

The Proposed Privatisation of the South Australian Electricity Industry:

an Economic Analysis

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**A Report for the UTLC, CEPU,
ASU and PSA**

Summary

Privatisation has been an attractive financial expedient for governments seeking to deliver unfunded tax cuts or to make cosmetic improvements to measures of the budget deficit and public debt. Recently, the South Australian government has proposed privatisation of ETSA Corporation and Optima. The proposal has been supported by Sheridan (1998), arguing that, provided the gross proceeds of any sale are in excess of \$4 billion, savings in interest on public debt will exceed the flow of income from ETSA to the public sector.

ETSA has generated a substantial flow of income to the South Australian public sector, much of which has been ignored by analysts advocating privatisation, such as Sheridan. The main components of this income flow are:

- (i) interest paid to the South Australian Government Financing Authority
- (ii) tax equivalent payments
- (iii) dividends;
- (iv) retained earnings;
- (v) statutory sales levy; and
- (vi) uncompensated performance of Community Service Obligations

The analysis of Sheridan (1998), focusing on annual flows of \$215 million from ETSA to the SA budget sector, is defective because it fails to take account of the statutory sales levy and retained earnings, and because it implicitly undervalues interest payments.

An analysis correcting for these omissions shows that sale of ETSA will reduce public sector net worth. Under a projection in which real revenues grow at 1 per cent per year, it is shown that a sale price of \$7 billion would be required to compensate taxpayers for the loss of income from ETSA. Even under a projection incorporating price reductions and loss of market share, a break-even price of \$6 billion is required. Under a projection in which revenue growth is maintained in line with state gross product, privatisation would entail losses of more than \$1 billion in the first ten years.

Introduction and overview

In early 1998, the Premier of South Australia, Mr. Olsen, announced that, contrary to previous commitments, the state's electricity industry would be privatised. A variety of estimates for the possible proceeds from such a sale, ranging from \$4 billion to \$6 billion, have been put forward. The proposal has been justified on the basis of a report by Sheridan (1998), arguing that, provided the gross proceeds of any sale are in excess of \$4 billion, savings in interest on public debt will exceed the flow of income from ETSA to the public sector.

In this paper, the economic and fiscal arguments for and against privatisation are assessed. The paper begins with a brief historical overview of the development of the public electricity industry. A review of issues arising from the 1997 Auditor General's Report on Electricity Reform is provided along with an overview of the impact of privatisation on electricity prices. A discussion of recent developments in the electricity industry is presented. The performance of ETSA under public ownership is then discussed. It is shown that Sheridan's analysis ignores or undervalues important components of the return to taxpayers from public ownership of Telstra. Some fallacious arguments in support of privatisation are reviewed and the critical issue of allocation of risk is examined. It is argued that the main risks facing ETSA are regulatory and are best borne by the public sector. Finally, a detailed analysis of the fiscal impact of privatisation is presented under three scenarios for ETSA's future earnings. Under a projection in which real revenues grow at 1 per cent per year, it is shown that a sale price of \$7 billion would be required to compensate taxpayers for the loss of income from ETSA. Even under a projection incorporating price reductions and loss of market share, a break-even price of \$6 billion is required. Under a projection in which revenue growth is maintained in line with state gross product, privatisation would entail losses of more than \$1 billion in the first ten years.

Historical Context

An adequate supply of electricity at reasonable rates is of the utmost importance to the community particularly for the development of industry. The interests of the public in this regard have so far been largely at the discretion of the directors of the Company. Its (*the Adelaide Electric Supply Company*) claim that the public interest has been and will continue to be studied tends to conflict with the directors' duty to shareholders.

