Privatisation (Asset Sales) in New Zealand, 1987-1992

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Abstract

It is argued that New Zealand's privatisation programme is unlikely to meet its main overt objective of easing fiscal problems. In the case of sales of major public utilities, neither allocative, internal nor social efficiency are likely to be enhanced either. A brief history, and calendar, of the asset sales programme is provided.

1. The Situation: the Recent History of Privatisation in New Zealand

The 1986 *State-Owned Enterprises and Companies Act* and the *State Owned Enterprises Act*, 1987 consolidated the incorporation of 14 SOEs, to be run as commercial enterprises with minimal political intervention, confined in principle to agreement on corporate "statements of intent", setting of required state dividend and "social service provision" contracts under Section 7 of the 1986 Act. The *State Owned Enterprises (Restructuring) Act*, 1987 separated the regulatory and commercial interests of the State in industry, and the SOE steering committee - dominated by captains of industry and Treasury officials - was set up. Corporatisation was linked with the pressing public debt problem, and a "light-handed", generic regulatory regime was set in place by the *Commerce Act*, 1986. Numerous more or

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less credible denials over the following years notwithstanding, the logical drive from corporatisation to privatisation, explicated in the Treasury Briefing to the incoming Labour Government in 1984, has seemed irresistible. The Budget in July 1987 announced that asset sales were necessary to alleviate the problem of public debt (whilst also referring to expected efficiency gains). The sale of 30% of PetroCorp for $265M initiated a major asset sales programme which has yet to run its course. The floating of 13% of the Bank of New Zealand, grossing $180M, continued a century-old sorry saga only now (1992) reaching its climax. The December economic statement set a target of $14B worth of asset sales over 4 years, and reinforced public debt retirement as the main objective.

The July 1988 Budget argued that inadequate efficiency gains from corporatization indicated privatisation, and laid down the principles under which it was to occur (see below). A target of $2B for 1988/9 was set. The remaining 70% of PetroCorp ($801M), DFC ($111M), NZ's largest investment bank, the Health Computing Service ($4.25M), and the Crown's 90% stake in NZ Steel ($327M) were sold. Sales in 1989, including PostBank ($665.4M), Air New Zealand ($660M), ShippingCorp ($18.5M), and Rural Bank ($550M). In a messy $600M rescue operation, Fay Richwhite acquired 27% of BNZ equity. Deregulation, especially of Telecommunications, also continued.

The largest, and most controversial sale to date occurred in 1990, when Telecom was sold for $4.25B to a consortium dominated by Ameritech and BellAtlantic. State Insurance went to Norwich Union for $735M (and then bought Export Guarantee Ltd for $16.3M). Tourist Hotel Corporation was sold to Southern Pacific Hotel Corporation for $73.85M, which will do little more than cover the concomitant liabilities which passed to the Crown. The $284M received for Maui Gas and related assets, was also all but cancelled by the payment of $203M to a Fletcher Challenge subsidiary to take NZ Liquid Fuel Investment off our hands. The Public Services Association argued that the Rank Group got a bargain by paying about $20M for the Government Printing Office, whose assets alone were valued at $80M. About $1B worth of Forestry Cutting Rights were sold.

In October, the new National Government took office, making noises intimating that the frenetic pace of liberalisation of the state's trading activities would be slowed down (emphasis being placed instead on liberalisation of the "welfare state"). This did not prevent them pouring a further $620M into the BNZ swamp, and at the same time effectively shouldering the risks of $2.83B of non-performing debts hived off to a special "bad bank", ADBRO.

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In 1991, Clear Communications Ltd., so far Telecom's only autonomous competition in network services, began operations. (BellSouth expects to be competing with Telecom Cellular early in 1993.) The trickle of minor asset sales continued, but no new initiatives were taken. Of Labour's assets sales programme total of around $9.7B (at 30/9/91), only about $450M appears to have been used to retire debt, which stood at 61% of GDP at 31/3/90. There were about $4B worth of SOEs remaining as at 31/12/91, out of total State equity of $7.1B. The SOEs include AirwaysCorp, Coal-Corp, ElectriCorp, Government Computing Services, Government Property Services, Government Supply Brokerage Corp, LandCorp, NZPost, Rail-Corp, Radio NZ, TVNZ, and WorksCorp (*Hansard NZ*, 1991). The remaining Forestry Cutting Rights, vested in ForestryCorp, with a book value of $1.2B, have been independently valued at as much as $1.6B.

In May 1992 privatisation re-emerged with the announcement of "scoping studies" for four new candidates: RailCorp ($283M), GCS Ltd ($47M), WorksCorp ($99M) and 171 LandCorp farms ($249M). Privacy issues around GCS still remain to be resolved. RailCorp probably needs an overseas buyer, and it seems likely that some kind of "Kiwi share" will be retained to protect the existence of an integrated rail and ferry network. RailCorp land will remain in Crown hands, to avoid clashing with Maori Land Claims under the *Treaty of Waitangi*. WorksCorp would be going into a depressed construction services market. LandCorp farms are likely to be sold singly over time - although their transfer in settlement of 80% of outstanding Maori land claims has been mooted. It looks as though BNZ will finally be sold, following an offer by National Australia Bank in July of $1.48B (worth $850M to the crown).

During 1992 concerns have emerged about Telecom's continued dominance of the telecommunications markets (Commerce Commission, NZ, 1992), and about the effects of overly commercialised behaviour by some of the remaining SOEs. For ElectriCorp security of supply, infrastructural significance and conservation were raised as possible grounds for non-commercial objectives in the aftermath of the power crisis. HousingCorp is to be effectively subdivided in order that non-commercial aspects of housing policy are not subordinated to commercial objectives. Accountability of SOEs to Parliament became an issue - in particular the modification of NZ Post's purely commercial conduct was mooted in the wake of a doubling of charges (to $80 per annum) for rural box holders. There has been press speculation of a more general dilution of the Government's hard line against active microeconomic policy to stimulate growth.

Nevertheless the NZ Business Round Table (1992) continues to urge an increasing pace of asset sales, and the *Energy Companies Act* seems to be

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being interpreted by the Minister as a *de facto* instruction to the 48 Electrical Supply Authorities (totalling $2.5B) to restructure their ownership in favour of a majority of tradeable shares. It seems unlikely, though, that there will be any other major privatization before the 1993 election. Public opinion seems to strongly favour local Government or community trust ownership of the ESAs (see, for example, McKinlay, 1992). ElectriCorp will not be sold in the near future, although TransPower ($2.5B) may be floated, possibly with a view to establishing ownership by a "club" of Supply Authorities, ElectriCorp and major commercial customers. The hydro-power crisis is estimated to have reduced ElectriCorp's net worth from $5.6B to perhaps as low as $3.2B, by stimulating conservation and substitution to alternative energy sources. NZ Post is unpopular as an SOE, but public sentiment is even more averse to privatisation. Other possible sales in the foreseeable future include some broadcasting assets of Radio NZ and TVNZ.

