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The Budgetary Impact of Privatization

Prepared by Ali M. Mansoor 1/

Authorized for Distribution by Peter S. Heller

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Abstract

This paper reviews the widely held notion that privatization, particularly of enterprises that are incurring losses, improves budgetary prospects. It is argued that unless significant efficiency gains are realized and captured by the budget, privatization may in fact worsen budgetary prospects over the medium term. To ensure durable improvements in the budgetary position, policymakers should ensure that privatization is accompanied by deregulation and increased reliance on market forces.

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Summary

This paper reviews the common perception that divestiture of public enterprises improves the budgetary position. It argues that, notwithstanding any apparent improvement in the conventional government deficit, privatization will have a positive long-term impact only if overall efficiency gains can be realized. This holds even for loss-making enterprises since, without potential efficiency gains, their sale would involve subsidies equivalent in present value terms to the expected stream of losses. The failure to consider whether government is saving or dissaving explains why, following an asset sale, the medium-term budgetary position may worsen despite a decline in the conventional deficit. This suggests that even though asset sales ease liquidity constraints and convention treats proceeds from their sales as revenue, it would be more appropriate for policy evaluation to consider them akin to bond sales that carry implications for future net liabilities.

In practice, asset sales may impose losses on the government, since it may not be able to get a price equal to the expected value of the earnings stream. In part this could arise because the government may be less risk averse than private agents or because it has a lower discount rate. It is also likely that, on average, the government would tend to underprice assets since it is difficult to evaluate the reservation price of the private sector. These potential losses require that there be an offset in terms of efficiency gains if privatization is to improve the budgetary position. Indeed, this is the point of the exercise. To secure lasting gains to the budget, however, the government must ensure that real gains in efficiency are secured and in part captured by the budget, either through the upfront sales price or through future taxes. Thus for privatization to improve budgetary prospects, it is essential that it be accompanied by measures to promote competition and increase exposure to market forces.



I. Introduction

Privatization has both immediate and long-term implications for government finances. Further, privatization influences the management of the productive sectors, which in turn will have budgetary consequences. Without a full model of economic behavior it is difficult to analyze these effects of privatization. This paper focuses on the more narrow question of whether privatization, particularly of enterprises that are incurring losses, improves the government's budgetary position. ^{1/} It is argued that, unless significant efficiency gains are realized and captured by the budget, privatization may in fact worsen budgetary prospects over the medium term, notwithstanding any short-term improvement as a result of the proceeds from privatization. In practice, this means that policymakers should be wary of privatization unless it leads to, or is accompanied by, greater reliance on market forces and increased competition. It is also important that an evaluation be made of total net flows from government to the enterprise sector, rather than focusing only on changes for enterprises that have been privatized.

A corollary is the danger, where asset sales are concerned, of relying on changes in the conventional deficit in determining the appropriateness of fiscal policy. This arises because asset sales tend to reduce the conventional deficit (and the public sector borrowing requirement) in the year of sale, while the impact on government "permanent income" or wealth is neglected. Thus, although asset sales ease liquidity constraints (by providing cash in hand) and appear to provide a margin for cutting taxes or increasing expenditure (by providing extra revenue), this may occur at the cost of tightening these constraints in future years. It is also likely that privatization has implications for the budget where inertial growth in expenditure is an important issue. However, this topic will not be discussed given the difficulties of doing so without specific behavioral assumptions and well-defined constraints.

Section II of the paper reviews the standard treatment of asset sales in government financial statistics as reported by the Fund. It is suggested that sales and purchases of enterprises may not have symmetrical implications for fiscal stance. Indeed, while nationalization may not significantly increase future revenue, in contrast, asset sales are likely to imply losses in future income. This remains true even for enterprises incurring losses, as their purchase by the private sector is likely to require subsidies or the assumption of

^{1/} The term "privatization" has been used to signify various types of shifts in the relationship between the private and public sectors. Here it will be used in its narrowest sense, namely a change in ownership, particularly of public enterprises, in part or in total. Similarly, the term "asset" used in reference to purchases or sales by government refers to enterprises in whole or in part.

liabilities. To simplify the analysis, perfect capital markets, certainty, and unchanged performance are initially assumed.

Section III considers necessary qualifications to the earlier results as more realistic assumptions are introduced. The impact of changes in tax regimes is reviewed, followed by a relaxation of the certainty and perfect capital market assumptions. The key question of improvement in performance is then analyzed. Consideration is then given to possible second-order effects of privatization and a discussion of the implications of the possibility of renationalization. Section IV discusses the implications of asset sales for financial programming of the current account deficit of the balance of payments. The conclusions of the paper are summarized in Section V.

