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FREE LUNCHESES IN THE CASE FOR PRIVATISATION AND DEREGULATION

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Abstract

Free lunches arise when benefits of public or private organizational forms are estimated without regard to the associated costs. Two forms of the free lunch fallacy are prevalent in the literature on privatisation and deregulation. First, transfers from employees and transfers associated with tax evasion are treated as if they are net gains. Second, the benefits of market discipline, arising from the threat of bankruptcy or takeover form a major part of the case for privatisation. However, the social costs of bankruptcy and of the operation of the market for corporate control are typically not taken into account.

Free Lunches in the Case for Privatisation

1. INTRODUCTION

TANSTAAFL - There Ain't No Such Thing As A Free Lunch. This aphorism is the *leitmotiv* of Chicago School economics. The original 'free lunches' were offered by publicans in an attempt to attract custom. Naturally, the cost of the lunch was reflected in the price of drinks. A free lunch, then, is a proposal which yields seemingly costless benefits. The heuristic implied by the acronym 'TANSTAAFL' is to search for the hidden costs of free lunches.

The term 'free lunch' will be extended in this paper. Instead of referring to policy proposals, it will be used in relation to comparisons between public and private organizational forms. Whenever the benefits of a particular feature of one form of organisation is suggested as a reason for superior performance, a potential free lunch fallacy is present. Unless the costs associated with that feature are considered, we have a free lunch. A central feature of the Chicago style of argument is the demonstration that the benefits promised by intervention proposals ranging from Keynesian stabilisation to public education are 'free lunches' for which the inevitable cost has been ignored or hidden.

It is, then, of particular interest to look for free lunches put forward in support of proposals to reduce government intervention. Notable examples are deregulation of economic activity and the privatisation of public enterprises. Over recent years, the view that the current level of government activity is excessive has come to dominate the economic debate in most Western countries. In the UK, where direct public production of goods and services has been a major form of intervention, the main focus has been on privatisation. In the US, deregulation has held centre stage. Many studies have suggested that privatisation and deregulation may yield significant benefits. Summaries of the literature are given by Borcharding (1982) and Domberger and Piggott (1986). The primary question examined here is whether these studies have been subject to some form of the free lunch fallacy.

The paper begins with a brief consideration of the free lunch fallacy. This is followed by a

discussion of the free lunch fallacy in arguments for reductions in the scope of government activity. Two main forms of the fallacy are examined.

The most obvious form of free lunch is one paid for (normally involuntarily) by someone else. Obviously, economists in the Chicago tradition are well aware of this type of free lunch. It has been the primary focus for their criticism of various interventions, such as 'free' education and health. Nevertheless, a surprising number of advocates of privatisation estimate cost reductions without considering whether one person's cost is another person's income.

The second class of free lunches is somewhat more subtle and certainly less frequently remarked upon. It is offered by those who point to the benefits of various forms of market discipline, such as bankruptcy or the threat of takeover, without considering the costs of providing this discipline. An attempt will be made to describe these costs and consider how they will affect the validity of various comparisons between the performance of private and public firms.

2. GAINS FROM PRIVATISATION - EFFICIENCY IMPROVEMENT OR REDISTRIBUTION

One of the central empirical claims made in support of privatisation and related policies is that the private sector can deliver services more cheaply than the public sector, and that regulation acts to increase costs. Minford (1987), for example, claims cost savings of the order of 25 per cent for 'contracting out' of services by British local authorities. A large number of studies of the benefits of contracting out are summarised by Borchering et al (1982) and Domberger and Piggott (1986). Similarly, the case for deregulation has been bolstered by reductions in air fares following airline deregulation in the United States. In a surprising number of cases, these estimated benefits have been presented without any reference to the costs incurred by those who lose from privatisation and deregulation. In some cases (e.g. Beesley and Littlechild 1983) the normal social welfare criterion has explicitly been discarded. Instead, policies are supported if they benefit consumers, without regard to their effects on other groups. Even where an attempt is made to measure net social benefits, important transfers are frequently neglected.

Two examples will be considered. First, consider the case where a public authority dismisses its cleaning staff and replaces them with contractors.¹ It is unlikely that such a measure will be adopted unless the budgetary cost is reduced; that is, unless the contractors price is lower than the wage bill associated with employing cleaners directly. Domberger, Meadowcroft and Thompson (1986, 1987) examine two such cases of contracting out and estimate average budgetary gains of 20 per cent, a figure which seems to be consistent with much of the literature.