The July 1992 budget reported public debt of $47.88B (at 30/6/92), around 52% of GDP, which, because of continuing budget deficits, was expected to rise to 54% over three years. Debt servicing costs now account for 15% of central government expenditure. The Finance Minister argued that the continuing problems were increasingly on the revenue side, as public expenditure was coming under control. She re-emphasised the ear-marking of the proceeds of asset sales for debt retirement. The Treasury expects to gross $1.9B from more or less certain sales in 1991/2; and $540M in 1992/3.

2. The Situation: Objectives, Principles, Criteria and Guidelines

These were laid down in Annex 4 to the 1988 Budget statement, amplified in the December economic statement, and subsequently amended by the SOE Advisory Unit in 1990.[1]

Objectives:

- reduce public debt
- subject SOEs to professional business management
- avoid future demands for government cash
- minimise Government's commercial risk exposure
- enable ministers to concentrate on economic and social policy.

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Principles:

- case-by-case assessment of each mooted sale
- maximisation of the possible contribution to economic welfare of New Zealanders by
  - * removing statutory restrictions on competition
  - * maximising revenue from the sales.

Criteria: Each sale

- should generate a positive net revenue over the alternative of retention, taking cognisance of the risk factor in continued ownership;
- must contribute to economic and social goals.

Guidelines:

- all state-owned commercial assets were to be managed so as to make them ready for sale without delay (this injunction has been withdrawn by the National Government);
- to enhance contestability and commercial efficiency and maximise the premium of net sales revenue, full ownership and control will be surrendered, including removal of the provisions of the *State Owned Enterprises Act 1986* (where applicable);
- competitive constraints and advantages (including the regulatory environment) will normally be reviewed, with a view to removing them, or to them forming part of the specifications for sale
  - * SOEAU (1990) placed more emphasis on the need, for reasons of "economic efficiency", to actively establish competition *prior* to sale;
- individual assets not yet formed into enterprises may also be sold for entrepreneurial restructuring;
- the timing and method of sale are to be determined by government, which will use a competitive sales process (to maximise bid prices)
  - * SOEAU (1990) (referring to a report to Cabinet of 22 May 1989, "Prospects for the Business Sales Programme") added that "scoping studies" should henceforth be completed *prior* to the sale decision being finalised;
- foreign control is not precluded except "where this would be contrary to the economic and social interests of the country" (on the criteria used by the Overseas Investment Commission);
- Government will continue to control the regulatory environment.

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There are, in effect, two major targets: the fiscal objective of retiring public debt; and the microeconomic objective of increased efficiency through the impact of market competition. As argued below, these reduce to competition-induced increases in efficiency. The specific move from corporatization to privatisation is aimed at promoting capital market competition, and "de-coupling" of macroeconomic, social and political from microeconomic objectives and instruments, to facilitate the evolution of appropriate incentive and information transparent managerial structures for the delivery of core state sector services. A significant corollary of this, clear in the guidelines, is that privatisation is not to adversely affect broader macroeconomic or social policy. This then implies that the costs of any particular asset sale should include those of making good any degradation of (in particular social policy) objectives arising from it.

Retiring (especially foreign) public debt has had by far the highest public profile. Clearly the level of New Zealand's public debt is a legitimate cause for concern. It is uncontroversial that governments should manage their debt so as to minimise debt service payments over time. The issue is whether asset sales are an appropriate instrument of fiscal management. In fact it will be argued that the economic case for privatisation to achieve fiscal objectives itself rests entirely on the putative gains in efficiency.

Existing SOEs often enjoy a *de facto* dominant position in the markets in which they operate, even after deregulation. Of the nine new SOEs set up by the 1987 Act, AirwaysCorp, NZ Post and Telecom continued to enjoy statutory monopolies (under the *Civil Aviation Act*, 1964 (as amended), *Postal Services Act*, 1987 and the *Telecommunications Act* 1987, respectively). Although subsequently deregulated, Telecom continues to enjoy a natural monopoly in the local loops of its Public Switched Telephone Network, which endows it with considerable strategic leverage in complementary market segments. ElectriCorp, CoalCorp and ForestryCorp were recognised "to be in a position of market power to a greater or lesser extent" (Department of Trade and Industry, 1987, p. 14). It was claimed that only three (GPS, LandCorp and PostBank) were "not likely to exhibit dominance in their respective markets". There is little economic argument against the privatisation of any simple Government trading enterprise, of no particular infrastructural or ecological significance, with no significant externalities and no special social impact - although even here some attempt to evaluate the costs and benefits of any change in ownership is needed. Serious concerns, however, arise with respect to large public utilities with natural monopolies in significant and strategically pivotal market segments, of massive infrastructural and ecological import and with significant social impacts. Into this category must fall RailCorp, Telecom, ElectriCorp and

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the Supply Authorities, AirwaysCorp and NZ Post. It is also possible, in addition, that a publicly owned presence in insurance and venture capital markets may provide effective instruments for growth, microeconomic and social policies.

3. The Debate: the Mixed Economy

At present, divestiture can be supported or opposed only on the basis of ideology, theory or politics, because there is only the most limited empirical support for either position .

(Jones *et al*, 1990, p. 202)

On the one hand, this is too pessimistic: *indirect* evidence on the effects of ownership on structure and performance is available in some abundance, and the World Bank has just completed a study of the effects of privatisation in a number of countries. On the other hand, the uncertainty of many of the key quantitative estimates required, and finely balanced cost-benefit outcomes may leave, empirically supported, theory as the best guide to policy.

Publicly owned production units supplying market mediated consumption lie at the interface of civil society and the state. In the former, commercial pursuit of sustained, long-term profitability, on "value criteria" predominates. The state supports the market. But it is also crucially legitimately concerned with resource allocation determined predominately by a multitude of specific political, moral and administrative criteria in pursuit of some notion of the conditions required to facilitate autonomous development by social individuals - "use-value criteria". Orthodox economics' narrow "economistic" focus - derived from conflation of value and use-value criteria implied by the universal assumption of instrumental rationality - makes it peculiarly *partial* in its account of liberalisation and privatisation. Such partiality, masquerading as the whole of possible "scientific" knowledge on the matter, is, very precisely, ideology.