II. Treatment of Asset Sales in Government Finance Statistics and an Analysis of Their Impact on Fiscal Stance

1. Statistical conventions and possible asymmetry of impact of sales and purchases

The Fund's Manual on Government Finance Statistics (International Monetary Fund, 1986) recommends that the proceeds from partial or total divestiture of a public enterprise be considered as a loan repayment. This is the counterpart to the classification of outlays to nationalize an enterprise as lending. If there are no other budgetary changes, an asset sale (purchase) will reduce (increase) the overall deficit by an amount identical to the proceeds from the sale (costs of the purchase). 1/

Changes in the overall deficit, after suitable adjustments, are usually regarded as indicating changes in fiscal stance, 2/ while the actual size of the deficit has monetary and financial policy implications. Often the most relevant measure of the overall deficit depends on the purposes of the analysis. Nevertheless, since the conventional deficit relates to the financing needs of government, it remains useful even when other measures may be preferred for policy evaluation. This can be seen in the context of the present discussion by focusing on the public sector borrowing requirement, which is unambiguously reduced (increased) by a sale (purchase) of assets. 3/ However, asset transactions differ from most expenditure/revenue operations, since they also have implications for future deficits

1/ It is implicitly assumed that in a monetary economy assets are traded for cash; the possibility of exchanges for other assets is excluded.

2/ Heller, Haas, and Mansur (1986) discuss various measures of fiscal stance and their relevance for particular policy evaluation.

3/ It is implicitly assumed that the sale (purchase) proceeds exceed foregone (earned) income in the year of sale (purchase).

through the revenue lost or due in future years as a result of the change in liabilities implied by the asset transaction. The impact of asset sales on the overall deficit may be misleading in capturing the full implication for changes in fiscal stance, unless the future impact is small.

The possibility of differing future financial consequences that are not reflected in the current period's deficit exposes the possible dangers of symmetrical treatment of asset sales and purchases in evaluating fiscal stance. If the expenditure on an asset purchase is well below the present value of any expected future income stream, then reflecting such expenditure in the overall deficit remains consistent with an evaluation of fiscal stance based on changes in the overall deficit, since the asset effect on government earnings is small. When asset purchases have significant positive implications for future revenue, then the conventional treatment would be misleading when changes in the overall deficit are used to evaluate changes in fiscal stance. In practice, purchases of public enterprises typically have not led, overall, to a commensurate increase in future government revenue. Indeed, it would appear that often such purchases tend to raise future spending. ^{1/} Thus, the conventional treatment of asset purchases would in general provide a good guide to fiscal stance.

It may seem perverse that governments should pay more for enterprises than the expected present value of future income streams. This overpayment can come about when governments take over failed enterprises or those in declining industries. It may be possible for an ailing firm to improve its financial performance by drastically cutting back on certain operations--for example, by closing a large number of unprofitable plants. Such restructuring may have serious employment, regional, and even aggregate output implications when the firm is large. One reason for a government takeover may be to delay or postpone such drastic adjustment. Where a stock market exists, the share price of such a firm would reflect the belief that the government would intervene to take it over at some positive price. At the same time, the fair price of the firm would be the expected value of the restructured firm rather than that of the ailing firm being taken over. Thus, the government may have to pay a much higher price for the firm than it would apparently be worth or generate in income, given the objective of postponing adjustment. Such motivations also explain why the observed poor performance of public enterprises does not automatically suggest inefficiency.

^{1/} As evidenced by the observed and deteriorating deficits reported, for example, by Short (1984).

2. Equivalence of bond and asset sales and implications for fiscal stance

In contrast to the costs of asset purchases, receipts from asset sales must correspond more closely to the present value of expected income from the asset, since the private sector has the option of refusing to buy an asset priced too high. In that sense, asset sales have implications for net government liabilities that are similar to those for bond sales: the counterpart to the cash received today is a lower stream of net revenue to finance expenditure in the future, after allowing for the liabilities arising from the asset or bond transaction today. 1/ Further, given any monetary target, both asset sales and bond sales allow an increase in expenditure or cuts in taxation in the current period beyond the extent feasible without them, by raising current revenue against the expectation of future income streams. 2/ This also means that, where bond sales are impractical, privatization may offer a means of financing that is consistent with restrained monetary growth and balance of payments adjustment. For example, the Government of Turkey has sold public assets to mobilize funds for investment in the housing sector. 3/

