, for example, the potential surplus that could be generated had the firms been transferred to private hands, the crowding out effect in the credit market, and the fact that the surplus is being generated by restricting entry and creating monopolies. An estimate of the economic cost of CODESA in Costa Rica concludes that per capita GDP would have been 342 dollars higher in 1992 had the CODESA enterprises operated with "normal" returns throughout the period in which CODESA operated --i.e, under the efficiency imposed by competitive conditions (Meléndez and Meza, 1993).[27] On the other hand, the privatization of CODESA enterprises cost the Costa

[26] This figure includes the biggest firms, but even allowing for underestimation the percentage is rather low.

[27] CODESA was create in 1972 and liquidated completely by 1993. As an example, by December 1986, two months before one of the companies, the tuna fish fishing and processing ships (ATUNES), was

Rican government 148 million dollars, figure that corresponds to FINTRA's contribution in the process. The fact that those firms yield an accounting surplus, however, makes the privatization decision politically more difficult.

Privatization Transactions

A conservative estimate of the privatization proceeds for the five countries in that period is around 2.6 billion dollars, without considering private investment in infrastructure (see table 3 above). One of the most important transactions in terms of the proceeds took place in Guatemala –the sale of the telephone company, Teléfonos de Guatemala (TELGUA)-- yielding revenue of 700 million dollars, in addition to the acquisition of the debt of the company by the buyers, 240 million dollars.

By privatization, as has been explained above, it is mainly meant the transfer of ownership of SOE, but also a strategy that aims at developing a strong and competitive private sector. Under this perspective, private participation in infrastructure projects plays a fundamental role. Though these projects do not represent a direct income to the government, they account for large amounts of investments in the five countries under study. Indeed, almost 1.2 billion dollars in investment have been attracted to the infrastructure sector in the region, with 32 projects between 1984 and 1998.[28] The details of the projects involved in each country are also shown below.

Costa Rica. Costa Rica has historically faced important political restrictions to pursue an aggressive privatization program. The privatization of CODESA is an example of how the government has foregone important benefits from privatization by imposing political constraints on the process, like restrictions on foreign ownership, "democratization" of ownership, and politically-based, as opposed to market-based valuation. Similar political restrictions have been faced in the attempts to privatize the railroad system, process that faced several difficulties given the lack of flexibility allowed by Congress in the financial schemes for the transaction. Another cases of delayed sales are the Fabrica Nacional de Licores (FANAL) and the sectors of electricity and telecommunications, under control of ICE. The

transferred to FINTRA, its accumulated operating losses represented 106.7% of its total assets (Meléndez and Meza, 1993).

[28] The source of this information is the PPI Database at the World Bank. We are grateful to Mina Salehi for allowing access to the database for this study.

latter companies have been an important source of revenues for the government and there has not been a clear consensus to privatize. Recent changes in the regulatory framework aim at introducing competition in generation activities in electricity, as well as opening up for competition in telecommunications, as an attempt to overcome the political constraints --by avoiding full privatization-- and improve efficiency --by introducing competition.[29] The World Bank privatization Database shows four transactions that took place in Costa Rica between 1989 and 1995. The reported proceeds from the transactions are 97 million dollars. Those transactions are:

i) Central Azucarera del Tempisque (CATSA, sugar), sold to 214 local cooperatives;
ii) Expendios Consejo Nacional (Retail), sold to worker cooperatives;
iii) Cementos del Pacifico, S.A. (CEMPASA, cement), sold through a mixed sale to local investors and employees (the latter acquired 30% of shares); and,
iv) Fertilizantes de Centroamérica (FERTICA, fertilizer), sold through a direct sale, public auction, to local investors.

Other transactions not reported in the World Bank database are ALUNASA (aluminum), ALCORSA (cotton), and ATUNES (tuna fish). Those transactions took place in potentially competitive sectors. In an open economy environment with free entry into those sectors, there are no reasons to regulate those sectors after the sale. As specified by the discussion on privatization methods above, competitive bidding processes are recommended, schemes that were indeed were chosen for those transactions. As discussed in section 5 below, political interference in the process led to distorted prices and the acquisition of the several firms by FINTRA, a fund created by the government for industry restructuring. FINTRA would later carry out a new competitive bidding to transfer the companies to private hands, absorbing important financial losses.

The government announced in 1998 the intention to privatize the Banco Internacional de Costa Rica (BICSA), Banco de Costa Rica (BCR), and Fábrica Nacional de Licores

[29] From the point of view of the private international investors, the approach followed by the authorities in Costa Rica is one of "If ain't broke, don't fix it" (reported in Privatization International, 1998). Given that the firms that remain in public hands generate a surplus, the idea of privatizing is not well accepted, even at the cost of significant distortions in the allocation of resources and entry conditions to the markets where those firms operate.

(FANAL), as well as the monopoly insurance company (INS). These privatizations have been delayed because of political opposition in Congress.

In the area of infrastructure, there have been seven private projects on electricity generation after legislation changed in 1995. Basically all the projects involve power purchase agreements under BOO schemes. That implies that all commercial risk is absorbed by the state-owned company, Instituto Costarricense de Electricidad (ICE). Private generators accounted in 1997 for 30% of the total national installed capacity. There is a limit to foreign participation at 65% of the capital of the generation companies. More sophisticated schemes that involve competition between generators without guaranteed purchase agreements will not be possible as long as ICE remains as a vertically integrated monopoly in public hands.

The only project in the telecommunications sector involved the company "Milicom de Costa Rica." Milicom was granted a nationwide concession to provide cellular phone services. The concession was granted by the Oficina Nacional de Control de Radio in 1989 and represented the first attempt to introduce competition against the monopoly telephone services provided by ICE. The market share of Milicom grew steadily and had 3,000 customers by 1994. The company was then asked to suspend the provision of its services. The Supreme Court in Costa Rica declared that the office that had granted the concession had no legal power to award spectrum rights. The license was thus declared null.