There are several possible ways in which this reduction can be brought about. First, the contractors or their employees may do the same work for less money. Second, the quality of service may be reduced. Third, the contract employees may be in a position to evade or minimise taxes. Finally, contractors may do the job more efficiently. Only in the last case, that of a pure increase in efficiency, will the reduction in budgetary costs translate into an equivalent social welfare gain.

A similar analysis may be applied in the case of deregulation. US airline deregulation led, at least initially, to substantial reductions in fares for most travellers. In assessing the net social welfare gains from deregulation, it is necessary to distinguish between pure efficiency gains and transfer gains arising from reductions in wages, taxes or service quality.

Reductions in Wages and Conditions

It is worth examining each of these sources of savings in more detail. The first, and most easily measured, is that arising from reductions in wages, and, more generally in payments to factors employed in the industry. This has been an important source of cost reductions in some instances. The most notable case is that of the US airline industry where wage reductions of as much as fifty per cent were imposed on pilots [Moore (1986)]. Other staff, such as flight attendants and ground

¹In some cases, an internal team is given the chance of tendering for the contract. More generally, it often happens that the contractors are simply the dismissed staff re-hired on new terms and under new management.

staff have also experienced wage reductions and this process is still continuing². After reviewing a range of comparisons of private and public firms, Borchering et. al. (1986) suggest that returns to labor are, on average, 10 to 15 per cent higher in the public sector.

There may be some social welfare gains arising from reducing wages. These arise if the wages are above the socially optimal level. In the Chicago tradition, the existence of people willing to do the job for less is *prima facie* evidence that the prevailing level of real wages is excessive. A reduction in wages to the competitive level will eliminate deadweight losses, producing a net social welfare gain. However, social welfare gains of this kind will be smaller, and typically an order of magnitude smaller, than the total reduction in wage costs. Cost reductions arising from reductions in real wages are mainly transfers rather than genuine gains.

For example, suppose that the actual wage is 25 per cent greater than the equilibrium wage, and that the elasticity of demand for labour is 0.6. Then the net efficiency gain from a 25 per cent reduction in wages may be approximated, using the Harberger triangle method, as $0.6 \times (0.25)^2 \approx 1.9$ per cent of the initial wage bill. Of the total reduction in costs to employers, net social welfare gains from the removal of distortions contribute about 7 per cent. The other 93 per cent is a transfer from wage-earners.

Reductions in returns to labour may also take the form of increases in working hours or work intensity, associated with reductions in the staff needed to do a given job. Given the stickiness of money wages, and the existence of various forms of minimum wage regulation, this may be more important than direct wage reductions. It is also more significant in the present context, because

²The pattern of returns to capital has been more complex. Profit levels for many companies fell after deregulation, reaching 'unsustainably low levels' in 1986 but, market valuations of airline stocks generally rose. This pattern is consistent with a struggle for market shares in anticipation of future monopoly or oligopoly profits. Following the price wars of the early 1980's, most of the new firms which entered the industry after deregulation withdrew or were taken over by established firms. Market concentration is now greater than that prevailing before deregulation.

there is a greater temptation to present a 'free lunch' fallacy. The costs to employees of longer hours or 'speed-up' can be ignored more easily than those of wage cuts³. For example, Albon (1987) criticises Australia Post on the grounds that postal routes can be completed in about two-thirds of the time for which 'posties' are paid. This does not, however, imply, that the workload could be increased costlessly. Albon provides no evidence that the hourly wage is above the socially optimal level. Even in a regulated labour market such as that prevailing in Australia, it is likely that there is a trade-off between wages and conditions, so that easy work will earn lower wages. Further the policy-driven decline in real wages for public sector employees over the last ten years has produced a situation where below-market real wages are common. Thus, the increase in social welfare from requiring postal workers to work at the full speed estimated by Albon, without compensation in the form of higher wages, would certainly not be equal to the reduction in the wage bill, and might be negative.

There are situations in which privatization and contracting out may yield improvements in working conditions, for example, by permitting public sector workers to become contractors and work from home, during their own preferred hours. However, it is likely that these benefits will be reflected in the price charged by contractors and hence will already be included in measures of the gains from contracting out.

