

## Privatization : Theoretical Issues

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### INTRODUCTION

Privatization or the sale of the assets of state owned enterprise to the private sector, has been the buzz-word for over a decade now. Economic reform programmes of 1960s and 1970s and today's with privatization occupying central role, was partly due to the compulsions of the structural adjustment. As a part of structural adjustment programmes, developing countries were directed to reduce their deficit, as financial losses of public enterprises were often a significant component of the public sector deficit. Further, any investment outlays meant that cash strapped government had to generate requisite resources.

In this context, privatization was attractive on two counts: Firstly, it was hoped that unprofitable enterprises could be divested reducing flow burden of state exchequer. Secondly, profitable or potentially profitable enterprises could be sold at a price approximating the capitalized value of future profits. Apart from these, poor performance of public enterprises and ideological reason were popular for privatization. The Regon government being strong supporter of privatization and under its influence international financial institutions such as World Bank were advocates of divestiture programme, and the trend was indicated by the Thatcher government in the U.K.

No matter what compulsions for privatization, any assessment of its impact must take into account the effect of ownership changes upon the economic performance of enterprises.

The end of the Second World War marks the beginning of the process of state-led developmental activity in the developing countries. In most countries industrialization became synonymous with development and import substitution was actively supported. Public enterprise came to play a critical role in the process for: developing countries had only limited traditions of domestic capitalist development and state enterprises seemed necessary in the absence of developed class of industrialists; given the underdevelopment of the capital market and reluctance to allow foreign dominance in critical sectors, public enterprises were natural solution; traditional argument also played a role for public enterprise in natural monopoly industries; the desire of bureaucrats and politicians to increase their power and the scope of patronage contributed to the growth of public sector.

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The 1980s marked an end of this process of the public sector growth and, indeed, its reversal. The transfer of the ownership of a firm from the public sector to the private has number of implication for the behaviour of the firm, and questions can be asked:

- Do private firms have greater incentives for cost efficiency than public owned firms?
- Will privatization result in allocative inefficiencies due to socially inappropriate input decisions or to the private exploitation of monopoly power?
- What role does product market competition play in ensuring efficiency? And,
- Will privatization result in alleviating the fiscal crisis?

### PRIVATIZATION AND COST EFFICIENCY

Let us consider the relation between the ownership structure and cost or x-efficiency. The idea that privatization will ensure cost efficiency in production is perhaps the strongest conviction of proponents of privatization. Profit maximization requires cost minimization even for a monopolistic firm, as long as the firm's monopoly power does not extend to factor markets. For this reason it has been argued the private enterprises have greater efficiency for cost-efficiency production. However, this simple view fails to take into account the separation of ownership and management in modern industry. The question is:

Do manager of private owned firms have greater incentives for cost efficiency than managers of public owned firms? At one level it can be answer yes, because public sector managers are answerable to civil servant and politicians who have other objectives as well including profit, whereas private sector managers are answerable to their owners or shareholders alone who are usually concerned mainly with profits. Hence, privatization is likely to result in greater emphasis on profits in managerial decision making, and this is likely to have a positive effect on cost efficiency. However, private sector managers may also not be inclined to put in the supervisory effort required to increase x-efficiency. Future increase in efficiency may require change in work practices taking disciplinary action, firing of workers which cause manager to become unpopular and target of action by work force. So manager may opt for quiet life and owners may not be able to check this since they do not have full information on the firm's conditions.