Moreover, private participation in the provision of water and sanitation has been opened. The agency known as Acueductos y Alcantarillados (AyA), the autonomous public agency in charge of all decisions related to drinking water supply and sewerage, has been reorganized. The reorganization involved a decision that allows former employees to become private contractors for the provision of services. There has been a proposal to create a separate regulatory agency, the Instituto Rector de Agua y Saneamiento y Regulacion de Empresas Operadoras. This new proposal also includes the possibility that operators can be of three types: public service companies (100% state participation), mixed-capital public service companies (at least 50% state participation), and private public service companies (majority private ownership).

Finally, the Legislative Assembly approved in 1997 a bill that converts the postal divisions of the post and telegraph company, Correos y Telégrafos (CORTEL), into a public company, whose shares can be bought by private investors. This created a new company, Correos de Costa Rica, which shall be allowed to contract out the services with private suppliers.

El Salvador. El Salvador does not report any transactions in the World Bank Database. Important privatization transactions, however, have taken place during the second half of the decade. In early 1998, El Salvador sold the control and the majority shares of its four electricity distribution companies. As a matter of fact, it was the first country in Central America to leave electricity distribution in private hands. The sale was a complete success in terms of revenue for the government (586 million dollars).

In the case of El Salvador, most of the transactions have taken place in sectors with natural monopoly segments, like electricity and telecommunications. At least since 1970, El Salvador has shown a low level of public participation in production. This participation had been basically reduced to natural monopoly sectors, under the traditional "market failure" argument for public ownership. The privatization of Banks, though it does not fall into that category, also requires important regulatory conditions to succeed. After looking at the results in terms of the expansion of the network, new investments, and competitive pressure in the market, the privatizations of electricity and telephone services seem to have been a success, after the selection of the correct sale methods giving the existing constraints.

El Salvador has pioneered at creating a telecommunications sector widely open to competition. As a result, five companies have invested in the telecommunications sector. The proceeds from the sale of the incumbent telephone company, Compania de Telecomunicaciones de El Salvador (CTE), were lower than in those in similar countries, 275 million dollars in total (or around 965 dollars per existing main line), as opposed to, for example, more than 900 million in Guatemala (or about 3,108 dollars per existing main line). That was seen, however, as the price to be paid in order to create a competitive market from day one, without granting any monopoly concessions to the incumbent company.

It is interesting to notice the El Salvador carried out the privatization of the main public utilities notwithstanding the fact that they were generating net transfers to the government from 1993 to 1996. The net transfers to the government of the non-financial public enterprises, was between 0.2 and 0.5 of GDP during that period. This was mainly due to the positive operating surplus of the electricity distribution company (CEL), which was around 0.6 percent of GDP. The water and sewerage company (ANDA) incurred losses during the same period for about 0.1 of GDP. The national ports operated with a surplus of less than 0.1% of GDP (IMF, 1998).

Guatemala. The World Bank Database on privatization transactions shows only two privatizations in Guatemala between 1989 and 1997. Though there were more transactions than those, Guatemala has indeed been a relatively slow privatizer. The two transactions that are reported are the sale of 75% of the shares of the Guatemalan airline company (AVIATECA) to the airline company of El Salvador (TACA), which acquired 30% of the stock, leaving the rest in hands of local investors. That sale amounted 13.4 million dollars, in 1989. The second transaction that is reported is the sale of the electricity generating company La Laguna (Thermoelectric) for 30 million dollars in 1997. This company, however, was bought by a joint venture between an American subsidiary (Guatemalan Generating Group) and the state-owned distribution company, EEGSA. Later, in 1998, however, the Guatemalan government carried out the privatization of the whole electricity distribution system. The two companies that distribute electricity to 22 Guatemalan Provinces, Distribuidora Eléctrica de Occidente and Distribuidora Eléctrica de Oriente, were sold (80% of the total shares). The control was acquired by the Spanish Utility Union Fenosa, which paid 101.15 million dollars.[30] Only 13% of the remaining shares were later placed in the local stock exchange. The total proceeds from the sale of the distribution of electricity reached above 500 million dollars.

The operating balance of the Guatemalan non-financial SOE was positive for most of the period 1991-1997, due to the surplus generated by the state monopolies in electricity and telephones. As a percentage of GDP, the operating surplus of these companies was 1.5% in 1991 and 1.1% in 1997 (IMF, 1998).

After a failed attempt during 1997, in March 1998 the Guatemalan government reopened the privatization process of the telecommunications company (TELGUA). This sale had failed when the Mexican company, Teléfonos de México (TELMEX) offered 529 million dollars for the GUATEL (the original name of the company before the last restructuring) and

[30] This was higher than the 60 million at which the assets had been valued, though lower than the expected 200 million by the Guatemalan companies.

the government refused to sell, arguing that the assets were worth at least 700 million.[31] Finally, the company was sold in October 1998 for 700 million dollars, in addition to the acquisition of the 240 million of the company's debt by the buyer. The company that was awarded TELGUA is a consortium named Luca, S.A., integrated by Banco Americano, Financiera de Inversion, Centrans International, and Optimal Investment Financial Corp. The winning consortium, however, contracted TELMEX, the Mexican telephone company that had failed to buy GUATEL, to operate it. Moreover, the consortium gave TELMEX the option to buy 45% of the company. As opposed to the case of El Salvador, competition was established under unclear regulatory conditions. It has been especially important that the regulator is not independent and is subject to political pressure under the ministry. Using some flaws in the regulations, the incumbent company has not allowed competition to take place, even though it is legally obliged to do so. The company had signed 14 interconnection contracts with potential competitors by 1998, but had failed to provide interconnection services to those companies, claiming technical difficulties. These problems, in addition to rate increases that reflect more realistic telephone costs for the population --the domestic service was previously highly subsidized by the government, have generate criticisms to the process in the media.[32]

In addition to the successful privatization of electricity and the mixed experience in telecoms, Guatemala also privatized the railroad company, FEGUA. A 50-year concession contract was awarded to the US company Railroad Development Corporation. The concession is under a BOT scheme, though the building part also involves restoration of the existing network with an investment of 10 million dollars. The winning company was the only bidder for the concession. This was sold for 10% of the revenue generated by the company annually during the concession period. The company has the option of keeping the concession for other 50 years.