(Royal Commission, 1945)

An economic analysis of privatisation of the electricity industry in South Australia in the 1990s necessarily reflects upon some of the economic and social reasons why the privately owned electricity industry was brought into public ownership. As the 1945 Royal Commission into the privately run industry reveals the nationalisation of South Australia's electricity industry was a product of an irreconcilable conflict between shareholder interests and the public interest. The reluctance of the privately owned Adelaide Electric Supply Company to make use of Leigh Creek coal reserves for power generation and its failure to restrain dividends to shareholders and accelerate the electrification of regional South Australia combined to convince Premier Tom Playford that broad industrial and social objectives would be best met through public ownership of the industry. Playford concluded that the only effective means of ensuring that electricity infrastructure could be utilised as a tool to advance South Australia's social and economic development was public ownership. The 1945 Royal Commission came to the same conclusion. Among the Commission's key findings were:

- the need for electricity charges to be set at rates which support local industry development;
- lack of restraint by the AESC to restrain dividends and therefore prices;
- the failure to extend electrification throughout the state.

For Playford, public control over electricity provision was an essential pre-requisite for the industrialisation of South Australia. Under private control, electrification of the state was proceeding slowly and industry needs were under-provided for.

Playford regarded electricity provision as a "natural monopoly" where the best interests of the State were served through public ownership. This would ultimately enable him to provide the necessary electricity infrastructure to support the development of the Passenger Motor Vehicle and mining industries in South Australia. It would also ensure that regional South Australia had access to affordable power supplies.

Private providers on the other hand saw the electrification of country areas as unprofitable. Playford and his contemporaries claimed a longer term view of what was profitable and in the public interest.

Many of the issues raised in the debate surrounding the future of the electricity industry in 1945 are relevant today. In particular the conflict which arose at that time between shareholders interests and the public interest is likely to intensify in the NEM. Ironically the risks of entering the National Electricity Market (NEM) at the heart of the debate on the future of the industry in the 1990s have opened up the question of ownership of the industry once again. Whether these risks would be better managed or minimised in public or private ownership is in fact irrelevant to participation in the NEM, yet much of the debate has been constructed as if privatisation of the industry were a pre-requisite for compliance with competition policy agreements. It has long been recognised that structural reform of ETSA would be necessary for entry to the NEM. In a review of the financial performance of ETSA in 1994, the South Australian Commission of Audit after finding importantly that ETSA had significantly improved its performance over the 1988-93 period, recommended that ETSA be corporatised in preparation for entry to the NEM (Commission

of Audit, 1993:261). Since 1994 ETSA has undergone profound restructuring to prepare for the NEM. The performance of ETSA has improved significantly, its dividend payments to government have been high and productivity high. The ETSA workforce has dramatically declined by nearly 50 percent from around 3,200 to 1,700. While the competitive pressures in the NEM will be significant, ETSA has undergone the necessary reforms demanded for participation in the national market.

The question of ownership is not in the end a question of compliance with competition policy, but rather a question of whether privatisation will improve the State's financial position, improve pricing outcomes for consumers and result in a more efficient and effective industry. Prior to the release of the Sheridan Report the 1997 Auditor General's was used as the justification for privatisation of the industry. This report does no more than specify possible risks associated with participation in the NEM. The Auditor General takes no position on the question of ownership, but rather advises prudence through the operation of appropriate risk management strategies.

The Auditor Generals Report and the Nem

In response to the release of the Auditor General's Report released in December 1997 the Government stated that the financial risks to the State of retaining the South Australian electricity industry in public ownership were too high. Further it was also claimed that the proceeds of privatisation would result in a net financial benefit. This change of position on ETSA was attributed by the Government to the potential financial risk, if any, linked to ETSA's entry into the National Electricity Market.

The risks identified in the Auditor Generals report include:

- The potential risks and benefits to the South Australian Government as shareholders in, and guarantor of, the ETSA corporations and Optima as well as being a member in the

National Electricity Code Administrator (NECA) and the National Electricity Market Management Company (NEMMCO). In past years the Government's electricity business has made substantial annual financial contributions (expected to be \$212 million in 1996-97) to the non-commercial sector;

- The competitive risks and benefits to the ETSA corporations and Optima in the introduction of competition in the ESI;
- The risks, if any, to Commonwealth competition-related financial assistance between 1997-98 and 2005-06 from any non-compliance by South Australia with the COAG competition policy and electricity reform agreements. This assistance is comprised of:
 - 'competition payments' of about \$332 million in real terms;
 - a potential reduction in the State's share of financial assistance grants amounting to \$690 million.