Thus, strictly economic aspects of privatization policy will be located within the broader social and political context of the mixed economy. First an internal economic critique, discusses the extent to which privatisation might be expected to improve the efficiency of resource allocation on purely value criteria.

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4. The Narrow Economic Debate

i) A cost-benefit approach

The orthodox economics of this area can be summarised using the cost-benefit terminology of Jones *et al*, 1990 (based largely on a World Bank Project by the same authors).

Unlike private asset transactions, public asset sales are rooted in three values, three prices and two parameters:

Social values

V_{sg}: social value under government operation

V_{sp}: social value under private operation

V_{sp} captures the fiduciary responsibility of government, unlike a private asset seller, for the post-sale operation of the enterprise. It may differ between potential buyers, as determined by profitability, other factor incomes, the factor incomes of adjacent firms, consumers' welfare, tax revenues etc. Social values may be conceived as determined either by maximisation of some social welfare function, or by some optimization over chance-of-reelection.

$$\Delta V_s = (V_{sp} - V_{sg})$$

is then the change in the social value of the enterprise concomitant on privatization. This may be different from zero because of a) the difference of private from public conduct in regard to goals, degree of entrepreneurial dynamism, etc - the standard main reason for privatization; b) change in the structure of sanctions and incentives concomitant on privatization, in terms of regulatory etc environment, credit availability, etc.

To capture the possibility that any beneficial changes could have been made without asset sale, V_{sg} can take alternative values:

V_{sga}: value under *status quo ex ante*

V_{sgr}: value under restructuring as if privatised, but without privatization.

Private value

V_{pp}: private value under private operation.

This may differ across buyers with different opportunities for synergy: economies of scale, scope or vertical integration, market power, diversification, opportunities for utilisation of accrued tax liabilities, etc. Thus V_{pp} also has two variants:

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V_{ppa}: private value as a stand-alone enterprise

V_{ppc}: private value as part of a larger corporation

V_{pp} is determined by privately appropriable sustainable long-term profits - the first basis for divergence from social values.

V_gs may also differ from the V_p in that the government may, deliberately or otherwise, face different input and/or output prices from the private sector; different excess costs due to rents and the transactions costs of rent-seeking behaviours; different indirect tax regimes; and different "second best" effects.

Jones *et al* confine their discussion to discounted cash flow type estimates for the social values. However an "option pricing" method to value the rights and obligations attached to corporatisation and privatisation policies might capture the enhancement of V_{sg} from the option to sell (or not) an SOE over some time period endowed by corporatisation itself, as well as the Crown's options with regard to financial, organisational, employment, contractual and other restructuring prior to sale (see the proposal in Seed, 1992). As long as assets remain in government hands, there are options as to how to react to contingent events. Similarly, different buyers will have different "growth options" associated with their purchase of the asset.

Prices

Z_g: government's minimum price

Z_p: private buyer's maximum price

Z : actual sale price

Then $Z_p \geq Z \geq Z_g$, depending on the outcome of sales negotiations, or share market response to a float. This will vary with the degree of capital market competition (many prospective buyers favouring the state as seller over the 50/50 focal point likely to emerge from a bilateral negotiation between equally powerful bargainers), as well as with the skill of the negotiators.

Financial effects and shadow multipliers

The government revenue shadow multiplier,λ_g, captures any difference between the value of money in government, as compared with consumers' hands. That is, it allows for different weighting of welfare generated by firms' profits, government revenues and consumers' consumption (here normalised to 1). In general we may expect $\lambda_g > 1$. Optimal government, plus the excess welfare burden of any government revenue raising (other

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than that which compensates for externalities - which are intrinsically unlikely to be substituted by asset sale proceeds) would ensure this. With less than fully optimal government, it is still likely to hold. The applied welfare economics literature generally indicates that the shadow value of government revenue/cost of government funds is greater than one (ranging from 1.01 to 1.56 for MDCs - Jones *et al*, 1990, ch.3).

The private funds shadow multiplier λ_p, which (since it is mostly the alternative marginal private investment which is "crowded out") depends largely on the shadow multiplier for investment (as well as, possibly, on λ_g and financing sources - domestic, government or foreign). We may expect $\lambda_p > 1$ if the extant level of investment is sub-optimal (capital markets are imperfect).

Then $\Delta\lambda = \lambda_g - \lambda_p$, the difference reflecting an opportunity cost of the private funds utilised (eg the marginal investment projects foregone) which is different from the value of the use to which the government puts these funds (eg to retire debt).

There is no definitive empirical evidence, but an initial assumption that $\Delta\lambda > 0$ seems justified, since if it were not we should observe governments paying large sums to divest themselves of state-owned assets - which we do not. On average low effective corporate tax rates, and high values of λ_g (in part itself determined by the required rate of return on government projects - a policy variable) would produce this result.

The decision

Sale should occur when $\Delta V_s + \Delta\lambda.Z > 0$: there is a net gain to society taking into account both "economic" and "financial" effects. Two assumptions $\lambda_g > \lambda_p$, this implies

$$Z_g = \frac{\Delta V_s}{\Delta\lambda}$$

Under perfect competition, with private not differing from government conduct/performance, $Z_p = Z_g$, so any sale involving transactions costs would obviously not be desirable. Legitimation of sale then depends on *market distortions being worse under public than under private ownership*. The typical trade-off created by a proposed privatisation is internal (cost) efficiency gains versus decreased allocative efficiency from increased exercise of market power (including strategically) (Jones *et al*, 1990, ch. 5).

No liberalising government, East or West, North or South has based any asset sale on such a *prior* case-by-case evaluation. A specific requirement

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in the enabling legislation in New Zealand to do just that has been honoured entirely in the breech. The closest we have come so far is a series of studies into the saleability of assets, and the method and timing of sales.[2] But without it we cannot know whether any observed increased market value on privatization derives from efficiency gains, enhanced quality and marketing, on the one hand, or from the exercise of market power, favourable treatment of debt, favourable changes in regulatory etc. regime, on the other. It may be a plausible presumption that, in all the interesting cases, the quantifiable costs and benefits will be so uncertain and finely balanced that the decision legitimately rests on a long-term political - even ideological - evaluation. However, in New Zealand at least, such studies have been neglected because of the uncritical faith in unimpeded market forces which grips key groups of those with power and influence. The remainder of this paper critically appraises this faith.