Reductions in Service Quality

The second source of budgetary cost savings may arise from reductions in the quality of service. Theoretical models such as Niskanen's budget-maximising bureaucracy model suggest that the level of service under public provision is likely to be higher than the competitive level. Also, some forms of regulation, such as certification requirements, tend to raise service quality above the competitive level. In these cases, the analysis is similar to that for wage reductions. There will be

³ Some of the debate over Liebenstein's (1966) X-inefficiency concept is relevant here.

some net social welfare gain from reducing service quality, but this will be small in relation to the total reduction in costs.

The conditions of privatisation may create incentives to reduce service quality to a level below the social optimum. One example is the pricing formula adopted for British Telecom, and proposed for Telecom Australia, where the privatised firm is subject to a cap on price increases. Under imperfect competition, a simple constrained optimization shows that profit-maximizing service quality will be below the socially optimal level.

There are, however, cases where public ownership or regulation may reduce service quality. For example, in inflationary periods, publicly owned firms have been subject to pressure to hold back price increases. The adoption of a commercial approach through corporatisation or privatisation may result in increases in both price and service quality.

The empirical evidence on this issue is mixed. Critics of privatisation have made claims of reductions in service quality, notably in relation to British Telecom and to contracting out of services. However, Domberger, Meadowcroft and Thompson (1986) found no evidence of reductions in the quality of garbage collection after contracting out. The evidence is clearer in relation to US airline deregulation. There have been reductions in service quality including more stringent ticket conditions, reductions in in-flight amenities and more frequent delays and cancellation (More 1986). Since these changes have occurred in a competitive situation they are more likely to yield net improvements in social welfare than in the British Telecom case. Still, it is necessary to take them into account in any assessment of the total costs and benefits.

Tax Evasion

The third form of transfer which may finance cost reductions under privatisation arises from increases in tax evasion and avoidance. The opportunities for evasion and avoidance are increased by contracting out. Public sector wage employees have less opportunities for evasion than any other group of income-earners. By contrast, contractors and their employees are in a very good position to evade taxes, especially if, like cleaners and garbage collectors, they work non-standard hours. The

evidence reported in Tanzi (1982) indicates that evasion is insignificant among government employees and highest in the small business sector⁴.

By the nature of the problem, it is difficult to assess the significance of tax evasion in the economy, let alone the change which would arise under a change such as privatisation or contracting out. Carter (1984) quotes estimates of the total size of the 'hidden economy' ranging from 2 per cent to 33 per cent of GDP.

The large amount of revenue yielded by the Prescribed Payments Scheme in the building and transport industries (estimated by the Treasury (1986) at \$835m for 1986-87) provides an indication of the extent of previous evasion. While this sum includes some tax which would have been collected anyway, the scheme has led to additional collections under the ordinary income tax system and there is still considerable evasion going on.

Tax evasion is normally regarded as a transfer, which would result in an overstatement of the measured social gains from privatization. However, there are considerable deadweight losses associated with tax evasion, including the resources dissipated in public efforts at tax enforcement and private efforts at concealment of untaxed income. Thus, to the extent that the measured benefits from privatization are due to tax evasion, it is likely that the true social benefits are negative.

Estimating Net Efficiency Gains

Changes in wages and service quality may in some cases yield net social welfare gains, but they are likely to be small. The crucial issue is whether privatisation and deregulation will yield pure efficiency gains. In the US airline industry, sources of potential efficiency gains have included increased passenger loads associated with more flexible fare structures and the reorganisation of routes on the basis of 'hub-and-spoke' networks. In other cases, efficiency gains are less apparent.

⁴⁴ It is not being asserted that government employees have moral attitudes different from those prevailing in the community at large, but rather that the incentives and opportunities facing them are different. This point also applies to the discussion of rent-seeking presented below.

Richardson (1987) suggests that the switch from a purely public system of health insurance to a competitive private system involved increases in administrative costs.

In many studies of the benefits of contracting out, the distinction between efficiency gains and pure transfers has simply been ignored. It is useful to examine in detail a study where an attempt has been made to partition the gains. Domberger, Meadowcroft and Thompson (1986) and Cubbin, Domberger and Meadowcroft (1987) examine the contracting out of garbage collection services in Britain. In-house teams as well as outside firms were permitted to compete for contracts. In both cases total cost reductions are estimated to be of the order of 20 per cent.⁵ Using Farrell's (1957) notion of technical efficiency, the gains were partitioned between those attributable to differences in technical efficiency and those attributable to other sources including reductions in wages and fringe benefits. The results are summarised in Table 1 (reproduced from Cubbin et al).