Such cases demonstrate how asset sales can ease liquidity constraints in the context of an adjustment program that is expected to generate resources over the medium term to compensate for the loss of future income associated with the sale. In general, the convention that asset sales reduce the overall deficit in the same way that nationalization (with compensation to the private sector) raises it implies that changes in the deficit arising from asset sales will be misleading in evaluating underlying fiscal policy and the associated balance of payments impact. 4/

To see this more clearly, while keeping the analysis simple, perfect foresight and capital markets will initially be assumed. Moreover, while one of the strongest arguments in favor of privatization is that significant improvements in financial performance are expected as a result of the change to private ownership, for expositional clarity the discussion will initially focus on the budgetary impact of a pure change in ownership with performance unchanged.

1/ For the asset, the liability is the transfer of future income from the asset to the purchaser of the asset. For the bond, future revenues must be diverted to meet the associated interest obligations.

2/ For bonds, the expectation is that the government will be able to collect taxes, and for an enterprise, it is expected that net revenue will flow from its ownership.

3/ "Privatization," Financial Times (London), November 4, 1985.

4/ For more on the concept of an underlying deficit see Tanzi (1987) and Tanzi and Blejer (1984).

Assume that a public enterprise is sold to a private buyer at a competitive price. The price is defined as being equal to the present value of the discounted stream of after-tax profits of the enterprise. ^{1/} Further assume that this stream is positive in all future years. As indicated above, the overall deficit would be smaller at the time of the sale, ceteris paribus. But the counterpart to this initially smaller deficit would be larger deficits in all future years, reflecting the loss of revenue from remitted profits. If the discount rate embodied in the sales price correctly reflects financial opportunity costs, these larger future deficits would be exactly offset if the government used the sales proceeds to purchase other financial assets or to retire an equivalent amount of outstanding debt. In such circumstances, the government and the private sector are simply exchanging financial assets and liabilities, which should not affect the demand for real resources at the time of sale, or in the future. Fiscal stance is therefore permanently unaffected.

If the government uses the entire sales proceeds to finance a temporary increase in current expenditure or a temporary reduction in taxation (or both), the deficit in the year of the sale would be unaffected while future deficits would be larger. Whichever combination of tax cuts and expenditure increases is chosen, there will have to be a corresponding contraction in the future. ^{2/} If the expenditure increase or tax reduction is intended to be permanent but is limited by the resources generated from the sale, there will be both an immediate increase in expenditure or a reduction in taxation (or both) and a reduction in the deficit, and the impact of these changes will fall between the outcomes just described. ^{3/} The same will also be true in future years. Clearly, whatever the use of the sales proceeds, the resulting change in the current overall deficit fails to reflect the macroeconomic consequences of the sale over the medium term.

The above argument holds for both profit-making enterprises and those incurring losses. If an enterprise requires a subsidy on a temporary basis but the present value of its net profit stream is positive, the only difference is that in some future years the deficit will be smaller rather than larger. However, the more interesting case--since it is one where privatization is widely advocated--is when an enterprise not only suffers losses but also has a net profit stream with a negative present value. In such cases the first part of the argument applies symmetrically; there is no possibility of financing an increase in current expenditure or a reduction in taxation. If the

^{1/} It is assumed that tax liabilities are the same in both the public and private sectors. See Section III for further discussion.

^{2/} This implicitly assumes that future deficits cannot be larger after privatization.

^{3/} It is assumed that the difference in current receipts will be used to purchase financial assets; in practice, this usually means retiring government debt.

enterprise is sold at a competitive price, this price will be negative, and the buyer will have to be paid an up-front lump-sum subsidy equal to the negative present value of the enterprise's future losses, or a stream of marginal subsidies will have to be guaranteed. 1/

The precise pattern of subsidies will determine the resulting time profile of future deficits, but unless the transaction is extremely artificial--with a positive sales price and correspondingly larger future subsidies--the most likely outcome is a larger initial deficit and smaller deficits in future years, relative to the preprivatization situation. The government will have to finance the larger initial deficit, and the need to service the additional debt will cause future deficits to return to their higher original levels. Again, the public and private sectors have simply exchanged financial assets and liabilities, and fiscal stance is not affected. The notion that privatization, regardless of changes in performance--as opposed to liquidation--offers permanent financial dividends to the budget where enterprises are heavily subsidized is therefore misleading. Such dividends will emerge only if enterprises can be run more efficiently in the private sector, a key issue to be discussed below.