5. The Narrow Economic Debate

ii) Efficiency is the sole primary objective

If an SOE can be made to generate profits, the government won't sell it; if it cannot, the private sector won't buy it (developed from Jones *et al*, 1990, p. 3)

An oft declared objective of the New Zealand asset sales programme has been the retirement of public debt. New Zealand has a debt problem. Not only is public debt high and rising (currently $48B - around 52% of GDP), but, it is increasingly being attributed to revenue shortfall, as it is claimed that expenditure is being controlled. For privatisation to ease fiscal constraint, the value of savings in debt servicing costs must exceed that of the expected returns on the marginal investment project crowded-out by the funds transferred to the government in payment for the asset sold.[3] There is widespread agreement among economists that optimal funding of public debt is usually not facilitated by asset sales (see, for example, Hemming and Mansoor, 1988, p. 16-18). The next link in the public presentation of the case by successive New Zealand Governments - that interest rates will fall, benefiting both private investment and private consumption - is based on the further implicit assumption that the downward pressure on interest rates from retirement of public debt overcompensates any upward pressure from the raising of funds for the purchase of the asset.[4]

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In general, the maximum sale price of a state asset, Z_p, will not be greater than the present discounted value of net benefits expected by the buyer, V_{pp}. This will only entail a positive net effect on long run public expenditure if the premium of sale price, Z, over net present value of benefits foregone, V_{sg}, is more than sufficient to cover the transactions costs of the privatization (variously estimated at around 10% of sale price, with a large economies of scale effect - Jones *et al*, 1990, p. 139). This depends ultimately on expectations of a sufficiently greater efficiency gain by the private buyer than is likely to be achieved by the enterprise within the state sector, (unless either the market structure and/or regulatory/tax environment to be faced by the firm after privatisation enables it to appropriate monopoly rents denied to the SOE; or there is some relevant price distortion, such as a difference in time preference between the state and market sectors).

In the case of New Zealand, McCann (1988) argues that the policy of using the proceeds of asset sales "to repurchase ... New Zealand official debt in order to reduce interest payments and future budget deficits ... will fail under any plausible conditions and that it will then increase the discounted budget deficit." The interest payments avoided by retiring debt may well not offset the profit stream foregone. When New Zealand interest rates exceed foreign rates (and sometimes even when they do not), and with plausible tax rates, even a 50% improvement in profitability post-privatisation is shown not to decrease the discounted value of the budget deficit from what it would have been without privatization/bond purchase (p. 12). McCann concludes that, *if* debt reduction were the objective, "the preferred policy would be for the government to retain ownership of the assets and to increase their profitability." (p. 15)

Much more intensive investigation is needed to ascertain actual transactions cost of privatisation. As an indication, Giedrojc (1989) estimates that about twenty members of Treasury staff were employed in 1989 to oversee the asset sales programme. The consultancy fees paid in the years 1987/8 and 1988/9 (revealed in response to an enquiry under the *Information Act*, 1982) amounted to $6.1M and $8.5M respectively (p. 11). Press speculation for 1989/90 has ranged as high as $40M and more. The first eleven months of 1991/2 saw the Treasury spending $13M on consultancy (written answers to parliamentary questions put by opposition MP Pete Hodgson, July 1992), the vast bulk of which was concerned with asset sales and restructuring concomitant on privatisation, and liberalisation more generally (smaller amounts being spent on such things as debt management policy and tax reform).

The components of V_{sgr} (the value under restructuring without sale) are difficult to ascertain, as restructured enterprises typically have but a short

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life prior to privatisation. At least part of the costs of financial restructuring may have had to be incurred irrespective of any proposed sale. But the extent of costly financial restructuring necessitated by a proposed sale could well be greater than that demanded by the optimal inter-temporal management of an SOE's capital structure. On the other hand, the Crown is to some degree merely withdrawing from costly past over-investment. Restructuring of NZ Steel (sold for $327M) since 1985 has cost about $2,146M (Auditor-General, 1987, B1 Pt II), as well as any additional costs that can be imputed to an amendment to the *Income Tax Act* to enable the transfer of its tax losses to the buyer, EquitiCorp. The state took over $800M of PetroCorp debt in exchange for a bonus issue of $265M worth of shares, making a net cost of $535M, to be compared to the sale price (for the remaining 85% of the equity value) of $801M in 1988. Fletcher Challenge, the purchasers of the last 70% of Petrocorp's equity were given $280M worth of exemption from future tax liabilities as part of the deal. About $250M was injected into PostBank to enable its sale as a viable enterprise. The Crown assumed $73M worth of THC liabilities in order to sell it for $73.85M, and was able to net only $80.2M on the sale of Maui Gas and Synfuels for $279.2M. It is at least clear that any adequate analysis of costs and benefits of the programme could not ignore the costs of financial restructuring.

Notwithstanding the last government's claim that "the results [of organisational restructuring] may be inconsistent with the aims and objectives of the eventual owner, in which event the costs of reconstruction will have been incurred for no tangible benefit" (Budget Speech, 1988, Annex 4), corporatisation did entail major restructuring of many industries, without which they may well have been unsaleable. What is more, in the case of a public monopoly such as ElectriCorp, mooted restructuring is presumably designed to be inconsistent with any objectives the future owners may have of exploiting their market power. It is not easy to ascertain the exact sums allocated for corporatisation, specifically required to facilitate subsequent privatisation. However, expenditure on Treasury's Programme VI (State Owned Enterprises) was $156M in 1987/8, and the estimate for 1988/9 was $49.9M. More recently, details of this Programme appear to have disappeared into aid to industry in general.

There has only been one instance revealed to date of costs incurred for maintaining social services: PostBank was paid $29.5M for retaining non-commercial outlets for one year.[5] The "Kiwi share" provisions on Telecom effectively impose a cross-subsidy of local by toll telephone services, and the continuation of the emergency 111 service. It might be expected that any prospective privatisation of the natural monopoly public utilities may generate a further need for these kinds of social service contract.

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6. The Narrow Economic Debate:

iii) Efficiency depends on product market competition/ contestability

There are three aspects to economic efficiency: *Allocative efficiency* pertains to the allocation of resources to the production of the goods and services reflecting consumer demands as revealed by purchasing decisions, in relation to attainable costs determined by available technology. *Internal (cost) efficiency* refers to the provision of any given level of output at the minimum attainable cost. And *dynamic efficiency* can best be grasped as the reproduction of allocative and internal efficiency over time, in the face of technological and taste changes, by an appropriate investment path, reproduced by entrepreneurial initiative, within a structure of appropriate sanctions and incentives.

Internal efficiency is a necessary, but not a sufficient condition for allocative efficiency. In the absence of any divergence between social and private costs and benefits, both allocative and internal efficiency will be unequivocally maintained (although not necessarily brought about) by "perfect competition" - a market structure in which all firms in all markets have such small market shares that they must accept the market price, making decisions only as to whether to produce or not, how much to produce, and with what technique.