### Allocative Efficiency

Allocative efficiency requires that firm produces the socially appropriate level and types of output, using the socially optimal input combination. Concern with allocative efficiency in the discussion on privatization has hitherto mainly focused on whether the privatization firm will produce too little, i.e. use the possible market power in order to

raise price and reduce output. This is natural, since the public sector in the developed country has been confined mainly to the natural monopolies or to industries where economies of scale and scope make for large firm size and monopoly power. This issue is relevant to developing countries as well, since many public sector firms which have been privatized or are the candidates, are the natural monopoly industries. In addition small size of the market in many developing countries makes for oligopoly even in those products which are produced under reasonably competitive conditions in developed countries. As is well known, the number of firms which can profitably enter an industry depends on the market size relative to the size of fixed costs. Hence the problem of market power is likely to be greater in countries where the domestic market is smaller and access to the world market is difficult for products

### **Competition**

Product market competition can play an extremely useful role in ensuring cost efficiency in curbing monopoly power. Competitive pressure ensures that privately owned firm must produce efficiently if it is not to go bankrupt. Potential competition and the possibility that rival could enter a monopolized industry also create an incentive for cost efficiency on the part of an incumbent firm.

### **Social Objectives for Public Enterprises**

Public enterprises are also required to serve other welfare objectives, notably employment generation. These objectives can be subsumed within the concept of allocative efficiency, provided that social cost and benefit are appropriately defined. Allocative efficiency in this sense requires that the output be produced in a socially optimal way, i.e. at the minimum social cost. If the market prices of productive inputs correspond to their social cost, it follows that a firm which seeks to maximize profits also minimize the private cost of production, and therefore, makes the socially appropriate input decisions. However, any deviation between the market price of inputs and their social cost will imply that cost minimization will be inappropriate. This is particularly relevant in many developing countries which are characterized by widespread unemployment with substantial unemployed labour, the social cost of labour is less than the market wage. This has two implications : relative input choices under profit maximization will employ too little labour, and the level of output will be too low, as the marginal social cost of output is less than its private loss since public enterprises often have employment as an explicit objective to government policy, it is clear that privatization will be accompanied by a reduction in employment. Hence, privatization may result inefficiency, unless it is accompanied by an employment subsidy. Apart from employment public

enterprises are often required to serve other social goals; poverty alleviation and reduction of income disparities. Typically, the goals are sought by input or output pricing policies designed to benefit deserving group. One way in which these goals can be promoted without sacrificing management's responsibility for attaining special financial objectives is through clearly defined government subsidies. Conversely, any assessment of the performance of public enterprises would have to consider their performance in this dimension as well.

### **THE FINANCIAL IMPLICATION OF PRIVATIZATION AND THE CAPITAL MARKET**

It must be pointed out that the money raised from the sale of a profitable or potentially profitable company is a capital account transaction as opposed to current one. Consequently these transactions are similar in character to government borrowing or bond sales, rather than tax receipts. The financial consideration has often been permanent, and other consideration such as efficiency, have taken a back seat. Hence the privatizing government often does not set up an effective regulatory framework for monopolized industry, and no attempt is made to see whether the firm could be broken up prior to privatization in order to reduce its monopoly power. The reason for this is quite clear, since there is a conflict between the financial motive and the curbing of monopoly power as regulation reduces monopoly profits and therefore, also reduces the purchase price which investors are willing to pay. Relative underdevelopment of capital markets obviously militates against effective privatization. Consequently, government must take the unwelcome decision to sell assets to foreigners, or to ethnic minorities against whom there might be resentment. Capital market underdevelopment also implies that the government must have recourse to direct sales rather than floating the company on the market stock. This makes for underpricing of assets, with adverse income and wealth distribution consequences. This is particularly the case when buyer is a foreigner.

### **BANK AND PRIVATIZATION**

Monobank, earlier, combined the functions of a central bank and commercial bank activities. Government manipulation of administered prices, fixed interest rates, provision of credit and subsidies ensured the continued liquidity. Method of credit allocation was direct, with the banking system acting as an administrative arm of planning organ. The administered rates of interest had little relation to the return on capital, banks were not mandated or motivated to pay much attention to the quality of asset, the role of asymmetric information and delegated monitoring services. Now, monobank, in reality broken up into two tier :

banking system in central bank and the hiring off of the non-governmental loan portfolio to several commercial bank. Banks transfer short term liabilities into long term assets to satisfy the demands of both consumers and enterprises. Banks, therefore, depend on their ability to attract a continuous inflow of deposits and to recover loans from borrowers. Hence, the stability of a banking system depends on expectations about the continued solvency of the constituent parts of the system. A temporary decline in confidence can lead to a bank run, making intermediation difficult, investment financing hard to obtain, output suffers because of a suboptimal capital stock and limited opportunities for intertemporal sublimation.