Given that the change in the overall deficit is often taken as a reliable preliminary guide to fiscal stance, the question naturally arises why this is not so with asset sales. According to Hills (1984), by focusing exclusively on cash flows, standard budgetary accounts fail to reflect what is happening to government or public sector future income flows and liabilities. 2/ For example, if the government's balance sheet is considered, it is clear that if an asset sale causes a change in the composition of assets but does not affect savings, then, despite resulting changes in deficits, the transaction should have no net fiscal impact over time. Similarly, when the sales proceeds are used to finance current expenditure or reduced taxation and there is no change in the deficit, the resulting reduction in savings indicates the initial expansionary impact of the transaction and the need for subsequent contraction to compensate for the income that would have been generated by the lost wealth.

The foregoing suggests that account should be taken of whether the government is saving or dissaving in assessing the fiscal impact of asset sales. This is not to attach any less significance, than is

1/ It is possible that assets have a positive scrap value, in which case a superior solution is to liquidate the enterprise rather than to privatize it. Also, the subsidy need not be explicit. It could, for example, be used to assume part or all of the liabilities of the firm.

2/ Hills puts the argument in terms of net worth. However, each time the government collects taxes or makes expenditures its net worth changes. Hills' argument is therefore more usefully framed in terms of future flows and liabilities.

current practice, to the overall deficit; 1/ rather, in certain circumstances, additional information is needed in order to assess the fiscal implications of budgetary changes. In asset sales, this additional information relates to the underlying changes in the government balance sheet, or the extent to which the government is saving or dissaving.

III. Qualifications

1. Differences of tax regime in the public and private sectors

Provided it is unchanged after privatization, the tax regime has no bearing on the above arguments. The market price of the asset should reflect the expected after-tax discounted profit stream. To the extent that performance is unchanged by a change in ownership, the tax flows to the government will be unaffected; to the extent that public enterprises do not meet their tax obligations or have special exemptions or rates, as is prevalent in many developing countries, tax receipts would be expected to increase after privatization but at the cost of a lower market price, reflecting increased tax liabilities. Since rational agents will equate marginal benefits with marginal costs in any transaction, a transfer of ownership that leaves income streams unaffected cannot generate greater income. However, the distribution of that income between taxes, dividends, and other transfers may change following the transfer in ownership.

While an unchanged tax regime cannot change the relative wealth of the private and public sectors, the tax regime could have spending implications through liquidity constraints. Thus, if after privatization, a firm starts paying taxes 2/ larger (smaller) than the sum of taxes and profits remitted as a public enterprise, this would loosen (tighten) the government's liquidity constraints.

1/ In any case, the construction of a full balance sheet where the future impact of all government activities is represented in present value terms raises methodological and practical problems that would make it an enormous, and in many cases fruitless, undertaking. It is instructive, nevertheless, to conceptually relate the appropriateness of expenditure levels to the "permanent income" of government, along the lines suggested by Buiter (1983a and 1983b). From this perspective, it becomes clear that an exchange of financial assets for money does not in itself extend the expenditure frontier of government, although it will ease its liquidity constraints.

2/ Strictly, one should use the sum of taxes paid by the firm that has been privatized and income from the financial assets acquired from the proceeds of privatization.

2. Implications of uncertainty and imperfect capital markets

In the absence of perfect foresight, the willingness to pay for risky assets will be based on the certainty equivalents of the expected income streams and will reflect the degree of risk aversion of the decision maker. Since governments can spread risk more readily than private agents can, it is usual to assume that they are less risk-averse; indeed, it is often assumed that they are risk-neutral (see Arrow and Lind, 1970). In such circumstances, it may be expected that governments would have to sell assets at a discount relative to the expected value of the stream of discounted earnings. The discount would have to be even greater if one considers other uncertainties--for example, future changes in the regulation of prices, markets (including labor) and profits, possible modifications to the tax regime, and the prospect of renationalization at below market price. In addition, because of capital market imperfections, it is usually argued that the government has a lower discount rate than the private sector. This arises for example, when the government has access to foreign borrowing on favorable terms. ^{1/} Thus, even with the same degree of risk aversion, the private sector would not be willing to compensate the government fully.

The above arguments suggest that, even if governments were able to devise ways of selling assets at market value, this price would be below the expected discounted value of the stream of earnings as perceived by the government. It can be concluded therefore that the earlier arguments have to be modified to take into account the fact that, even if all the proceeds of an asset sale are invested in financial assets, the expected future income stream would be lower than without the asset sale. Put another way, the government would have to transfer some of its wealth to the private sector to compensate for its greater risk aversion and its higher discount rate.