A similar beneficial result will emerge provided any market which is not perfectly competitive is at least (perfectly) "contestable" (Baumol, Panzar and Willig, 1982; Brock, 1983). Decision-makers are then constrained to behave as if they faced perfect competition, by the constant credible threat of entry. A condition for this is that the net present value of expected profit streams for potential contestants must be greater than the greater of the costs of entry and those of exit. The costs of exit are typically those of the proportion of the value of assets which are "sunk" in the sense that there is no means of recovering them.

In the many significant markets which are neither competitive nor contestable these marginal conditions will not be met. More importantly, then *nothing* can be said *a priori* about the effects on allocative efficiency of moving any specific market towards local satisfaction of the marginal conditions (by, for example, privatization and increased competition/contestability).[6] There can, therefore, be no presumption on allocative efficiency grounds in favour of an asset sale involving the removal of one enterprise from the public sector to be added to a, typically, oligopolistic market. We cannot predict that it will bring prices closer to marginal costs,

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cannot predict that that would entail an improvement in allocative efficiency.

Natural monopoly provides the limiting case in which competition may be neither desirable nor sustainable. Enforcing competition could then entail the sacrifice of significant economies of scale by facilitating the emergence of more than one firm. It may also be destructive in the sense of enforcing short run marginal cost pricing, and the neglect of the fixed capital investment from which the natural monopoly derives. Privatisation without the introduction of competition, and in the absence of effective regulation, would provide the opportunity for the appropriation of monopoly rents, undermining allocative efficiency, as well as (if some of these rents are taken in the form of decreased effort or a "quiet life") a reduction in the effective sanctions and incentives to internal and dynamic efficiency. On equity grounds, unavoidable monopoly rents are better injected into the public exchequer rather than into monopoly profits.

Reference to contestable market theory is inappropriate for the typical natural monopoly elements of a public utility. The existence of very heavy fixed "network" costs constitute not only a barrier to speedy entry (before the incumbent can react tactically), but usually constitute also significant sunk costs, undermining the freedom of exit upon which contestability rests (cf Baumol, 1987). In general there is no reason to suppose that merely transferring a natural monopoly from public into private hands will produce an output more valued by consumers, so that gains in allocative efficiency will only come about via gains in internal efficiency - namely, doing more efficiently something which is less in keeping with consumers demands![7] Alleviation of these problems would necessitate regulation - whose efficiency costs must therefore be compared to those of regulating the (natural monopoly elements of) the industry within the public sector. We are dealing here not with *de*regulation, but with a change in the mode of regulation (Rees, 1986). One promising avenue for future research would be to examine the value of the options foregone in transferring public utilities to the private sector. These might include not only their use in facilitating regulation of an intrinsically uncompetitive/incontestable infrastructurally significant industry, but also as a source of state revenue.

The major public utilities (such as main energy provision, transportation and communications, and water and sewage management) provide what have been perceived as essential infrastructural goods and services exhibiting economic complementarity with a wide set of "private" commodities, entailing, in the absence of perfect competition, external benefits of expansion of the infrastructure to complementary adjuncts, and therefore sub-optimal levels of utility provision and super-optimal prices (Helm and Yarrow,

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1989). Their provision entails extensive use of capital intensive, specific and durable networks. Security and universal availability of supply are often considered to be socially desirable (leading to capacity and tariff structures reflecting peak loading problems, and substantial elements of natural monopoly).

In the face of these theoretical conclusions, NZ arguments for utility privatization have turned to the increased internal and dynamic efficiency said to be imposed by *capital market* competition (see, for example, SOEAU, 1990). However, it is not the case that this can compensate for competitive failings in the product market. In the absence of commodity market competition, the residual surpluses (after all factors of production have been paid contractually determined incomes) may be the result, not (only) of competitive success, but of monopoly rents. What is more, this incentive impacts directly only on the principals (shareholders), not their agents (managers).

The threat of bankruptcy may directly affect managers, but Vickers and Yarrow conclude that "in general the overall impact of an increase in the probability of bankruptcy on the effort level is ambiguous in sign" (1988, p. 25-6). Takeover may or may not be welcomed by managers who may stand either to lose their positions, or to enhance them by becoming part of a larger and more successful corporate entity. Since they may be driven by expected gains in market power, reduction in tax liability etc, and may invoke preemptive managerial behaviour in the target firm, it may be better to view takeovers as an instrument of, rather than a constraint upon managerial utility maximisation (pp. 19, 21). They may also tend to raise managerial discount rates (thus shortening their time horizons - with deleterious effects on long-run supply and ecological concerns, such as may have been an element of the current power crisis in NZ)(p. 22-4). Scherer (1988) argues that (the threat of) takeover has no systematic effect either way on corporate efficiency. The market for corporate control in New Zealand has been claimed to be particularly weak because of the size of the capital markets in relation to that of the major candidates for (controversial) privatization, and indeed of the economy in general, with its dense network of inter-locking directorships (*Listener*, 16/4/88).

The property rights literature (Arrow, 1986; Sappington and Stiglitz, 1987) seems to have exercised a peculiar - if somewhat uncritical - fascination over the New Zealand Treasury. However, both state and market corporations need a system of sanctions, incentives and monitoring by the principals of the agents (Williamson, 1990); and "Economic analysis has thus far failed to predict the circumstances under which government action will incur lower (or higher) cost than those resulting from private contracting." (Cheung, 1978, p. 48)

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Privatisation substitutes one set of principal-agent relationships within the state by three capital market principals: shareholders, potential investors and creditors. This has not been demonstrated to alleviate the problems of principals - particularly in those cases in which a regulatory body remains as a fourth. The diffusion of share-holding, and the option to manage risk by portfolio adjustment, mean that management monitoring may be sub-optimal: any one shareholder will receive only a fraction of the benefits of monitoring, in which there may also be significant economies of concentration in a single principal (which leads to a further layer of principal agent relations - a board of directors inserted between shareholders and managers).

It has been argued that the marketability of equity, relatively concentrated actual share ownership, demonstration effects across companies in a single (corporate) shareholder's portfolio, the internal labour market for top managers and the effects of oligopoly in product markets may attenuate any effects generated by diffuse share-holdings on incentives for rent-seeking by managers. However, empirical evidence suggests that private sector managerial remuneration is more closely correlated with firm size than with profitability (Scherer 1980, p. 29-41). Thus excessive growth may be encouraged, to the point that managers have still greater discretion for personal utility maximisation, because of their firm's market power. This is a particular problem if there are conservation and other ecological concerns. Similarly, the probability of takeover, although directly related to valuation, is inversely related to firm size (Singh, 1975; Stein, 1988), providing another incentive for managers to over-emphasise growth, and to be thereby provided with greater room for self-seeking discretionary behaviour.