Honduras. Honduras has carried out more transactions than Guatemala, El Salvador, and Costa Rica, though the proceeds are lower, as most transactions are smaller firms that operate in competitive sectors. The number of transactions registered during 1989-1998 period is above 40. The total proceeds during that period were at least 74 million dollars. Most of the

[31] In Guatemala, only 3.5% of the households have a phone line.
[32] Rates of telephone services and comparisons with respect to international averages are shown in chapter 11 in this volume.

transactions were carried out as direct sales to local investors. The privatization process of natural monopolies has followed a slower pace.

The composition of the privatizations by sector is: construction and cement production, four transactions;[33] furniture and manufacturing, five transactions;[34] sugar, three transactions;[35] agribusiness, seven transactions;[36] hotels and airlines, six transactions;[37] machinery and steel, two transactions;[38] and power utilities, one transaction.[39] The rest of the sales are in foodstuffs, media, storage, and others.

As of 1999, the government intends to privatize the electricity sector by selling the National Electricity and Energy Company. The Honduras government expects to collect 500 million dollars from the sale. Moreover, the government also announced the privatization of four ports (to be sold to one buyer). This was only possible after the approval of a new Law of concessions in 1999. The electricity company generated important income for the government in recent years. Its overall balance before transfers was 0.6% of GDP in 1993 and 0.7% in 1997 (IMF, 1998). That made the sale process politically more difficult.

In the infrastructure sector, where the electricity company will eventually be fully privately owned, there are two private generation companies which have invested 95 million dollars since 1996. Both plants enjoy power purchase agreements with the national electricity company for 15 years.

Finally, the Honduras government also awarded a concession contract to a cellular phone company (CELTEL). CELTEL had invested 33 million dollars between 1996 and 1997 and had around 15,000 customers in 1997. The government obtained 5.1 million dollars for the concession, plus 8% of gross revenues less interconnection charges every year, as well as 7.30 dollars per customer. The publicly owned telephone company (HONDUTEL) (telecommunications company) has generated a surplus above 2% of GDP since 1993, which

[33] SIC, Indeco, Incehsa, and Cementos de Honduras.
[34] Inhomsa, Contessa, Metalsa, Pacarsa, and Aisa.
[35] Aysa, Azucarera Central, and Azucarera Cantarranas.
[36] Sertecny, Finca Santa Rosa, Isletas, Grainsa, Planta Regional de Juticalpa, Planta Regional de Danli, and Planta Regional de la Entrada.
[37] Hotel Plaza, Transportes Aereos Nacionales, Desatur, Hotel Brisas del Lago, Hotel Posadas de Copan, and Hotel Telamar.
[38] Proinco and Inacero.

has also created opposition against its sale. The government, however, has shown the intention to privatize the company in 1999.

The water and sewerage (SANAA) and ports companies (ENP) had a negative joint overall balance in 1993 of -0.3% of GDP, reaching an equilibrium in 1997 through a balance of -0.1% of ENP and 0.1% of SANAA (IMF, 1998). As of 1999, the privatization of the four ports had been announced with the intention to award a concession to operate all of them to one buyer, under a BOT scheme.

Nicaragua. A total of 77 privatization transactions took place in Nicaragua between 1988 an 1997, according to the World Bank database. The proceeds reached around 130 million dollars according the same source, but that figure seems to be an underestimation. It should thus be seen as a lower bound. The estimate of the proceeds by the IMF between 1996 and 1998 goes above 200 million dollars. The most important transactions took place in agriculture and sugar mills (14),[40] manufacturing and metals (11),[41] mining (5),[42] and tourism (7).[43] The rest of the sales were in retail, forestry, fishing, foodstuff, and others. In this case, most of the transactions were also made through direct sales to local investors.

As in the case of Honduras, most of the transactions took place in potentially competitive sectors, with a slower pace followed by natural monopoly enterprises, like electricity and telecoms. The limited capacity of the stock market has impeded successful IPO operations of large firms.

Important sectors are yet to be privatized in Nicaragua. The case of the telecommunications company (ENITEL) has been delayed for almost four years, and failed again in 1999. The two most important companies interested in ENITEL, the Spanish and Mexican telephone companies, withdrew from the bidding process claiming lack of

---

[39] Energia Electrica Roatan.
[40] Agroexco, Cafenic, Can, Bananic, La completa, Nicarroz, Ifrugalasa, El Castillo, Yucasa, Ingenio Benjamin Zeledon, Ingenio Javier Guerra, Ingenio Julio Buitrago, Ingenio Victoria de Julio, and Ingenio Camilo Ortega.
[41] Carnic, Aluminios de Nicaragua, Empresa Nacional de Vestuario, Compania Cerveceria de Nicaragua, Complejo Metalurgico Especial, Cecalsa, Metales y Estructura, Empresa Nicaraguense de Re, Industrias Delmor, Intercasa, and Envases.
[42] Areneras Nacionales, Canteras Diriamba, Piedra Cal., La Libertad, and Empresa Francisco Meza R.
[43] Turnica, Viajes America, Hotel Intercontinental, Hotel Las Cabanas, Hotel Montelimar, Hotel Las Mercedes, and Centro de Diversiones.

transparency, reluctance to increase domestic service rates, and difficulties to obtain contractual and other important financial information of the firm.[44]

There have also been proposals to introduce reforms to the Instituto Nicaraguense de Acueductos y Alcantarillados (INAA), in charge of water supply and sanitation, in order to allow for private participation in this service.

Public utility enterprises in Nicaragua have systematically operated with losses, at least since 1992. The overall balance before grants went from -1.6% to -2.5% of GDP in 1996, and to -0.9% in 1997 (IMF, 1998).