(Auditor General, 1997: A.3-6)

Competition Payments

The risk to the payment to South Australia by the Commonwealth of 'competition payments' to the value of \$1billion were central to the early debate on whether ETSA should remain in public ownership. These risks arise only where there is a failure by ETSA and the Government to comply with the Council of Australian Governments (COAG) electricity reform agreement signed by the State Premiers in 1994. On the question of risk to competition payments the Auditor General crucially concluded that there was no immediate risk to payment of the first tranche due in 1998-99. Rightly the Auditor General highlighted that a number of future compliance issues would need to be addressed to ensure

that successive payments were made (Auditor General, 1997).

Equally the Auditor General has highlighted the prospect of a likely reduction in dividends paid to the State Government by ETSA as the result of the competitive pressures created by entry to the NEM.

Crucially the Auditor General does not conclude that the risks to Government would be resolved by a retreat from public ownership of the electricity industry. On the contrary he states that 'there are many opportunities to both the South Australian Government, the ETSA corporations and Optima to manage the risks associated with the entry of South Australia into the NEM' (Auditor General, 1997:A.3-40). Among the key issues identified by the Auditor General to be addressed as a matter of sound risk management are:

- An effective transition from a monopolist to a competitive culture for the ETSA Corporation and Optima;
- Maintenance/aquisition of relevant expertise;
- Regular reviews of established systems and market assumptions to keep abreast of developments that occur in the industry. In this regard, refinement of modelling of the risks to the ETSA Corporation and Optima and the Government as information on market circumstances and the scale or significance of change becomes clearer, would assist management.

(Auditor General, 1987: A.3-40-41).

The Auditor General's conclusions regarding risks associated with the management of the electricity industry in South Australia are a basis for moving forward within existing ownership arrangements. Arguments that private ownership will minimize the identified risks have no foundation in either the Auditor Generals report or in international and local experience.

In short the Auditor General's report does not provide justification for the privatisation of the South Australian electricity industry. This threat only exists where a clear case of non-compliance with the COAG competition principles agreement occurs. The question of ownership of the industry is irrelevant in any consideration of compliance as the agreement itself makes clear.

This agreement is neutral with respect to the nature and form of ownership of business enterprises. It is not intended to promote public or private ownership.

(COAG Agreement, 1995)

This view on the ownership of the industry was also reflected in the Industry Commission's review of ETSA in 1996 when it stated:

The South Australian Government would not be prevented from continuing to own the various businesses which would be created by restructuring ETSA along the lines proposed.

(Industry Commission, 1996)

Analysis supporting the privatisation of the electricity industry in South Australia had not been publicly available until the release on March 12, 1998 of a report on the future of the industry, commissioned by the Government and undertaken by former Auditor General, Tom Sheridan. This report focused attention away from the question of compliance with competition policy agreements to broader questions of the impact of increased competition on dividends flows, the relative effectiveness of private or public ownership and the

economic impact of privatisation on the State Budget. Among its key conclusions were that 'combined sale prices in excess of \$4 billion could well have a significant favourable net impact on the State Budget' (Sheridan, 1998). The report conclusions are overly optimistic and flawed as John Quiggin demonstrates later in this report.

Before looking in detail at the economic and financial issues raised by the Sheridan Report, a brief survey of the international and local experience of privatisation on prices is provided.

Electricity Prices and Privatisation

Britain

Over the 1989-91 period, domestic electricity tariffs in Britain rose by 28 percent or 4 percent above the rate inflation. Perversely the cost of coal in 1991 was 27 per cent cheaper than it was in 1988 (Ernst, 1994:130-131). If this decline in coal prices had been translated into a reduction in prices, the unit price for domestic consumers would have been around 8 percent less in real terms. Domestic tariffs have increased significantly relative to industrial tariffs over the 1986-91 period as the following table indicates (Yarrow, 1993).