In the face of natural monopoly elements and/or significant divergence of social from private costs and benefits, the monitoring of managerial performance falls again to the state, in the form of a another principal - the regulatory agency. The literature on the costs of regulation does not suggest that such regulation is likely to be either effective or costless, and the direct costs and distorting effect of regulation on input choice may exceed those of state ownership. Problems of regulation include the Averch-Johnson (1962) "over-capitalisation" effect; the problem of "regulatory capture" from the reliance of the regulators on the regulatees for information on technology, costs etc. (Vickers and Yarrow, 1986); a tendency to be drawn into increasing regulation as the regulatee optimises with respect to that subset of outcomes which is regulated at the expense of those which are not; possible under-investment because of the increased uncertainty generated by policy-credibility problems (Helm and Yarrow, 1989, p. xxi-ii); and the

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illegitimate subjection of the regulator to pressure group attention. The (unanswered) question is whether regulated public or regulated private ownership is, in specific instances, with specific constellations of natural monopoly and divergences of social from private costs and benefits, the best second best arrangement.

Most international empirical studies of comparative private/public sector efficiency are concerned in the first instance with internal aspect of economic efficiency. A wide-ranging assessment (Boardmand and Vining, 1989) indicates that large SOEs perform less well than similar market-sector firms, and that partially privatised "mixed enterprises" do no better, and sometimes worse, than SOEs. However, whilst this study controlled for firm size, economies of scale, market share and structure, industrial sector and country of operation, it used only commercial ("value-criteria") measures of performance ($ measures of returns on equity, assets and sales, net income, sales per employee and sales per asset). (Cf The NZ Economic Development Commission, 1989, p. 8-9.) These measures evade the specific problem of public utilities by neglecting any divergence between social and commercial costs and benefits.

Jarden Morgan (now CS First Boston), a vocal participant in the New Zealand debate concluded that:

> Studies ... on balance suggest that unregulated private organisations are superior [on value criteria with respect to internal efficiency] to public ones. ... It is not possible to conclude with confidence that private regulated firms are generally superior to public firms. The empirical evidence emphasises the importance of product market competition (1988, p. iii).

The overall evidence from a number of studies is usually presented as generally indeterminate.[9]

The case of electricity generation and distribution, with its network sunk costs and thence natural monopoly elements, is the single biggest nettle yet to be adequately grasped by any New Zealand government. The overall message is that regulated private companies enjoy no internal efficiency advantage over public firms (Yunker, 1975; Meyer, 1975; Pescatrice and Trapani, 1980; Fare and Logan, 1985; Foreman-Peck and Waterson, 1985; Atkinson and Halvorsen, 1986). Similar results apply for water utilities, though here the allocative inefficiencies generated in the private sector by the Averch-Johnson (1962) incentives to over-capitalise in a regulated enterprise (Baumol and Klevorick, 1985) were said to be outweighed by the over-manning internal inefficiency of public utilities (Crain and Zardkoohi, 1977). In the case of railways (Caves and Christiansen, 1980), air services

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(Forsyth, 1984) and insurance (Finsinger, Hammond and Tapp, 1985) regulated private companies had no internal efficiency advantages over publicly owned companies.

Two reasonable, tentative relevant overall conclusions can be drawn:

1. The effects of ownership on allocative efficiency are empirically indeterminate.

2. It is increased (product market) competition rather than changes of ownership *per se* which generate any perceived gains in internal efficiency (see, for example, Primeaux, 1977; Savas, 1977; Bailey, 1981; Fershtman, 1990; Pint, 1991).

Of course, profitability without some indication of the overall social costs and benefits is not the bottom line, especially for natural monopoly, infrastructurally significant public utilities, entailing ecological concerns, and perhaps with the potential to be an effective instrument of regulation and microeconomic policy in general.

7. The Political Economy of New Zealand's Asset Sales

Treasury briefing papers to the incoming government in 1984 revealed that for at least 10 years NZ's economy had been deteriorating in terms of growth, inflation, unemployment, and, in particular public and overseas indebtedness. Part of the problem was laid at the door of the 12% of GDP, and 20% of gross investment then accounted for by a miscellany of state trading activities. Nevertheless, the asset sales programme is now impinging on the kind of "natural monopoly public utilities" which raise complex political-economic issues.

In principle, many of these concerns could be made to impact on calculations of costs and benefits. The use of option pricing theory, for example, may provide an avenue whereby some of the wider "options" available on the basis of continued public ownership - for example to facilitate public interest and competition driven regulation - may be incorporated in V_{sg}. The privatisation wave throughout the capitalist world has placed these kinds of issues back on the social agenda, and raised questions about the best means of achieving social aspirations not adequately reproduced by market forces. It has become evident that these must include a process for evolving a structure of sanctions and incentives to ensure that those who are to implement them are likely to do so, and can be adequately monitored. However, this does not mean that all, or even nearly all, socially desirable economic and social activities will be adequately resourced through unregulated market forces.

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The driving force of liberalisation, and within it privatisation, world-wide has been as much political as purely economic. Many conservative governments have been concerned to push back the frontiers of what they see as socialistic elements of the state and to promote the cause of popular capitalism. At a more mundane level, such governments have found that privatization - particularly by share flotations at what often turns out subsequently to have been a substantial discount[10] - can also be very popular with electorates.

What started as a limited programme of corporatisation in New Zealand, arguably compatible with the then Labour Government's presumably generally social-democratic objectives, seems to have been pushed along towards privatisation, (and the "marketisation" even of the provision of social services) by the momentum of the unleashed "free-market logic" (Collins, 1987, p. 67; cf McKinlay, 1987, p. 74-87).[11] Both the legitimation of the bourgeois democratic state, and the acceptance as immutable of economic "laws" requires a separation between the state and the economy (Reuten and Williams, 1989, p. 179-83). The need to maintain this separation is manifest in several specific aspects of NZ's liberalisation:- The state as funder is to be separated from competitive provision of health, education and welfare services. Section 7 of the *SOE Act* 1986, and various "Kiwi Share" provisions attempt to separate social from commercial obligations of corporations. The 1988 guidelines' implicit assumption that commercial efficiency is compatible with being a good employer and having regard to the interests of the community may mask contradictions evidenced, for example, by recent legal rulings that the Section 7 provisions are meaningless in the light of the overall injunction on SOEs to behave commercially. The tensions of corporatisation emerged clearly in July-August 1992 when the National Government made overt moves to dilute the cold commercial logic of SOE management, including calling a meeting of 15 SOE heads with the SOE Minister. The fallacy is that privatisation transcends these contradictions, when all that it does is to shift their location - the state/civil society interface. If an industry has inseparable external costs and benefits, then the state will "interfere", whether the enterprise is in the private or public sector. The issue then is how best to ensure that the evolution, evaluation and implementation of public policy is effective and efficient. Even in narrow economic terms it can be shown, for example, that there may be cases (typically involving significant fixed start-up costs not fully recoverable from users) when both cross-subsidisation and a "protected" monopoly may be justified on allocative efficiency grounds (Henry, 1989, ch. 1). The focus of policy would then have to shift to the question of how to maintain internal and dynamic efficiency and equity in such s situation.