In the electricity sector, the Instituto Nicaraguense de Energía (INE) is still a state-owned vertically integrated monopoly, whose balance before transfers was negative 0.8% of GDP in 1997. There are proposals for reforming the sector and attract private investment. The first steps would involve the unbundling of the company into generation, dispatch and transmission, and distribution. A sale of the state-owned assets would then be a possibility. As a result of the slow reform in the energy and telecoms sectors, only two projects that involve private sector participation have taken place. In electricity generation, Puerto Sandino Oil-Fired Power Plant invested 36 million dollars under a power purchase agreement with the electricity company. In telecoms, Nicacel is a private firm offering cellular phone services. The concession was awarded to Nicacel is 1992 and it cost 550,000 dollars to the consortium integrated by Motorola (49%) and its local partner OCAL (51%). The company invested 31.2 million dollars between 1992 and 1997. The number of customers in 1997 was close to 8,000.

In 1999, the sale of 49% of the shares of the Banco Nicaraguense de Industria y Comercio (BNIC) was carried out. After the announcement of the sale in January, an investigation by the Nicaraguan Controller Office was initiated. In August of the same year, the sale was declared legally null, after some allegedly corrupt practices during the process. This problem undermines the credibility of the Nicaraguan government and might affect the privatization process in other sectors.[45]

[44] See the article on this subject in The Wall Street Journal, July 14th, 1999.
[45] See *The Wall Street Journal*, August 31, 1999.

Finally, one important privatization transaction in the financial sector was the liquidation of the development bank, Banco Nacional de Desarrollo (BANADES), and the sale of all the assets --mainly the branches around the country-- for commercial banking. BANADES had been a source of corruption and had created fiscal distress through systematically bad credit decisions and constant bailouts.

6. On Privatization Methods: The Good, the Bad, and the Ugly

As discussed in section 3, the privatization methods chosen are key in determining the success of the strategy. In general, in all sectors, open bidding processes are preferred. Moreover, if allowed by the size of the firm and the existence of a relatively developed stock market, public offerings are recommended. Mixed sales are a good solution to corporate governance issues while allowing for widespread ownership. Regulation has to be credible and enforceable in the case of natural monopolies.

In Central America, most of the transactions have been made outside of the stock market. That has been the result of a poorly developed financial sector that does not allow for public offerings with the required expected success. Also, the size of the companies sold, in many cases, has made the idea of "going public" cost-ineffective. As an example, according to World Bank (1998), in 1990 and 1996 there were no international public offerings of shares of companies from the region, except for one in 1996 in Costa Rica. There have been local offerings, however, so initial public offerings are still a method to consider, in the local markets, for large firms.

In general, however, the method used in Nicaragua and Honduras is almost 90% direct sales to local investors (World Bank, 1998). In the case of Nicaragua the process also involved in many cases devolution of assets previously nationalized during the sandinista government.

Putting those cases aside, at least half of the direct sales in those two countries did not involve an open, competitive process, as recommended for political acceptability, transparency, and maximization of the proceeds. In a different environment, Costa Rica is an example where political interference distorted the implementation of the privatization method used and later stopped the privatization process. El Salvador seems to be the country whose selection of methods and implementation was the most successful. It must also be said that the scope of the privatization program was relatively small, given that, at least since 1970, the economy did not have a great share of its production in public hands.

The Good

The case of El Salvador is perhaps the best in terms of the election of the appropriate method, as in the case of the electricity and telephone companies. In both cases, the regulatory framework was clearly stated in advance, competition was introduced since the beginning to eliminate regulatory discretion, and the processes were competitive. In the case of the telephone company, the decision to open the market to competition from time zero reduced the potential proceeds for the government. That was, however, the price to be paid to reduce regulatory problems *ex-post*. The idea behind the scheme was that countries with lower administrative capacity to regulate credibly should maximize the realm of the market and create regulatory settings that are not bureaucracy-intensive (Guasch and Spiller, 1999).

El Salvador pioneered among developing countries at leaving the electricity sector in private hands. The distribution system, composed by four companies, was sold in 1998. The four companies were bought by foreign investors (see table 5). The absence of restrictions in terms of the nationality of potential buyers made the bidding process more competitive and maximized the income for the government.

Table 5
Privatization of electricity distribution in El Salvador

Assets	No. of Customers	Price paid (million dollars)	EV/Customer (dollars)
CAESS	390,000	297.0	582.4
DELSUR	188,000	180.0	
CLESA		109.0	
EEO		n/a	

Note: The companies are CAESS (San Salvador and northern region), DELSUR (southern region), CLESA (western region), and EEO (eastern region). CAESS and EEO were sold together by 297 million dollars.

The transaction involved a mixed-sale. After the controlling shares were sold (part of them acquired by the employees), there was a multi-tranche offering to retail investors. The generation assets were divided into two companies, Generadora Acajultla and Generadora Salvadorena, which will also be traded (Privatization International, 1998). This transaction represented one of the most successful ones in the region in terms of the proceeds, and the transparency and competitive nature of the process.

The Bad

Sale prices should never be fixed by law. The privatization of CODESA shows how political interference can harm the sale process. The aluminum company (ALUNASA), sugar mills (CATSA), cement company (CEMPASA), and fertilizer company (FERTICA) were the biggest firms of the corporation. The examples shown here are the sales of ALUNASA and CATSA, though these are not the only examples of this type of a distortion.

CODESA was privatized and liquidated completely between 1985 and 1993. In terms of the proceeds the government received around 97 million dollars for the sale of ALUNASA and CATSA. Those companies were valued by the Costa Rican government at what was called "adjusted book value." Those prices were imposed as the minimum acceptable bids in the competitive process to sale the companies. That value turned out to be highly inflated and did not take into consideration any reference to the market value of the company. As a result, the only entity willing to pay the pre-established minimum bid was FINTRA, the trust fund created by the government as a "transitory" fund for the restructuring. FINTRA was then the winner in the bidding process and acquired the assets of the companies.

After those transactions, FINTRA was in charge of re-selling the companies, for its role was not to become the asset holding company. A sale was then carried out through competitive bidding in which the firms were sold by about 12.1 million dollars (6.1 million for ALUNASA and 6 million for CATSA). The difference, a loss of about 85 million dollars, was absorbed by FINTRA. From an accounting perspective, the government got rid of the companies and was able to eliminate the debt those firms had incurred, but the original transaction should not be seen as privatization but, if at all, just a first step: financial restructuring. The whole operation involved actually a loss. This is the reason why, in the case of Costa Rica the amounts given as proceeds by the World Bank (1998) are actually misleading.