⁵ In the first round of contracting out of hospital cleaning services, examined by Domberger, Meadowcroft and Thompson (1987), average savings of 40 to 50 per cent were achieved. However, the services offered at these prices were often inadequate and subsequent contracts showed savings averaging about 20 per cent.

TABLE 1 NEAR HERE

Cubbin et al observe that the gains not accounted for by differences in technical efficiency may arise from a number of sources other than wage reductions - most notably increases in the efficiency of the input mix. However, they do not observe that the measured technical efficiency could include a substantial transfer component. The first possible source of transfer is increased intensity of effort. Indeed, the main source of efficiency gains explicitly noted by Cubbin et al is the replacement of fixed 'task and finish' payments (sometimes for tasks which have become less onerous since the time rates were set) with piecework rates. Productivity gains here will arise primarily from increased effort. Net efficiency gains are likely to be an order of magnitude smaller. Ganley and Grahl (1988) cite a number of cases of increases in working hours or reductions in working conditions associated with contracting out of garbage collection.

A second source of gains which is likely to appear in the measured improvement in technical efficiency is that arising from tax evasion. The existence of employees working 'on the black' is unlikely to be reported to local authorities, especially if workers compensation insurance as well as income tax is being evaded. The output of these employees will be measured as a productivity gain. In this context, it is noteworthy that the in-house teams showed much lower gains in technical efficiency even though the overall gains were about the same. In-house teams would, at least initially, consist of workers already known to the authorities.

Some Possible Responses

Thus, the majority of studies of the benefits of privatisation and related measures have failed to distinguish between transfers and efficiency gains. Even those which have drawn this distinction have probably underestimated the transfer component. Some advocates of privatization have argued that the inclusion of transfers in estimates of social gains is justified.

First, it is argued that the most important gains from privatisation are not those revealed by comparative static analysis but the dynamic gains associated with a capitalist economy (or, in a

variant of the argument, that the measured gains reflect only a partial equilibrium analysis, when a general equilibrium analysis is appropriate). This viewpoint has been expressed by many contributors to the debate (eg Blandy et al 1985) and has grown in popularity in recent years. In response to this, it may be observed that these dynamic gains are difficult to discern. For example, GDP growth in Britain has been no better in the 1980s, under policies of privatisation, than in the 1970s.

This poor performance has been accompanied by a sharply regressive redistribution of wealth. A more detailed discussion is given by Layard and Nickell (1989). Similarly disappointing overall results, and a similarly regressive redistribution, have been observed in other countries, such as New Zealand, which have made strong moves towards deregulation (Easton 1989).

TABLE 2 NEAR HERE

However, a debate over the existence or otherwise of dynamic gains is not central to the argument. The crucial issue, from an analytical viewpoint, is that unquantified dynamic gains from deregulation do not justify the use of incorrect measures of static gains.

A second set of arguments is essentially ethical in its orientation. Its premise is that, since the losers from deregulation are merely giving up rents illegitimately extracted from the economy through the manipulation of the political system, their losses should not be taken into account. For example, Domberger, Meadowcroft and Thompson (1988,p 89) state

If it turns out that the best case that can be made for the retention of a public sector monopoly in refuse collection is that it provides a basis for the expropriation of monopoly rents, then this seems to us to be a compelling argument *in favour* of the introduction of competition rather than the reverse.

Underlying this claim is a view that what matters is not the distribution of incomes in some end-state, but the process by which this outcome is arrived at. This ethical position will not be debated here. However, if such a position is accepted then comparative static analysis is largely irrelevant. Having said *Fiat iustitia et ruant coeli* ⁶, there seems little point in making a cost-benefit

⁶ Let justice be done, though the heavens fall.

analysis of the results. If just procedures are taken as the basic criterion of policy formulation, then the question of whether their outcomes involve increases in social welfare is irrelevant. (Precisely this view is adopted by consistent advocates of a procedure-based ethics).