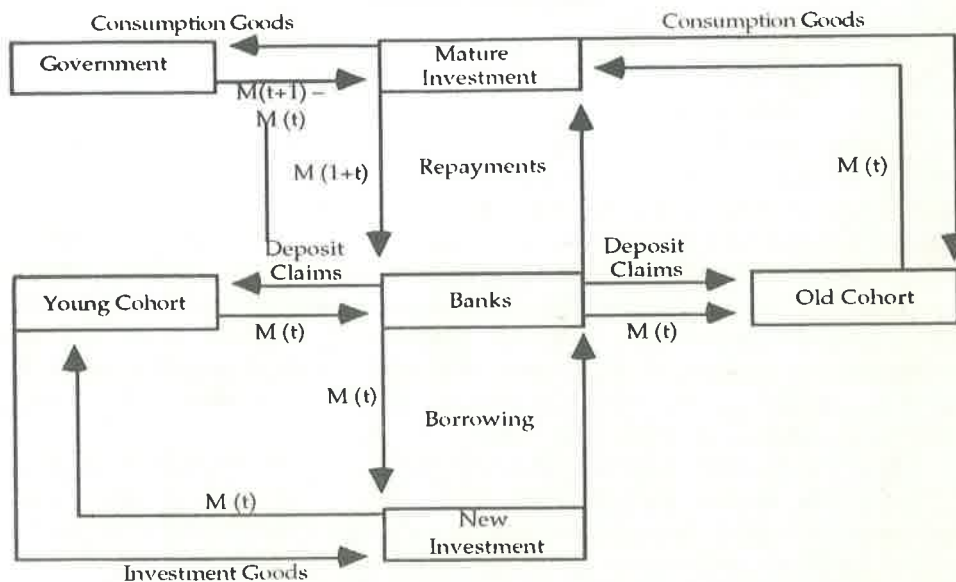
Time is discrete and indexed by  $t$ ; time subscripts are dropped whenever ambiguity is not thereby created, and there is an infinity of periods. All agents are sufficiently small so that each takes prices and the behaviour of others as unaffected by his or her own decisions. A cohort, of constant size, is born in each period and lives for two periods. The young receive an endowment,  $E_t = aE_{t-1}$ ,  $a > 1$ , of the investment goods, and may inherit any financial assets of the past generation that have not been disposed off. Only the old consume. Each unit of the endowment can be converted into  $k$  units of the consumption goods or sold to firms. Thus the investment goods is an input that may, even be interpreted as labour. Neither the investment nor the consumption goods can be stored as inventory. The consumption goods has a price,  $p$ , and the investment goods cost  $q$  per unit. An investment of  $I$  yield  $sI$  units of the consumption goods after one period, and  $S$  units after two period, but has no immediate liquidation value.

It is interesting to concentrate on the case where  $S > K$ ,  $S > 1$ . The capital stock depreciate entirely after two periods. A government absorbs  $G_t$  of the consumption goods, where  $G_t$  is fixed proportion,  $\gamma < 1$ , of the final consumption in the economy in any period. Government consumption is financed by seigniorage, which adds  $\Delta M_t$  to  $M_t$ , the stock of outside money at the start of the period.