The second example has to do with the sale of the other two firms, CEMPASA and FERTICA. That sale raised 34.7 million dollars, an amount that represented about half of the estimated market value of the companies. The reason for that was the imposition of restrictions that made the sale less competitive –through requirements of "democratization" of ownership, spreading the shares over different political groups, affecting the corporate governance structure of the firms. Those firms eventually ended up under a concentrated ownership and the firms recovered their market value.[46] The case of the privatization of CODESA is an interesting one, for it shows how the political constraints can significantly affect the decision process, affecting the outcome of the privatization (Meléndez and Meza, 1993; Meza, 1999).

The Ugly

The telecommunications sector in Guatemala has suffered from lack of real competition until 1999, notwithstanding the fact that the law provides for free competition in local and long-distance services. Some of the regulatory problems have been mentioned above. The incumbent telephone company has claimed technical difficulties to avoid providing access to potential competitors. In this sector, there is also in Guatemala an example of how the lack of commitment can destroy credibility in the process. This is the case of the sale of a license to provide cellular phone services, carried out in 1994. A bidding process was announced in which a special commission would be in charge of analyzing the bids and selecting the winner.[47] One of the first problems was that the Comission was formed by employees of the incumbent telephone company, GUATEL, including trade union representatives. Seven companies submitted their bids. A company called MASTEC won the bidding process after the Commission made public all the economic and financial considerations that had led them to assign the license to that company.[48]

After the winning bid had been announced, the board of GUATEL asked for the reconsideration of the decision, claiming some legal problems of the winning company. The process was done all over again, and the previous winner was disqualified in the pre-selection process. Table 6 shows the points assigned by the Commission to each bidder in both rounds.

[46] FERTICA's market value was about twice the amount that was paid to the government. The shares of CEMPASA, for which the government received around 12.3 dollars per share, went up to 20 dollars per share after the sale, after significant changes in the ownership structure took place in the market.
[47] This was the Comisión Receptora, Calificadora y Adjudicadora.
[48] The specific arguments are reproduced in Guasch and Spiller (1999). They included promised technology improvement, coverage, service, and payment.

Table 6
Qualification of the bidders by the Commission

Bidder	First round	Second round
MASTEC	88.75	Disqualified
GUACEL	69.01	85.46
LONDRINA	84.90	84.49
COM. ELECTRICAS	51.42	56.10
UNICOM	Disqualified	33.37
SEMELEC	Disqualified	32.20
BSC	Disqualified	Disqualified

Source: *Crónica*, Sept. 29, 1995, p. 19 (from Guasch and Spiller, 1999).

In addition to the cancellation of the previous process, in detriment of the transparency and credibility of the Commission, at least two other things seeded doubts in the media and prompted angry reactions among several participants. First, the fact that the previously declared best bid was disqualified in the second round. Second, the change in points given by the Commission to the bid submitted by GUACEL, whose points went from 69.01 to 85.46, placing that bid at the top of the ranking, even though it had occupied the third position in the previous round.

The Commission never explained publicly, in a detailed way, why the values of the bids were changed. Later, after participants filed for legal recourse, the licensing process was cancelled. Lack of commitment and transparency, as well as interference of the incumbent in the provision of rights to competitors, severely undermined the process and affected the credibility of future competitions.

7. Existing Evidence on the Benefits of Privatization in Central America

From the microeconomic perspective, there is only one study that compares the performance of former SOE after privatization (Meza, 1999). This study follows four of CODESA companies in Costa Rica and compares their performance after privatization.[49]

The first benefit reported is the elimination of the cost that these money-losing companies had for the economy. An estimate of the net present value (1998 prices) of the accumulated losses of the four companies --the "cost for the country of the CODESA

[49] These companies are ALUNASA, CATSA, CEMPASA, and FERTICA.

experience," reaches an amount of 971 million dollars, about 9% of Costa Rica's GDP in 1998 (Meza, 1999, p. 19).

Since they were sold, these firms have paid taxes on the profits generated, for about 10 million dollars in total (cumulative). After being money-losing companies, their profitability has reached 12% per year (CATSA), 6.2% (FERTICA), and 7.1% (CEMPASA).[50] In the case of CATSA, the capacity utilization went from 57.1% to 92.1%, even after new investments in capacity. Sales for CEMPASA increased 46% between 1990 and 1993. Sales per employee --which can be seen as a measure of productivity-- increased 92% in the case of FERTICA. ALUNASA's sales increased 470% in nine years (1989-1998). These pieces of evidence seem to support the microeconomic implications of the theoretical models presented above. These are firms in relatively competitive sectors --though they are still protected by regulations and trade restrictions, which have improved profitability and efficiency. There is room left for efficiency gains by eliminating the scope for the use of market power some of these firms might still have.

As discussed above, the macroeconomic links with privatization are weaker. There is, however, an improvement of the fiscal situation in the countries that have reformed, which must be supported by the elimination of the fiscal burden of SOE.[51] As can be seen in table 7, practically all countries improved their fiscal balance between 1991 and 1998, except for Guatemala. Costa Rica shows a very small reduction in its deficit and, coincidentally, has been the country most reluctant to reform.

Table 7
Central government deficit/GDP

Country	1991	1998
Costa Rica	3.1	2.9
El Salvador	3.2	1.6
Guatemala	0.1	1.6
Honduras	3.3	
Nicaragua	3.4	

1998), from official sources.

[50] As annual return on assets.
[51] For an analysis of the fiscal standing of these countries, see chapter 10 in this volume.

Fiscal relief, as well the fact that firms that previously were receiving subsidies are now paying taxes, may allow the governments to direct spending towards other social goals, like education and health.[52]

One important benefit of the privatization process is the creation of an investor-friendly environment and the subsequent attraction of foreign investment. Table 8 shows foreign direct investment flows into these countries in the period 1986-1991, as well as in 1992 and 1997.