Related to this is the question of compensation for losers (see, for example, the concluding discussion in James 1987). The Kaldor-Hicks criterion, which forms the basis of much normative comparative static analysis, classifies changes as beneficial if the gainers could, in principle, compensate the losers. This criterion does not take account of the welfare losses involved in actual compensation, such as the deadweight losses associated with taxes and transfer payments. When these are considered it is possible that the costs of actually compensating losers would wipe out the benefits. Borchering et al (1986) argue that the transfers arising from public ownership could not be made more cheaply through fiscal processes.

A final argument arises from the literature on rent-seeking, which suggests that benefits to labor from public ownership are likely to be competed away in the rent-seeking process [Krueger (1974)]. To support this claim, it is desirable to identify plausible mechanisms through which rent could be dissipated. Borchering et. al. suggest that the resources consumed in rent-seeking may take the form of queueing or of higher educational qualifications for public sector jobs. It is not clear, however, whether higher educational qualifications would imply pure waste of the rent, as in the Krueger model, nor is there direct evidence of significant queueing costs.

3. MARKET DISCIPLINE

Free lunches of the kind discussed in the previous section have been recognised before, and have been avoided in careful studies. By contrast, a large literature has extolled the benefits of market disciplines, such as the threat of bankruptcy or takeover without any examination of the associated costs. It is argued that publicly owned firms, not being subject to these threats, are more likely to be inefficient. Despite this, there have been few references to the costs of maintaining such disciplines, let alone attempts to measure the size and incidence of these costs.

Bankruptcy

I will begin by considering the most obvious form of market discipline: the threat of bankruptcy. In fact, it is desirable to consider, not bankruptcy *per se*, but the decision of a firm to stop production. The choice between leaving an industry and staying is one between crystallising these losses at a particular point in time or taking them as a flow over time.

In simple discussions, it is assumed that private firms are subject to the threat of bankruptcy but public firms are not. In practice, the dichotomy is not so sharp. The discipline on private firms will vary according to a range of factors such as capital structure. There is a continuum from firms which are guaranteed continued support regardless of the losses they incur to those which may be closed down as soon as, or even before, the value of the future stream of discounted profits is less than the current salvage value. The range of losses acceptable for a publicly owned firm will be constrained by the political process, but the constraints will usually be less stringent than for a private firm. Public firms are likely to bear continuing losses in a situation where private firms would stop production.

Except under perfect contestability, exit from an industry will be costly. Some costs, such as those associated with the disposal of fixed capital at 'fire-sale' prices, will be borne by the firm and its shareholders. Others, such as the loss of firm-specific skills and the search costs associated with unemployment, will be borne by employees. Other costs will be borne by creditors whose bills go unpaid in part or full.

These costs are well known, but their relevance to comparisons of public and private firms is not often considered. The possibility of bankruptcy means that partial cost measures such as labor productivity and production costs form an invalid basis for comparison. This is because privately owned firms are more likely to incur the once-off costs associated with bankruptcy rather than accept a stream of higher costs due to, say, low labor productivity. Such comparisons are only valid if an allowance is made for the potential costs to the firm associated with bankruptcy.

Problems of selection bias arise in making such allowances. If a time series study is undertaken using only firms in business throughout (or at the end of) the relevant time period, the results will be biased. First, and most obviously, the costs of bankruptcy will be ignored. Second, more

private than public firms will be excluded and these will be the worst performers. A more subtle version of the selection bias problem appears if researchers tend to select 'well-behaved' data sets and data periods for analysis. Since the occurrence of bankruptcies is likely to make analysis more complex, it is possible that researchers will tend to avoid studying industries and time-periods where bankruptcies among private firms are common. By contrast, the fact that public firms incur losses in a given period does not create analytical difficulties. Selection bias is, therefore, likely to lead to overestimates of the performance of private firms. It is not clear how serious the selection bias problem is.

In further research on this topic, it is proposed to compare the actual rate of bankruptcies among private firms with that observed in data sets which have been used for comparisons of private and public performance. A lower rate of bankruptcies in the latter group would be taken as *prima facie* evidence of selection bias. At this stage, it appears likely that selection bias is a problem. None of the studies reviewed so far has included observations on private firms in years in which they went bankrupt or left the industry. In most cases, the data definitions and sources precluded the use of such observations.