In practice, this problem is compounded because asset sales are likely to be associated with further discounts that reflect asymmetries in the market. When governments offer assets for sale they do not know the reservation price of the private sector. Thus, there will be a tendency to overprice some assets and underprice others. When the government overprices an asset there is no sale; when it underprices, the government is incurring a potentially large financial loss.

In the United Kingdom, for example, at the beginning of trading, discounts for enterprises privatized through offers for sale ranged from 3 percent for British Aerospace to 86 percent (on a £3.6 billion sale) for British Telecom (Mayer and Meadowcroft, 1985). Similarly, in France, shares in Saint Gobain, the first major firm to be privatized,

^{1/} In addition it is usually argued that the social time-preference rate used by government is lower than that of private agents, reinforcing this point.

rose 20 percent above their offer price when trading opened. For later privatizations this margin was reduced, and the premium for both the Compagnie Generale d'Electricité and the Societé Générale was cut to about 10 percent. This underpricing demonstrates the tendency for a government to collect less than full market valuation. 1/

In developing countries, where stock markets are less readily available to provide an observed market price, it is harder to obtain evidence of underpricing. However, it can be assumed that the government is unlikely to do better when the number of market participants is reduced. If anything, one would expect that the relatively few private agents negotiating with the government would be able to extract an even greater surplus.

3. Improvements in performance

Taken at face value, the conclusions of Section II, as modified by the preceding discussion, raise serious doubts about the policy of privatization at a time of budgetary restraint. However, modification is required to take account of changes in the expected income stream as a result of privatization. Indeed, privatization is widely advocated precisely because it is believed that it will lead to increased efficiency. This issue is taken up in more detail by Hemming and Mansoor (forthcoming), where it is argued that significant efficiency gains are more likely to result from measures to increase competition than from changes in ownership, and that the latter are neither necessary nor sufficient for such gains.

Particularly in developing countries with large public enterprise deficits, many times a change in ownership is required to bring about appropriate reforms and introduce competition. This may also be true in industrial countries that have generally profitable public enterprise sectors. For example, it has been argued that Japan National Railways is overmanned and serves too many uneconomic branch lines. The strength of public sector unions and the interference by local politicians are believed to be partly responsible for the decision of the Government of Japan to privatize the enterprise as a means to rationalize the labor force and the structure of the rail network. 2/ Similarly, in some developing countries, entrenched interests take advantage of public enterprises for private gain.

1/ It is possible that the premiums reflect in part deliberate underpricing to attract new shareholders. Despite this, the important point as far as the fiscal stance is concerned is that, ceteris paribus, such sales have an expansionary element given the implicit reduction in "permanent income" resulting from failure to extract full market valuation.

2/ "Privatisation: Everybody's Doing It Differently," The Economist (London), December 21, 1985.

Where governments face financial constraints and own enterprises that need investment, privatization may lead to an increase in the expected earnings stream. Privatization has been emphasized in a number of countries as a means to rehabilitate enterprises and/or to facilitate the modernization of plant and equipment. Similar considerations apply in enterprises where the private sector can identify new procedures and opportunities that the public enterprise cannot. For example, in introducing new technologies, a private enterprise usually can act or react faster and more readily realize any available gains. In several countries this has been an argument in favor of the privatization of telecommunications enterprises. 1/

There may also be public enterprises that have high unit fixed costs because of the narrowness of their market and insufficient rationalization. Private firms, particularly those with an extensive market, might be better able to reduce unit costs by integrating the firm into their production line. Similarly, where managerial skills or other inputs are scarce in the public sector, it may be impractical to increase efficiency without a change in ownership.

Thus, while privatization in itself may require a transfer of wealth from the public to the private sector, in practice many times such transfers could be offset by gains that cannot be realized within the public sector. To offset the potential negative fiscal impact, privatization must take place within an environment which ensures that such gains are indeed realized. In this respect, it is largely irrelevant whether the government captures the benefits of a larger income stream through an up-front payment in the sales price or through an improvement in future tax revenue. It is important that the desired actions that lead to improved performance are achieved through the change in ownership, but protection from competition may make this difficult.

Privatization can be linked with a transfer of wealth to the government, if the sale is accompanied by sufficient restrictions to competition so that the value of the earnings stream is increased. As observed by Kay and Thompson (1986), a government that is concerned with maximizing the revenue obtained from the sale of public assets cannot be expected to support measures of liberalization. It is possible that such considerations affected decisions regarding the privatization of monopolies like British Gas and British Telecom, where economists argued for privatization accompanied by an increase in competition. 2/

1/ It is interesting to note that similar reasons were provided for justifying the creation of public enterprises in the recent past.