Banks provide an intermediation service that transforms short term savings into long term investment. They hold cash and loan to firm as their assets and their liabilities consist of non tradable demand deposits. Note that by the time the investment matures, an individual who was alive when it was undertaken is dead. Individual can only hold cash or deposits as stores of value, and no individual can go short in any asset. In notation, banks in period  $t$  lend an amount,  $B$ , to firms, which promise to repay  $LB$  at time  $t+2$  if they are able. The loan is callable, in that the bank can demand its money back after one period; if all banks call in the loans of a firm, they share, at most, the liquidation value of the firm. A deposit made at time  $t$  can be redeemed at  $t+1$  with gross yield,  $R$ , if the bank is not in financial difficulties. If a bank can not honor all claims, its creditors divide the available resources in proportion to their claims.

All transacting in the goods market are conducted in cash. In each period the goods and the financial markets operate according to the following pattern; banks may lend what cost they initially have on hand to firms, which are then able to by the endowment from the young from investment; the young may deposit their income with banks, which are then able to meet withdrawals of deposit plus interest by the old and the government by the output of firms, and any of the consumption goods directly provided by the young, so firms receive the cash with which to repay loans to the banks. If all go well, banks will have cash on one hand at the start of the next period. The pattern of transaction in the economy is depicted in the following figure.

### Flows of Funds



This suggests that immediate and total decontrol of the financial sector far in advance of reform in the sector may serve negative consequences. The unintended consequences of financial liberalization in countries like Argentina, Chile, and Uruguay during late 1970s and early 1980s should not be allowed to revisit to the part of the globe a decade later and lead to a financial collapse. Although liberalization will lead to a sustained upsurge in economic activity, shifting economies from a controlled to a market based system will incur large cost.

Financial sector, when liberalized, banking system is assumed decentralized and broken up into separate. Concentration is, suppose, made on: removal of price controls and subsidies. At the start of some period,  $t$ , the government decides to stop all subsidies and to liberalize prices. Then outcome is that bank not to lend of new investment, the young to convert their endowment into the consumption goods, all loans

to be called in during period  $t$ , and out put to fall drastically and recover slowly. Start with the old in period  $t$ . In an effort to purchase as much as possible of the consumption goods, they will wish to withdraw the whole of their deposits, which amounts to a claim of  $Mt$  on the banks. But the banks can not have enough cash on hand, because the government has stopped the subsidy to firms and the entire supply of outside money is fixed at only  $Mt$ . In this sense there is a rational bank run. Each individual bank try to generate liquidity first by eliminating lending at the start of the period to preserve its initial cash holding and then by calling loans made in period  $t-1$  and honor its obligation. The investments liquidated after one period yield an out put of  $S^{Et-1}$ . For a system as a whole, price levels fall as the supply of consumption goods increases, so bank can never acquire enough liquidity.

### SEQUENCE OF PRIVATIZATION

Virtues of rapid privatization in reforming planned or state economies are placed in a key argument in favour of private ownership of productive assets and that it is an integral aspect of a market economy where individual agents receive and respond market signal in the quickest possible way, and it, privatization, allows of smooth information flows. Most recent discussion on privatization emphasizes the need for a rapid and complete change in the ownership of assets. But in selling or transferring public enterprises to the private sector has already unmasked a myriad of complications : lack of competitive environment could lead to a highly concentrated ownership, and create undesirable monopolistic market structures, and fundamental problems also arise from the absence of financial markets — how are shares to be valued, sold and how are modern instruments of savings to be developed.

Various sectors of an economy are interdependent and the ability of newly privatized sector to respond quickly to market signal may be limited by its dependence on sectors that remain under state control . Although the importance of freeing goods markets and establishing financial markets as a pre-condition to privatization has been emphasized, discussions on actual privatization have been limited to equity and cost consideration. These discussions suggest that it is better to privatize small firm first, both because it is more practical in the absence of well developed financial markets and also because it leads to more equitable distribution of former state owned assets. As the economy moves towards more market oriented price uncertainty increases more rapidly due to rapid change in commercial trade and domestic policy.