Finally, it is necessary to make allowances for the external costs associated with the possibility of bankruptcy. In most cases, these costs will be anticipated and built into the prices faced by the firm. Workers will take the possibility of bankruptcy into account in determining the wages they seek for public and private employment. Similarly, creditors will take the probability of default into account in setting their prices. Thus, the external costs of bankruptcy will be reflected in the firm's profits.

This argument does not apply, however, to studies of the benefits of contracting out of public services. Here, the external costs of bankruptcy will include interruption of service and other costs borne by the relevant government. Assuming rationality on both sides, these costs will be anticipated and reflected in lower contract prices. But it is precisely these prices that are measured in most studies of the benefits of contracting out. By contrast, the external costs associated with bankruptcy by contractors do not appear to have been taken into account in any of the studies reviewed by

Domberger and Piggott or Borcharding et al.

The most spectacular recent Australian example of bankruptcy imposing external costs has been the collapse of the Victorian division of the National Safety Council. Despite its unassuming title, this private organisation was contracted to perform public operations (mostly search and rescue) throughout Australia on a very large scale. At one stage, its failure threatened to close Australia's northern air defences ⁷.

The bankruptcy of government contractors for more mundane services such as construction and garbage collection is a regular occurrence and the associated costs should be taken into account in any assessment of the benefits of contracting out. These costs can be internalised, to some extent, by requiring firms to post performance bonds, as has been done in the UK.

The Market for Corporate Control

For many firms the prospects of bankruptcy, or even of enforced exit from the industry in which the firm is involved is remote. Typically, such firms are too large for the constraints imposed by the legal powers of shareholders to appoint and dismiss directors and otherwise control the management to be a real constraint on internal inefficiency. In these circumstances, attention has generally been focused on the possibility of a takeover as a form of market discipline⁸.

In analysing takeovers, it is necessary to consider two potential sources of inefficiency in the operation of firms. First, the managers, or other employees, may seek to extract rents, through high wages and salaries, perquisites of office or internal slackness. This source of inefficiency is potentially present in both private and public firms. Moreover, the associated transfers and deadweight losses will appear in the accounts of the firms concerned.

⁷ *Australian* 25/4/89.

⁸ The literature on the market for corporate control beginning with the work of Manne (1965) and recently summarised by Varian (1988) is most notable.

In corporations with traded shares, managers or controlling shareholders may also seek to extract rent through stock market procedures such as insider trading and favorable share placements to associated interests.⁹ This form of rent-seeking will normally involve transfers from ordinary shareholders to management and associated interests. Since it is difficult to organise, and in some cases is illegal, such rent-seeking will also create deadweight losses. An important feature of this activity is that the transfers and deadweight losses are not reflected in company balance sheets. Rather they are measured as the difference between the return to capital and the return actually received by investors without market power.

The threat of takeover provides a market constraint on the extraction of rent by managers [Manne (1965)]. High management rents will depress the market share price and make takeovers easier. The takeover bidder may offer more efficient management policy or lower returns to management and other employees, in return for a transfer of control. This justifies the payment of a higher price for a controlling interest in the company.

Although the benefits of this market discipline have been described at some length, the costs have been ignored, at least in comparisons between private and public firms. Yet these costs cannot be denied. The extensive resources consumed by stock exchanges, merchant banks and businesses engaged in share trading would obviously be greatly reduced if takeovers were impossible.

This would not matter for comparisons of private and public firms if the costs made their way on to the balance sheets of private firms. In fact this will not normally be the case. The costs associated with the takeover market are, in general, paid in the form of returns to share trading. The main exception is that of costly defences against takeover mounted by incumbents using company resources.

⁹ Although insider trading is illegal in Australia and many other countries, successful prosecutions are rare (there has never been a conviction in Australia). Recent evidence suggests the practice is widespread in Australia (NCSC 1986). A partial defence of insider trading is given by Hogan (1988).

Measuring the Cost of Market Discipline

It is easier to point to these costs than to measure them. The costs of bankruptcy are difficult to measure, although there is an extensive literature on the subject. Similarly, it is difficult to estimate the total resources consumed by share trading and related activities, let alone to estimate the proportion associated with the market for corporate control. ABS data indicates that, since financial deregulation, employment in the financial and business services sector has increased more rapidly than in any other sector, reaching 10.7 per cent of total employment in 1987. Unfortunately, the level of disaggregation is not fine enough to yield estimates of employment in the market for corporate control. There can be little doubt, however, that resource use in this area has increased more rapidly than for the sector as a whole. Employment in retail financial sector activities such as savings banks and insurance companies has generally stagnated or declined.