2/ See "Good and Bad Privatisation," Financial Times (London), November 16, 1986.

Moreover, increases in earnings that arise from restrictions to competition have no obvious relation to ownership and presumably could be achieved without privatization. Governments have the power to change property rights and restrict the free operation of markets, and the use of this power entails redistribution of wealth. Governments that face financing constraints may be tempted to use this power to raise revenue, and privatization may provide a politically acceptable method of invoking such power.

Finally, the medium-term budgetary position of the government depends on the performance of the economy as a whole. Even if a particular firm improves its financial performance following privatization and the government reaps all these gains, this could still mean a worsening of budgetary prospects if the improvements of the firm come at the expense of the rest of the economy. For example, an extension of market power, say by restricting imports, coupled with improvements in productive efficiency, should significantly improve the financial performance of any firm. But if the extension of market power involves larger offsetting losses in allocative efficiency elsewhere in the economy, then the growth path of the economy as a whole will be depressed. In turn, this will reduce the future ability of the government to raise taxes and hence worsen budgetary prospects. Thus, in considering the impact of privatization, it is important to go beyond any measured improvements in the financial performance of privatized firms to consider the impact on the production frontiers of the economy as a whole.

4. Second-order effects

It is also necessary to modify the conclusions reached above to the extent that asset sales have second-order effects. The supply of shares in enterprises will increase as public enterprise shares are put up for sale. If private sector demand for future claims on the output of the enterprise sector is unaffected (the savings rate remains constant), then the purchase of shares offered by the government will come at the expense of planned real investment in private enterprises. Insofar as public enterprises are offered for sale at competitive prices, the expected return discounted for risk of the privatized enterprises would be equated with that on the foregone planned investment. It would be expected, therefore, that the growth in output of the private enterprise sector and hence its tax obligations would be unaffected. If the government does not use the sales proceeds to induce higher investment, 1/ it is possible that asset sales will be associated with a decline in the growth of capital stock that could adversely affect the overall growth rate of the economy, and hence have a negative impact on government revenue in the medium term. In the short term, there could be a reduction in aggregate demand unless the reduction in planned

1/ Either by increasing public investment or by inducing higher private investment through changes in taxes or other policies.

private investment was offset by government expenditure or cuts in taxation that would boost private spending.

If sales occur at below the competitive price, then the substitution of purchases of existing enterprises for planned real investment may be associated with a decline in the marginal productivity of capital in the private enterprise sector. This would arise if, at the margin, the private sector has been induced by subsidies to give up a higher expected yield on planned new investment for the sake of taking over a lower-yielding existing asset. In such circumstances, the medium-term impact on government finances could be expected to be negative unless the government used the sales proceeds to compensate for the losses induced by the crowding out of planned private investment. 1/

In practice, it is possible that additional private sector resources could be mobilized if the privatization program was placed in the context of a supply-oriented adjustment program. This would offset the crowding out discussed above, the extent depending on the exact circumstances. For example, it has been reported that the privatization of the Bosphorus Bridge and Keban Dam was financed by the sales of gold by individuals. 2/ It is also useful to remember that in many developing countries public enterprise investment has been defended by the converse of the above argument; that is, it was argued that it would crowd in private sector investment (Baumol, 1980).

A related issue concerns the impact of public enterprise sales on the prices of existing private sector enterprise shares. It would normally be expected that, with an unchanged demand schedule and increased supply, the equilibrium price of such assets would decline. This would tend to make share purchases at the margin more attractive than new investment and would also impose a capital loss on holders of shares in existing enterprises. Evaluating the overall impact requires a case-by-case analysis. However, such considerations affect the feasibility of large-scale transfers of public assets to the private sector.

The foregoing discussion suggests that privatization should focus on assets yielding low rates of return to the public sector. Also, governments should be prepared to offset any crowding out of private investment by boosting investment in infrastructure or human capital through changes in either taxation or expenditure policy financed partly by the proceeds of privatization. This further reinforces the notion that effective privatization requires fiscal policy geared to raising

1/ The government need not increase capital expenditure directly. For example, if tax rates are high, tax cuts may boost productivity. Similarly, increased expenditure on research or on education might be more effective than higher capital outlays.