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The same contradiction is manifest in the state's legitimate and necessary concern with the complexities of allocative efficiency (manifest in anti-trust activity), whilst private corporations are indifferent to - or rather seek - market power. The state has a fiduciary responsibility to take a view on V_{sp} when considering selling an SOE: privatisation is not a simple commercial transaction.

The "mixed economy" has evolved as a structure for managing the perceived social inadequacies of unrestrained market mechanisms. Any significant shift in the mix can be expected to ameliorate one set of problems (economic stagnation, inefficiency and fiscal problems) only by exacerbating others (neglect of social costs and benefits and of the inequities of access to life's chances concomitant on even an efficient market) (Reuten and Williams, 1989, p. 278-85). The governments of capitalist mixed economies are thus faced with the management of the contradictions of this mixed economy, and this must inform any mooted privatisation. Radical liberals in the capitalist world may lay claim to the tide of history by gesturing towards economic liberalisation in the ex "actually existing socialist" countries. No link is made with the concomitant and often horrific collapse of "civil society" there. To single-mindedly pursue alleged economic efficiency is to neglect the state's broader responsibility for the reproduction of civil society.

Poor performance of SOEs on commercial criteria becomes an extremely inadequate guide to their performance on social use-value criteria, if it can be argued that unidentified, unquantified and uncommensurated (and possibly unidentifiable, unquantifiable and incommensurable) costs and benefits are missing from the value-criteria based calculations. This is not, as is sometimes claimed, a retreat into some kind of know-nothing limbo, rather it is an insistence that it is irrational to base decisions entirely on commensurable data when we know that there exist relevant, possibly overwhelming, incommensurable data. To assert that market regulation is superior just because it provides some kind of basis for quantifiable evaluation is to base public decision-making on the rationality of the unfortunates who searched for their lost money under the street light rather than in the dark corner where it had been dropped, on the basis that at least they could see under the light ... !

Privatisation is not an objective but an instrument of microeconomic policy. It is certainly legitimate to examine the coherence of the objectives which have been traditionally pursued by state-ownership of certain enterprises (managing natural monopoly, providing economic infrastructure, industrial development and regional policy, managing the social impact of economic restructuring, restricting foreign ownership, ecological and cul-

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tural policies, provision of public goods and services and strategic considerations such as defence, and international image and prestige (NZEDC, 1989, p.1-5), and the effectiveness of state-ownership in furthering them. But it is not the job of economists to prohibit democratic governments from pursuing them.

Labour as an input to production is particularly relevant to social (and macroeconomic) policy because it is inseparably embodied in human beings. The wage is not only a market price signal, but also the last-resort income for those who do not own adequate production-relevant property, and a significant input into aggregate demand. It may often be the case that the relative value-criteria efficiency of market-sector provision is achieved only by drastically degrading the terms and conditions of service of workers. The impact on the labour market of decisions to privatise have to be evaluated. In particular, the social costs of the massive restructuring of employment entailed by corporatization and privatization would need to be estimated (if only in terms of the direct costs to the state of increased transfer payments).[12] The conditions of service of the remaining (much reduced) work-force of SOEs has often deteriorated due, amongst other things, to increased insecurity. There appear to have been considerable social costs in the inevitable geographical and sectoral displacement of redundant Forestry and LandCorp workers. The elimination of "employed poverty" is a perfectly legitimate social objective, whatever turns out to be the most effective means for pursuing it.

There is a tendency on the liberal side of the New Zealand debate to argue as if all re-distribution by the state were undesirable redistribution to - unspecified - special interest groups (see, for example, Jarden Morgan, 1988, p. 18-21). Whilst it is undoubtedly crucial to identify those socio-economic structures which facilitate illegitimate redistribution, and to address its disincentive effects, that cannot deny the legitimacy of democratically decided and overt redistribution. What remains for economics to contribute is argument and evidence as to the most efficient and effective ways of achieving these democratically derived objectives.

The two main objectives of New Zealand Government's privatisation policies may be mutually contradictory. Re-structuring of candidates for privatization so as to minimise post-privatisation market power, and maximise the efficiency of contractual delivery of any continued social service cannot but decrease the price which can be obtained from selling the asset, and thus the revenue generated. Whilst the government has stated that revenue maximisation is to be sought only *after* likely microeconomic efficiency gains have been achieved, two years after the largest sale to date, of Telecom, there is considerable dissatisfaction with the pace of develop-

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ment of competition; whilst a very high price was obtained for the asset. Any fiscal gains are likely only to be short run. Since new-right political economy itself claims to have demonstrated that politicians and bureaucrats are disposed to take decisions on short-run criteria, it beggars belief that these same agents will be able to resist the short-run apparent and very visible fiscal gains in favour of longer-run, uncertain and as yet obscure efficiency gains of privatisation. Liberalisation may conflict with democracy itself, as corporatization and privatisation entail the increasing control of public services by economic elites. All New Zealand SOEs are - as intended - run by top private sector executives. This is only a matter of indifference if it is thought that there is no difference between pure commercial, and the public interests.

Privatisation strictly in accordance with the criteria and guidelines laid down in the Annex to the 1988 budget statement could, perhaps, be argued to be perfectly compatible with both democracy and social-democracy - but it would be a different animal from what has been seen in New Zealand so far. Any fiscal objectives would have to be "de-coupled" from the pursuit of allocative, internal and dynamic efficiency. And social costs and benefits, not always reducible to dollar magnitudes, would have to incorporated. A genuine case-by-case approach, in which the possibility of no (or only partial) privatisation remained a real option, would have to instituted.

8. Conclusions

The New Zealand privatisation programme will have been a success to the extent that those ex-SOEs that survive are more profitable, those that do not were inherently inefficient, and that no unrepaired damage is done to wider macroeconomic, social and political objectives.

Privatszation is an inefficient instrument for debt retirement. It is likely to reduce allocative efficiency in social cost/benefit terms, whilst internal efficiency is related to market structure/contestability and to modes of dealing with principal-agent problems which are separate from ownership. There is no secure empirical evidence that privatisation improves internal efficiency in the core cases of natural monopoly public utility characterised by divergence of social from private costs and benefits.