The theory of rent-seeking yields an alternative approach to the problem. Suppose that all rents are competed away, as in the basic Krueger (1974) model. If this assumption holds, both above-market payments to employees and rents accruing to managers can be ignored. What remains is the return to ordinary shareholders. If investors maximise their expected returns, this return will be equal (after allowing for any differences in tax treatment) to the return on alternative assets. Because of the absence of default risk, the most convenient alternative to take is government bonds. Note that the risk of bankruptcy will be taken into account, in an actuarial sense, as long as costs are internalised.

This procedure yields a simple test for the efficiency of a public enterprise relative to the private sector as a whole. If the enterprise achieves returns equal to the government bond rate (after allowing for the effects of differential tax treatment), it may be regarded as efficient¹⁰.

¹⁰ This test is most appropriate for public enterprises operating in competition with private firms. Public monopolies can set prices so as to achieve high rates of return even with inefficient production. Other public enterprises are likely to have social objectives which make the application of commercial tests inappropriate.

There are several problems with this approach. First, returns to holders of government bonds and to holders of stocks fluctuate over time in both real and nominal terms. Coghlan (1987) observes that the annual nominal return (dividends + capital gains) to holders of the market portfolio of Australian shares over the 4 years to December 1985 was 21.6 % , while the government bond rate was about 13 per cent. By contrast, returns to stockholders over the last two years have been rather less attractive. Arbitrage should ensure that approximate equality of returns holds in the long term. Thus, it is desirable that the test should be applied to performance over a long period rather than at a single point in time.

Second, the returns from corporate investments are generally assumed to be riskier than those from government bonds, although variable inflation rates make investment in long-term fixed-rate bonds quite risky. If investors are risk-averse, they will require a higher rate of return on the risky asset. However, given the existence of a wide range of opportunities for diversification, the premium is not likely to be vary large.

Third, the test does not take account of any special circumstances prevailing in particular industries, which may tend to make them more or less profitable than average. The best solution is to make the comparison over a long period during which arbitrage will even out rates of return to capital. Despite these problems, the test proposed here more appropriate than partial productivity comparisons that involve reliance on some form of free lunch.

If the concepts of rent-seeking and capital market equilibrium are taken seriously, they invalidate comparisons of accounting rates of return on assets as a method for comparing the performance of private and public firms. Such comparisons have formed the basis of much of the case for privatisation particularly in the UK (see for example Pryke 1981). Instead, it is necessary to use market returns available to ordinary investors as the critical rate of return for public sector assets. Over the long term this is likely to imply a range of real returns of the order of 3 to 5 per cent.

An Example - the Commonwealth Bank

The test proposed here may be applied to the case of the Commonwealth Bank. Coghlan (1987) argues for the privatisation of the bank. He first presents a number of comparisons of profit per employee, asset growth, operating costs etc. most of which are unfavorable to the Commonwealth. He next compares a number of measures of the Bank's asset value with the present value of the expected stream of dividends, discounted at the Government bond rate (13 %) and a higher rate (15 %). He concludes that the Bank could be sold for about \$1.6 bn (1985 dollars) as against a book value of assets of \$1.9 bn. Coghlan values the expected stream of dividends under public ownership at about \$800m and concludes that the bank should be sold.

For the reasons outlined above, the partial measures used by Coghlan do not provide a valid basis for comparison. The second approach would be correct except for Coghlan's focus on dividends to the exclusion of capital gains (This error is not made when computing the returns to holders of the market portfolio of stocks). By the Modigliani-Miller theorem, in the absence of differential tax treatment (which is clearly irrelevant to the Commonwealth government), the owners of a firm should be indifferent between taking returns as dividends and as capital gains. Indeed, under Coghlan's approach, the value of the Bank in public ownership could be increased massively by the simple book-keeping measure of notionally paying out all earnings as dividends and having the government reinvest as much of the earnings as desired.