Table 8
Foreign Direct Investment
(millions of dollars)

Country	FDI 1986-91 (Annual average)	FDI 1992-97 (Annual average)[a]	Directly related to privatization (cumulative 1990-1997)[b]
Costa Rica	118.0	346.16	0.0
El Salvador	17.0	154.6	700.0
Guatemala	127.0	300.5	1,200.0
Honduras	44.0	50.5	100.0
Nicaragua	0.0	56.8	89.0

Source: UNCTAD (1998), World Bank (1998), and PPI database.
a/ Includes investment in telephone and electricity privatizations.
b/ Estimated based on World Bank (1998), PPI Database, and local sources

In all the cases, the average foreign investment flows in the 1992-1997 period was above the average level between 1986 and 1991. There is an upward trend in all cases. Costa Rica shows the highest level, especially after the investment carried out by the high technology firm INTEL in Alajuela.[53] El Salvador and Guatemala show high investment levels due to the inclusion of the investment in the privatizations of the telephone and electricity companies.[54]

Finally, even though most privatizations in the region have not been carried out through international offerings, there have been domestic public offers by former SOE. Though data at the firm level is not available for all countries, the increase in stock market capitalization can also be seen as a byproduct of the creation of a more market-oriented, "more

[52] Social policies in the region are discussed in chapter 13 in this volume.
[53] A detailed analysis of the INTEL experience in Costa Rica see chapter 5 in this volumes.
[54] The 1992-1997 average is higher even without considering those privatizations: 26.3 millions in El Salvador and 97.3 in Guatemala.

private" economy. In that respect, the region still has a long way to go, as their stock markets are not well developed. In 1997, stock market capitalization, as a percentage of GDP, reached 3.8% in El Salvador, 0.9% in Guatemala, and 5.9% in Honduras. The most developed market in the region is that of Costa Rica, showing a capitalization of 7.5% of GDP. The average in high-income countries is around 20% of GDP (World Bank, 1998).

In general, the creation of a market-oriented environment and the transfer of ownership of former SOE seem to have strengthened a positive trend in the fiscal accounts and the attraction of foreign investment. The available microeconomic evidence strongly supports the hypothesis that ownership matters and that important efficiency gains can be achieved by transferring property of productive assets to the private sector.

7. The Unfinished Agenda of Privatization in the Region

Notwithstanding the fact that countries like El Salvador and Guatemala show a high reform performance, other countries, like Costa Rica, have a long way to go in terms of privatization. Bureaucrats are indeed still in business.

In the case of Costa Rica, SOE share in GDP is about 8%, a high figure when compared to the rest of the region. The public sector in Costa Rica remains in control of firms in banking and insurance --BCS, BICSA, and INS, manufacturing and refinery --FANAL and RECOPE, and electricity and telecoms --ICE. As of 1999, there is an intention to pursue the privatization of banks and to open telecoms and electricity to competition without transferring ownership, except for the case of electricity generation.

In the case of Nicaragua and Honduras, where the level of SOE activity with respect to GDP is 4.0 and 3.5% respectively, the most important sectors to be privatized are telecoms and electricity. In 1999, the Honduran Congress passed a law that allows the private sector to participate in electricity, and the government has also announced the intention to privatize the telephone company and the ports. In 1999, Nicaragua failed again in its attempts to privatize its telecommunications company. In the same year, the decision of the Nicaraguan Controller Office to declare null the sale of the shares of the Banco Nicaraguense de Industria y Comercio constituted another major failure in Nicaragua's privatization efforts. All that notwithstanding the government initiated the unbundling of the electricity company for future privatization.

In all cases in the latter countries, among the main arguments used by political opponents, there is one that says that enterprises that generate a surplus should not be sold. This is a flawed argument. The economic costs of maintaining protected public sector companies, whose monopolistic position explains an important part of its profits, are higher than the accounting benefits. A recent study shows that commercial banks in Costa Rica, for example, have engaged in investments to develop their own telecommunications system in order to be able to carry out transactions and communications around the country for which the Costa Rican enterprise, ICE, cannot provide reliable service. The Bank of Costa Rica (BCR) estimated that such investments in telecommunications infrastructure will be obsolete in five years --due to technological change-- and new investments will have to be made. Certainly, in a world of private provision of telecommunication services, banks would focus on providing efficient banking services and would buy efficient services from a private, competitive company.[55]

El Salvador and Guatemala have the smallest public participation in production. The solution of regulatory problems is a priority in the case of Guatemala, solution that may require the re-design of more independent regulatory institutions. Both countries have to emphasize and favor private participation in infrastructure projects as the next step to strengthen their privatization strategies.

6. Concluding Remarks

Privatization of state-owned enterprises is a useful tool to enhance microeconomic efficiency, strengthen the fiscal position of the government, and thus foster economic growth. The theoretical literature has shown that under reasonably realistic conditions ownership indeed matters for efficiency. This is so mainly because of the magnification of agency problems and the susceptibility to political intervention under public ownership. Even in the case of natural monopoly sectors, where regulation is required because competition is not feasible, the government can intervene through efficient regulation without having to own the assets and provide the service in question. The arms-length interaction between the regulator and the private firms, as well the necessary public accountability of the regulatory offices, makes regulation a preferred option, as compared to ownership and control of the firms *via* the ministries. International evidence through case studies, cross-country empirical work, and cross-industry studies for specific countries, shows that the implications of the theoretical models are supported by the data.

The achievement of the benefits that privatization may bring about for the economy is not automatic. Choosing the appropriate privatization method is a key variable in the process. The methods have to take into account the specific objectives the government has in mind and the existing financial, technological, and political constraints. Improving microeconomic efficiency is the main objective if the government wants to increase the long-run growth potential and the social welfare of the country. In a positive sense, maximizing the revenue collected through the sale is the second objective.