2/ "The New Challenge for Corporate Turkey," Euromoney (London), April 1985.

the productive potential of the economy; in particular, proceeds from privatization should not be used to promote either public or private consumption but should finance productive investment.

In addition to the immediate second-order effects, privatization may have an impact on the economy as a result of the private sector changing the capital structure of enterprises that have been privatized by changing investment plans or by either spinning off or scrapping some plant and equipment. Indeed, it could be argued that this is one of the objectives of privatization. In practice, such a development may be thwarted to the extent that competitive pressures are not allowed to play an important role and monopoly rents accrue from perpetuating existing policies. This would be particularly true if increased competition does not accompany privatization. The general point is that changes in ownership will typically lead to a different set of priorities and market strategies and thereby affect investment decisions, with implications for capital markets--the general direction of which needs to be evaluated on a case-by-case basis.

In this section an attempt has been made to identify some of the impacts of privatization and that need to be looked at in more detail according to the specific circumstances. Although they may be "second-order" in nature, these may in the end be quantitatively more important than first-order impacts. It is not possible to trace these implications without specifying the constraints that an economy faces, its resource endowment, and most important, behavioral relationships describing choices by economic agents. Such a task is beyond the scope of this paper, but it is this sort of modeling applied to real-world situations that will be required to evaluate the budgetary implications of privatization in a comprehensive manner.

5. Renationalization

The experience with privatization is too recent and limited to evaluate the economic and financial implications empirically. Byatt (1985) has argued that performance over at least one business cycle would be required to judge whether privatization should be considered a success. In 1983, the Government of Chile felt obliged to take over the holdings of the Cruzat-Larrain and Javier Vial Groups, including many enterprises that formerly had been privatized. ^{1/} While the Government began to reprivatize these holdings within two years, the financial costs of the whole cycle from privatization to nationalization to reprivatization are not clear. The Spanish experience with the Rumasa Group suggests that such operations are costly (De la Dehera, 1986).

Another danger of privatization is that if governments do not change their attitude and allow market forces to determine the viability

^{1/} "Privatisation: Everybody's Doing It Differently," The Economist (London), December 21, 1985.

of firms, then they may privatize profits in the upward phase of the business cycle and socialize the losses and costs of restructuring in times of crisis. In evaluating the budgetary impact of privatization, there is always a risk, especially for strategic enterprises, that the government may be faced with the costs of a rescue operation in addition to having borne the up-front costs of privatization, as discussed earlier. This is why lasting budgetary improvement indeed requires that potential improvements in performance be realized. In turn, a hands-off approach to financial problems of public enterprises that concentrates simply on transferring ownership to the private sector is precluded.

IV. Implications for the Balance of Payments

Without a specified model of behavioral response it is difficult to trace fully the implications of asset sales for the balance of payments. Of necessity, the comments here will be general and to some extent self-evident. Nevertheless, it is useful to trace these effects, both for completeness and given concern over the negative feedback of budgetary to external deficits.

As argued earlier, a simple change in ownership cannot be expected to change real flows, and asset sales by themselves should leave the current account unaffected. If sales are made to foreigners who would not have otherwise invested in the country, there would be a capital inflow of equal magnitude to the proceeds of the sale. In turn, this inflow would be reflected by a rise in net foreign assets of the government sector, or by a decline in net foreign liabilities in debt for equity swaps.

In financial programming, the current account balance of payments deficit is usually related to the government deficit and the savings-investment balance of the private sector. In asset sales, this link is broken for reasons similar to the failure of changes in the overall deficit to indicate changes in fiscal stance. Different sets of accounts are used for different purposes and confusion can arise concerning the appropriateness of a particular approach to a given problem. For example, the balance of payments is concerned with physical versus financial flows, the national accounts with saving-investment flows, and the Fund's Government Finance Statistics with liquidity needs. More particularly, the usual identity relates to flows of real resources, while asset sales concern balance sheet transactions. Indeed, as pointed out by Heller, Haas, and Mansur (1986), "the sale of a public asset is not treated as a revenue item in NA (National Accounts)-based budgets because it is not directly related to economic activity. The government has simply changed the liquidity composition of its assets." (Ibid., p. 28.) While this is an obvious point, it is worth making because it means that in the design of adjustment programs, improvements in the overall deficit arising from asset sales should not in themselves be taken as an indication of adjustment even though they may help to fill a financing gap.