The correct approach is to compare total post-tax returns to capital with the post-tax rate of return on government securities (plus an allowance for the pure risk premium if desired). This is complicated by a series of major changes in company tax from the classical system (46 per cent company tax + income tax with a top rate of 49 per cent) to the imputation system (with both company and top income tax rates at 49 per cent) to the present imputation system with the company tax rate at 39 per cent, as well as by the introduction of taxation of realised capital gains in excess of inflation.

Under the imputation system, with equal company and income tax rates, post-tax company profits are tax-free in the hands of the shareholders. Thus, it is only necessary to compare the rate of return to capital with the post-tax returns to holders of government bonds (making allowance for a

pure risk premium if desired). In 1984-85, the first year in which all parts of the Commonwealth Bank paid company tax, net profits were \$237m, yielding a return to capital of 14.8 per cent (on Coghlan's estimated market value) or 12.9 per cent on book value of net assets. Coghlan argues that residual favourable tax treatment requires an adjustment of the commercial net profit to \$221m reducing these figures to 13.8 per cent and 12.1 per cent. He presents estimated of tax-adjusted returns to equity for the years 1979-80 to 1984-85 ranging from 10.6 per cent to 14.6 per cent. Assuming a bond rate of 14.5 per cent and a marginal tax rate of 30 per cent, the post-tax rate of return on bonds is about 10.2 per cent, implying that the Bank was efficient over this period.

Allowing for double taxation of dividends under the classical system, the picture changes a little. If it is assumed (following Coghlan) that 35 per cent of earnings would normally be remitted as dividends and taxed at 30 per cent (as was assumed for interest) then the effective tax on net profits becomes 10.5 per cent. This yields a net return of 11.7 per cent on market value or 10.8 per cent on book value for 1984-85 and a range from 9.5 per cent to 13.1 per cent for the entire period.

In summary, once Coghlan's error of focusing on dividend streams is avoided the evidence suggests that the Commonwealth Bank yields returns which are as great or greater than those returned to ordinary shareholders and bondholders in private firms. Privatisation might increase the profits of the Bank as measured by its annual accounts. However, the social costs associated with rent-seeking would more than dissipate these benefits. Once the price of the free lunch of market discipline is taken into account, the meal looks quite expensive.

IV CONCLUDING COMMENTS

Most previous studies have suggested that privatisation, deregulation and contracting out of public services lead to efficiency gains. In particular, many public enterprises provide costly transfers to their employees, in the form of above-market wages or working conditions. The analysis presented here indicates that there are also sources of loss that have been ignored in previous studies. These take the form of costly transfers occurring in capital markets instead of labour markets. The net outcome remains in doubt. The direction of transfer (from labour to capital, and

from low-income workers to high income) is clear, however.

Free lunches are always tempting. Over the post-war period, free-market economists have performed a useful service in pointing out the hidden price tag attached to various proposals to expand the role of the public sector. The tide of expansion has now been reversed. Arguments for *laissez faire* are no less subject to the free lunch fallacy than arguments for intervention. It is, therefore, highly desirable that advocates of privatisation should attend to the beams in their own eyes before looking for motes in those of others. Given that the free-market position is now more fashionable, particularly within the economics profession, the danger of uncritical acceptance of sloppy arguments is greater when they come from this quarter than when they are presented in more familiar guises such as proposals for 'free' public services.

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Table 1: Efficiency Comparisons: Refuse Collection
(local authorities in England and Wales 1984-85)

<i>Authority type</i>	FARRELL TECHNICAL EFFICIENCY		REGRESSION BASED
	<i>Mean scores</i>	<i>Efficiency differences</i>	<i>Cost differences</i>
All authorities (317)	0.8142		
Tendered and contracted out (17)	0.9390	17 %	22%
Not tendered (291)	0.8055	7 %	17%
Tendered and retained in-house (9)	0.8608		

Source: Cubbin et al (1987)

Table 2: Economic performance of the UK under the Thatcher government and in the preceding decade

	1979	1989 ^a	Ave 1970-79	Ave 1980-89
Inflation	13.5	7.5	12.6	10.2
Unemployment	4.9	8.6	3.8	10.3
GDP.growth	2.2	3.3	2.4	1.9
Current A/C (% of GDP)	- 0.3	- 3.4	- 0.4	0.6
Industrial output growth	3.8	1.5	1.9	0.9
Employment growth	1.3	1.6	0.3	0.2

Sources : IMF, British Central Statistical Office, *Economist*.

a: Most recent available figures