It is not possible to assess efficiency in abstraction from the social ends of economic activity, which cannot be reduced to market enforced commercial objectives. If regulation by market forces is identifiably lacking on some social criterion, and collective intervention via public regulation or ownership has been in practice ineffective and inefficient, then it may be more

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rational to implement policies to improve the latter, rather than to revert mindlessly to the former: as the Controller of the UK Audit Commission, John Banham put it "privatisation is the last resort of a management that has given up" (*Guardian*, 18 July 1985). The possible forms of ownership and regulation are not exhausted by a market/state dichotomy. There are other forms of collective control, and other criteria of resource allocation than purely market enforced commercial criteria. There are even many possible alternative arrangements for state intervention in the provision of goods and services.[13]

Microeconomic policy should not be dominated by concern over the size of the state sector, but needs to address itself to improvement in the management of those socially desired goods and services inadequately reproduced by market forces. The problems to be addressed include: the quantification and valuation of outputs, so that internal efficiency and effectiveness of supply (in terms of the policy objectives it is to serve) can be monitored; the evolution of physical as well as financial performance indicators, and of improved management to enforce their implementation; sophistication of audit procedures to encompass effectiveness-for-money as well as mere financial probity; the development of new institutional forms to facilitate internal efficiency and social control over the production and distribution of public services, and over any perceived socially undesirable effects of the operation of market forces.

Economic efficiency gains of at best "slightly better than nothing" (Brittan, 1986, p. 34, commenting on the British experience) are not good enough in the light of an overall use-value political-economic evaluation of the costs and benefits of such a programme, and especially considering the apparently transient nature of the purely economic improvements achieved. Already in the UK, as that country's long-standing economic weaknesses re-emerge, opinion polls indicate that there is a swing in public mood away from radical liberalism to (probably some new version of) social-democratic interventionism. In New Zealand we may in future be able to look back on the Lange/Douglas split, the subsequent election of a National Government and its re-thinking on SOEs in 1992 as the beginning of a re-assertion of social-democratic, or at least "one-nation Tory", values in the body politic - albeit chastened with a dash of "economic realism".

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Notes

1. SOEAU (1990) also pointed out that both normal commercial practice, and the fiscal objective of asset sales required that SOEs should be maximising the value for the shareholder's investment, rather than short term profits.
2. These so-called "Scoping studies" were, prior to May 1989, anyway carried out only *after* the decision to sell.
3. The explicit commitment of sales proceeds to debt retirement further implies that the debt service savings (plus, perhaps, longer term savings afforded by the preemption of any costly deterioration in New Zealand's credit rating) offer the highest return on the government's use of this money; and that this particular debt retirement would not have occurred without this particular asset sale. Ear-marking of money in this way is not generally an efficient mode of deploying government revenues.
4. Foreign capital inflows purchasing assets - significant, for example, in the case of Telecom whose sale quadrupled US direct investment in NZ - may be net additions to investible funds in the domestic economy. The openness of NZ capital markets enhances this possibility - and, indeed, by extension reduces the likely extent of domestic crowding-out. The "perfect" case of zero crowding-out and ultimate foreign finance for the whole sale, implies $\lambda_p = 0$.
5. Future provision of this service is to be open to competitive tender under Section 7 of the *SOE Act*, 1986 (Giedrojc, 1989, p. 12).
6. For accounts of this "theory of the second-best" see Lipsey and Lancaster, 1956-7; Sheshinski, 1986; and Henry, 1989, ch. 3).
7. For a discussion of the trade-off of possibly improved internal efficiency (from improved management performance) against decreased allocative effeciency, see Gravelle and Kats, 1976. See Kay *et al*, 1986, p. 12 for a matrix of the sanctions and incentives to internal and allocative efficiency generated by different structures of ownership and competition (cf Forsyth, 1984).
8. Public ownership may be a relatively efficient mechanism for regulation of uncontestable monopoly (Papps, 1975); for example, if apublicly owned dominant firm can be managed so as to enforce "as if" competitive (as well as the socially and ecologically responsible) behaviour on an oligopolistic industry. The conclusion of the recent Commerce Commission (1992) examination of telecommunications in New Zealand that Privatised Telecom has become the de facto regulator in the industry, cries out for comparison with the option of having used it as a mechanism of *de jure* regulation had it been retained as an SOE.
9. For overviews see Kay, Mayer and Thompson (1986, p. 8-16); Vickers and Yarrow (1988, p. 39-44). For indications that public production is typically less efficient than private, see, for example: Borcherding, Paunerchne, and Schneider (1982) (who, however, do not standardise for degrees of competition or regulation); Pryke (1983) (which addresses only cases where competition in product markets occurs - airlines, short sea crossings and gas and electrical appliances and services - and, in all but the first, compares peripheral activities of SOEs with the core activity of commercial companies (cf Heald, 1984, p. 43; Vickers and Yarrow, 1988, p. 43). For a survey which concludes that there is no general evidence for the relative internal inefficiency of state sector firms, see Millward (1982). Pryke (1971) argues that, in terms of the objectives set for them, UK public enterprises had performed efficiently up to 1968, although their performance deteriorated in the 1970s (Pryke, 1981).

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10. Mayer and Meadowcroft (1985) have estimated that over a range of asset-sales in the UK between 1979 and 1985 the average discount of the offer over the first traded price was about 26%. In one tranche of British Telecom shares the discount was nearly 100%. In New Zealand, PetroCorp was sold at a discount of $93M. On the other hand Telecom NZ appears to have changed hands at a $Z \approx Zp$ - which perhaps accounts for its keenness to hang onto its strategic advantage as long as possible.
11. The question of the "social-democratic" credentials of the New Zealand Labour party is not a rhetorical one. Long before the scramble to the right in the mid 1980s they have rested on a leftish attitude to redistribution and social welfare, rather than to the microeconomic issues of planning and public ownership. On these latter the Party has had an increasingly centrist position since its inception (Thomas, 1975 p. 62; Mascarenhas, 1982, p. 27-31).
12. One estimate puts the number of jobs lost by mid-1988 at more than 10,000 and Telecom has halved its workforce, losing some 12,000 jobs (Boston, 1988, p. 6-7).
13. Savas (1982) for example, identifies eight alternatives to direct state production: inter-governmental contracting, contracting with the market sector, franchising, grants to commercial suppliers, consumer vouchers, sprivate purchase by consumers, voluntary collective supply, consumer self-service (cf Heald, 1984, p. 40-41; McKinlay, 1987, p. 88-134). To these one could add leasing state assets and contracting-in management.

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