Economy is generally divided into two sectors, an *upstream* sector producing intermediate inputs and a *downstream* sector producing final goods. Sectors facing greater uncertainty should be privatized first because the gains from private ownership — the ability to respond to

shocks — are greatest in those sectors. One obvious link between two sectors is through a market for intermediate goods. To the extent that downstream firms rely on upstream sector to produce their inputs, the ability of privatized downstream firms to expand production in response to a positive demand shock will surely be constrained by the inability of upstream firms that continue to be owned by the state to supply more inputs. Similarly, if upstream firms are privatized, their production decisions will be constrained by the inability of state owned downstream firms to absorb more inputs. On the other hand presence of oligopolistic market structures would affect their results on the optimal sequencing of privatization. The belief of large scale production may lead to creation of monopolistic production units at the expense of encouraged competition, and here privatization is likely to give rise to highly concentrated markets, and could result in rent seeking behaviour by the newly privatized monopolies.

The existence of highly concentrated market raises question about the efficiency losses associated with privatizing oligopolistic markets. Thus private ownership, because it is expected to enhance firms flexibility and adaptability to change, is a critical importance. Further, if privatization of different sectors affects the overall flexibility of the economy in different ways, the sector to be privatized first must be chosen to the greatest gains in allocative efficiency through the increased flexibility of firms in the sector.

In a mixed economy framework with private downstream and public upstream sectors, the allocative efficiency that arises when the upstream supplies allocate intermediate input quotas to downstream firms on the basis of installed capacity (Sahay 1991). Opening up the economy to foreign trade may be a way of creating a competitive environment. However, concentrated industries are well placed to lobby for protection. In addition trade liberalization does little to competitive pressure on non-traded sectors (Newbery 1991) The upstream sector is subject to a raw material supply shock, and the downstream sector is subject to a final goods demand shocks. And in this respect public firms are less flexible because they choose inputs after they observed shocks in their own sector but before observing shocks in other sectors, the private sector is able to make its production decision after observing the shocks in both sectors. The analysis under perfect competition indicates that the remaining allocative distortion in the economy after partial privatization can be minimized by privatizing the sector that is kept under state control is relatively inflexible, the privatization should involve privatizing the downstream sector first, for supply shocks are relatively important.



## CONCLUSION

Since privatization is a relatively recent policy, the effects of privatization and the empirical evidence on its effects are relatively sparse. Most of the literature usually describes the process of privatization, and there is little systematic economic analysis of its effects. In fact, it is even difficult to know accurately the extent to which privatization programmes have been implemented in the developing world. Kikeri (1990) lists thirty one developing countries which are involved in World Bank supported privatization programmes which involved the sale of public owned assets to the private sector, but the issue of dependency between downstream and upstream sector and prioritization of privatization remained untouched. If final goods producing downstream sector is privatized but the intermediate input producing upstream sector is publicly owned or upstream instead of downstream firm privatized the result is : the distortion associated with state ownership of a sector is large. Hence the sector with relatively less uncertainty should be privatized first.

The market price of raw materials reflecting their scarcity and the market price of final goods, reflecting consumer demands; warrant that the firms; both downstream and upstream; respond quickly to changes in both prices. Efficiency gain resulting from privatization, then arises from the increased flexibility of the privatized sector in adjusting of these market signals. Efficiency are maximized when the sector facing relatively less uncertainty privatized first. Thus, if shocks to final goods demand are more critical than shocks to raw material supply, it is optimal to privatize the upstream sector first. On the other hand, if supply shocks are relatively larger, the downstream sector should be privatized first. Sector facing relatively less uncertainty and containing the relatively less concentrated industrial structure should be privatized first, recognizing that the ultimate objective of any privatization scheme is to maxim consumers' welfare. And, we assume that welfare decreases monotonically with higher deviations of out put.

Similarly immediate and total decontrol of financial sector without any effective reform in other sectors may bring negative consequence. Therefore, the unintended financial liberalization, for a system as a whole, will lead for a fall in price levels and financial institutions can never acquire enough liquidity.

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