Even though asset sales initially have no impact on the balance of payments current account, in the longer run substantial effects could be expected from second-order effects. Without an economic model these impacts cannot be fully followed through. However, it is possible to make some general observations. Often, public enterprises are overmanned and employ suboptimal production techniques. In such a situation, and especially where exposure to market forces can bring about greater efficiency, it is to be expected that the production potential of the economy would improve following privatization. To the extent that firms that have been privatized account for only a small share of potential output, such gains could be expected to have only a small impact on the economy as a whole. Where the enterprises are relatively important and/or significant improvements occur in the remaining public enterprises, these gains could be important, which means that the permanent income of the country could be raised noticeably. If, as is widely believed, the marginal propensity to consume is less than unity, then net exports should rise, contributing to an improvement in the current account. In the short run, the current account could deteriorate if actual improvements in efficiency lagged behind changed expectations of permanent income. 1/

V. Conclusions

This paper should not be construed as implying that in practice privatization has a negative budgetary impact and should therefore be discouraged. Rather, it suggests that the conventional view of asset sales as automatically improving budgetary prospects needs to be looked at more carefully. Privatization will have the greatest positive budgetary impact when it leads to efficiency gains in the economy. Usually these gains will come from improvements in those enterprises that have been privatized, but they could also be accompanied by higher returns on public expenditure. In that respect, significant improvements in the budgetary position would most likely result from the privatization of major public monopolies, coupled with deregulation and increased reliance on market forces throughout the economy, including the exposure of these monopolies to competition. The transfer of a public monopoly to the private sector with its monopoly power left intact may in fact lead to a worsening of the budgetary position, given the losses in public sector wealth that may be involved and the possibility of insufficient offsetting efficiency gains.

1/ This assumes that the country faces no constraints in financing an increase in the current account deficit.

References

- Arrow, K.J., and R.C. Lind, "Uncertainty and the Evaluation of Public Investment Decisions," American Economic Review (Nashville, Tennessee), Vol. 60 (1970).
- Baumol, W.J., Public and Private Enterprise in a Mixed Economy (New York: St. Martin's Press, 1980).
- Buiter, W.H. (1983a), "Measurement of the Public Sector Deficit and Its Implications for Policy Evaluation and Design," Staff Papers, International Monetary Fund (Washington), Vol. 30, June 1983.
- _____ (1983b), "The Theory of Optimum Deficits and Debt," in The Economics of Large Government, Federal Reserve Bank of Boston (Boston, 1983).
- Byatt, I., "Market and Non-Market Alternatives in the Public Supply of Public Services: British Experience with Privatization," in Public Expenditure and Government Growth, edited by F. Forte and A. Peacock (Oxford: Basil Blackwell, 1985).
- De la Dehera, G., Privatization in Europe: The Case of Spain. Privatization and Foreign Investment (unpublished, paper prepared for World Bank/IRI Conference, Rome, November 1986).
- Domberger, S. and J. Piggott, "Privatization Policies and Public Enterprises," Economic Record (Melbourne), 62, June 1986.
- Heller, P., R. Haas, and A. Mansur, A Review of the Fiscal Impact Measure, Occasional Paper, No. 44 (Washington: International Monetary Fund, May 1986).
- Hemming R., and A. Mansoor, Privatization and Public Enterprises, Occasional Paper (Washington: International Monetary Fund, forthcoming, 1987).
- Hills, J., Public Finances in Perspective, Report Series No. 8 (London: Institute for Fiscal Studies, 1984).
- International Monetary Fund, A Manual of Government Finance Statistics (Washington: International Monetary Fund, 1986).
- Kay J.A., and D.J. Thompson, "Privatization: A Policy in Search of a Rationale," Economic Journal (London), Vol. 96 (1986).
- Mayer, C.P., and S.A. Meadowcroft, "Selling Public Assets: Techniques and Financial Implications," Fiscal Studies (Oxford), Vol. 6 (1985).

Short, R.P., "The Role of Public Enterprises: An International Statistical Comparison," in Public Enterprise in Mixed Economies: Some Macroeconomic Aspects (Washington: International Monetary Fund, 1984).

Tanzi, Vito, "Fiscal Policy, Growth, and Design of Stabilization Programs," in External Debt, Savings, and Growth in Latin America, edited by Ana María Martirena Mantel (Washington: International Monetary Fund, forthcoming 1987).

Tanzi, Vito, and Mario I. Blejer, "Fiscal Deficits and Balance of Payments Disequilibrium in IMF Adjustment Programs," in Adjustment, Conditionality, and International Financing, edited by Joaquín Muns (Washington: International Monetary Fund, 1984).

Yarrow, G., "Privatization in Theory and Practice," Economic Policy, No. 1, 1986.