In inherently competitive sectors in which competition and antitrust policy has been put in place, public offerings or mixed sales are recommended for large firms. For small firms with few potential buyers, direct sales are a more cost-effective method. Those direct sales can be carried out through either a competitive bidding process or a negotiated sale. Negotiated sales --only recommended when the bidding process would not be competitive enough for a very specific reason-- should be avoided when possible. The latter tend to result in lower revenue and lower political acceptability. Competitive assignation mechanisms are recommended whenever possible.

In the case of natural monopoly sectors, the regulatory policy and the expected performance of the firm should be clearly specified before the sale takes place. Concessions through a competitive bidding have proven a very efficient privatization method that should be considered in those cases (*competition for the market*). The most important element of a concession contract is the way risk is distributed to minimize the room for opportunistic behavior and renegotiation that shifts the burden from users to taxpayers. In principle, the government should only concede guarantees for those risks that are shown to be policy-driven and not commercial.

---

[55] The bank BCR is also state-owned.

In Central America, there has been an important privatization activity since the late 80s. Costa Rica has been the least ambitious country in that respect. El Salvador and Guatemala have shown the "most private" economies throughout the process, and have carried out the privatization of natural monopoly, public utilities sectors during the 90s. In both countries, the sales have been a success in terms of the proceeds for the government, though the experience *ex-post* has been better in El Salvador because of the existence of regulatory problems in Guatemala. Honduras and Nicaragua have mainly privatized potentially competitive sectors, while delaying the sale of public utilities companies. The lack of transparency in the process has affected the sale of the telephone company in Nicaragua.

The existing evidence in terms of the benefits of privatization in the region suggests that profitability and efficiency have increase in firms in competitive sectors. Moreover, foreign direct investment has been attracted to the region directly through privatization and indirectly through the creation of a more investor-friendly environment. The fiscal balance has improved as the transfers to former money-losing SOE has decreased, as in the case of Costa Rica's CODESA.

There is still an important agenda for privatization in the region. Public utilities and transport facilities are at the top of the priorities in the region. In the case of Costa Rica, important sectors like banks, insurance, refinery, alcoholic beverages, and utilities are still in public hands. The strengthening of the conditions to foster sustained economic growth require a more market-oriented setting, where the government allows competition and effectively regulates those sectors were natural monopolies remain. Even though political opposition is still strong in some countries, a commitment to reform seems to be in place in the five countries.

References

Aharoni, Yair (1991); "On Measuring the Success of Privatization," in Ramamurti and Vernon (1991).

Blanchard, Oliver (1997); The Economics of Post-Comunist Transition, Oxford University Press.

Bourbakri, Narjess and Jean-Claude Cosset (1998); "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries," mimeo, Universite Laval.

Boycko, M., A. Shleifer, and R. Vishny (1995); Privatizing Russia, MIT Press.

Claessens, Stijn and Simeon Djankov (1998); "Politicians and Firms in Seven Central and Eastern European Countries," mimeo, The World Bank.

Frydman, R., C.W. Gray, M. Hessel, and A. Rapaczynski (1997); "Private Ownership and Corporate Performance: Evidence from Transition Economies", Research Report 97-28, C.V. Starr Center for Applied Economics, New York University.

Frydman, R., M. Hessel, and A. Rapaczynski (1998); "Why Ownership Matters?, Politicization and Entrepreneurship in the Restructuring of Enterprises in Central Europe", New York University, mimeo.

Guasch, J. Luis and Pablo Spiller (1999); Managing the Regulatory Process: Design, Concepts, Issues, and the Latin America and Caribbean Story, in press.

Haltiwanger, J. and M. Singh (1996); "Cross-Country Evidence on Public Sector Retrechment," The World Bank Research Project on Public Sector Retrenchment and Efficient Compensation Schemes.

Hart, Oliver, Andrei Shleifer and Robert Vishny (1997); "The Proper Scope of Government: Theory and An Application to Prisons", *Quarterly Journal of Economics*, vol. 112(4), 1127-61.

Galal, A., L. Jones, P. Tandon, I. Vogelsang (1994); The Welfare Consequences of Selling Public Sector Enterprises, Oxford University Press.

Guasch, Luis and Pablo Spiller (1999); Regulation of Natural Monopolies and the Latin America and the Caribbean Experience, Forthcoming.

Kikeri, Sunita (1995); "Privatization and Labor: What Happens to Workers When Governments Divest," The World Bank, Technical Paper No. 396.

Kikeri, S., John Nellis, and Mary Shirley (1994); "Privatization: Lessons from Market Economies," *The World Bank Research Observer*, vol. 9, no.2, July.

Kornai, Janos (1980); The Economics of Shortage, Amsterdam, North Holland.

(1986); "The Soft Budget Constraint," KYKLOS 39(1), 3-30.

LaPorta, Rafael and F. López-De-Silanes (1998); "The Benefits of Privatization: Evidence from Mexico," NBER Working Paper 6215.

Larraín, Felipe (1991); "Public Sector Behavior in a Highly Indebted Country: The Contrasting Chilean Experience," in Larraín and Selowsky (eds.).

__________ and Marcelo Selowsky (eds.)(1991); The Public Sector and The Latin American Crisis, International Center for Economic Growth.

__________ and R. Vergara (1993); "Macroeconomic Effects of Privatization: Lessons from Chile and Argentina," mimeo.

Leffort, Fernando and Andrés Solimano (1993); "Economic Growth After Market Based Reforms in Latin America: The Cases of Chile and Mexico," The World Bank, mimeo.

Levy, B. and P. Spiller (1997); Regulation, Institutions, and Commitment in Telecommunications: A Comparative Study of Five Countries, Cambridge University Press.

López-Calva, Luis F. (1998); "On Privatization Methods," Harvard Institute for International Development, *Development Discussion Papers No. 665, Central America Project Series*, Harvard University.

López-De-Silanes, Florencio (1993); "A Macro Perspective on Privatization: The Mexican Program," John F. Kennedy School of Government, *Faculty Research Working Paper Series* R96-12, Harvard University.

____________________ A. Shleifer, and R. Vishny (1997); "Privatization in the United States," *Rand Journal of Economics*, XXVIII, autumn.

López-De-Silanes, F. and R. Zamarripa (1995); "Privatization and Deregulation of Commercial Banking in Mexico,", *Revista de Análisis Económico*.

Lora, Eduardo (1997); "A Decade of Structural Reform in Latin America: What Has Been Reformed and How to Measure it,", Inter-American Development Bank.

Luders, R. and D. Hachette (1993); Privatization in Chile: An Economic Appraisal, San Francisco Press.

Mansoor, A. (1992); "The Budgetary Impact of Privatization," in Blejer and Cheasty (1992).

Mackenzie, G.A. (1998); "The Macroeconomic Impact of Privatization," IMF *Staff Papers*, vol. 45, No. 2.

Marcel, M. (1989); "Privatización y Finanzas Públicas: El Caso de Chile 1985-1988," Colección de Estudios CIEPLAN 26.

Meléndez H., D. and M. Meza R. (1993); CODESA, Origen y Consecuencias, San José.

Megginson, William L., Robert C. Nash, and Matthias Van Randenborgh (1994); "The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis," *The Journal of Finance*, Vol. XLIX, No. 2, June.

Megginson, William L., and Jeffry Netter (1999); "From State to Market: A Survey of Empirical Studies on Privatization," mimeo, The University of Oklahoma.

Meléndez, Dennis, y Mauricio Meza (1993); CODESA: Origen y Consecuencias, San José, Costa Rica.

Meza R., Mauricio (1999); "Privatización en Costa Rica: Ejecución, Impacto y Lecciones,", mimeo.

Morley, S., R. Machado, and S. Pettianto (1999); "Indexes of Structural Reform in Latin America," ECLAC, Serie Reformas Económicas.

Nellis, John (1997); "Is Privatization Necessary?," *Public Policy for the Private Sector*, The World Bank.

Olson, Mancur (1960); The Logic of Collective Action, Harvard University Press.

Rogozinski, Jacques (1998); High Price for Change: Privatization in Mexico, Inter-American Development Bank.

Shapiro, Carl and Robert Willig (1990); "Economic Rationales for the Scope of Privatization," in Suleiman and Waterbury (1990).

Sheshinski, E. and L.F. López-Calva (1999); "Privatization and Its Benefits: Theory and Evidence," Harvard Institute for International Development, *Development Discussion Papers No.698*, Harvard University.

Shirley, Mary (1991); "Evaluating the Performance of Sate-Owned Enterprises," in Ramamurty and Vernon (1991).

___________ (1999); "Bureaucrats in Business: The Role of Privatization versus Corporatization in State-Owned Enterprise Reform," *World Development*, vol. 27, No. 1.

Shleifer, Andrei (1998); "State versus Private Ownership," mimeo, Harvard University.

___________ and Robert Vishny (1994); "Politicians and Firms," *The Quarterly Journal of Economics* 46: 995-1025.

_______________ (1996); "A Theory of Privatization," *Economic Journal* 106: 309-319.

Smith, Adam (1776); An Inquiry into the Nature and Causes of the Wealth of Nations [Edition by Oxford University Press, 1976].

Tornell, Aaron (1999); "Privatizng the Privatized," NBER Working Paper.

Train, Kenneth (1994); Optimal Regulation, MIT Press.

UNCTAD (1998); World Investment Report 1998, Trends and Determinants.

Vickers, John and George Yarrow (1989); Privatization: An Economic Analysis, MIT Press.

Williamson, Oliver (1985); The Economic Institutions of Capitalism, Free Press.

Willig, Robert D. (1993); "Public versus Private Regulated Enterprise," *Proceedings of The World Bank Conference on Development Economics*.

World Bank (1998); World Development Indicators, Washington, D.C.

Appendix 1

A Simple Model of the Soft Budget Constraint

Let us discuss a simple example of a distortion introduced by political intervention. This is the classical explanation under the so-called soft budget constraint hypothesis. Think of a public manager who faces the decision of whether to invest or not in a project. Denote the amount to be invested by I (see figure 1). The alternatives are: invest (I) or not invest (NI). If the manager decides not to invest, the central government neither incurs a loss nor a gain. The same happens to the manager, so the payoffs in that case are zero for both the central government and the manager. If the manager decides to invest the outcome is not certain. The investment is profitable with probability α and a failure with probability $(1 - \alpha)$. The expansion of the firm through the new investment, however, gives the manager a personal benefit (*empire building* hypothesis). Let us denote that benefit by B. The expansion of the firm yields a personal benefit to the manager regardless of the profitability of such an investment, even though the fact that the investment turns profitable gives her an extra payoff, P.

The situation is for the central government is as follows. If the investment turns profitable, it gets a positive income tax on profits, T. If the investment is a failure, the central government faces two alternatives: bail the firm out and incur a loss of S (the subsidy), or let it go bankrupt and face the political cost of the closure, X. If the firm goes bankrupt and is shut down, the manager loses its job and reputation (her payoff is $-B$).

In this simple, though realistic, setting it is easy to see that the key variable is the relative size of S and X. Both can be seen as political costs: the subsidy implies higher taxes or indebtedness --i.e., higher future taxes-- whereas X is the political cost created by shutting the firm down and letting the workers go unemployed.[56] Positive political economy models would predict that the government would always opt for bailing the firm out because X tends to be higher than S. A basic collective action principle establishes that the larger the number of members in a group of stakeholders, the lower the capacity of such a group to "lobby" and influence policy in favor of its members (Olson, 1960). The cost X is potentially borne by

[56] Not to mention the fact that private firms that interact in good terms (e.g., get services at low prices) with the public firms are also important stakeholders.

unions, private firms, and political leaders. The cost *S*, on the other hand, affects a large group of unorganized taxpayers. Thus, from the government's perspective, $X>S$, making the bailout a politically preferred option. Hence the manager shall invest in the project even for a probability of failure equal to one (figure 1).[57]

[57] Assuming $X > S$, the manager will invest if $\alpha P+B > 0$, which always holds, even for a probability of failure equal to one. The solution concept used here is that of *subgame perfection*.

FIGURE 1

THE SOFT BUDGET CONSTRAINT