These findings are confirmed by a 1997 World Bank study on the restructuring and privatisation of the UK electricity industry. The study concluded that despite estimated efficiency savings between 6-11 billion pounds which translate into potential price reductions of 3.2 to 7.5 percent, prices did not fall as fast as costs. Indeed consumers were found to have experienced a significant loss from the reforms of between 1.3 and 4.4 billion pounds (Newbery and Pollitt, 1997). On the other hand shareholders were found to have gained significantly with National Power and PowerGen share prices increasing by around 300 percent since public float. The study also found that around 25 percent of the net gains

from privatisation were transferred out of the country through the repatriation of profits.

Thus, the companies seem to have unambiguously gained from the privatisation. Power purchasers seem to be paying higher prices than they would have under public ownership (higher company profit margins offset lower costs). And the government has gained from sales revenue, higher taxes on profits, and dividend income, though it has lost the revenue associated with the public sector dividend target for the CEGB.

(Newbery and Pollitt, 1997:4)

New Zealand

While not fully privatised the corporatised electricity industry in New Zealand operates largely on private sector principles and 'is not subject to any electricity sector specific regulation, apart from supply standards and safety regulations' terms (Smith, 1997:34) While the wholesale price of electricity declined by 17 percent in real terms domestic costs have increased by 20 percent in real terms over ten years since corporatisation in 1987 (Smith, 1997:36).

Victoria

Since privatisation of the electricity industry in Victoria there has been a doubling of the connection fee for domestic users from around \$16.00 to \$34.00. A range of services previously provided free of charge or at low cost have been subjected to charges or large increases (Loney, 1997:6). Domestic electricity prices were increased by 10 percent prior to privatisation and frozen in July 1993. Since privatisation in 1995 electricity prices show no sign of declining.

South Australia

Recent evidence on water prices following outsourcing of Adelaide's metropolitan water and sewerage supply reinforce consumer concern regarding price and privatisation. In this case claimed savings of around 20 percent during the period of outsourcing have not been passed onto customers. Since outsourcing of the service in 1996 bills for average water use have risen by 6.7 percent (The Advertiser, April 27, 1998). This experience is parallel with international trends post privatisation.

Recent developments in the electricity industry

From 1946 until 1 July 1995 the generation, transmission and distribution of electricity in South Australia was undertaken by a state government instrumentality, the Electricity Trust of South Australia (ETSA). ETSA was corporatised in 1995, and subsequently broken up into retail, transmission and energy subsidiaries, with generation being spun off into a separate enterprise, ETSA Generation.¹ These changes were made in response to the development of a national electricity market and to the requirement for competitive reforms under the Competition Principles Agreement of 1995 and the associated *Competition Policy Reform Act 1995* (Cwlth), usually referred to as the Hilmer reforms, after the report of the Hilmer Committee (Hilmer et al. 1993). Under the Competition Principles Agreement, failure by state governments to implement competitive reforms to the satisfaction of the National Competition Council may lead to the withdrawal of financial assistance grants from the Commonwealth.

Hilmer and others have stated on many occasions that the implementation of the Hilmer reforms does not require privatisation. Indeed, the terms of reference of the Hilmer Committee required them to identify policies that would enable public and private enterprises to compete on equal terms. Nevertheless, the need to comply with competition policy has been used as a pretext by governments wishing to privatise government business enterprises in the electricity industry and elsewhere.

Under the National Electricity Market, which is now coming into operation, generators bid to supply electricity to State pools. Large consumers may purchase electricity directly, while residential consumers contract with retailers who purchase electricity from the pool. Transmission of electricity remains a monopoly activity subject to price regulation.

¹ In the analysis below, ETSA generation will be treated as if it were still part of ETSA.

It is important to note that, despite the description of the new system as a 'national' market, it is in reality a set of interconnected state markets. Because in the past, each state operated an independent system, interconnections allowing the transmission of electricity from one state to another have limited capacity. Because of the large distances between major cities in Australia, expansion of interconnection capacity is an expensive option.

It remains unclear how the National Electricity Market will work in practice. In particular, it is not yet apparent:

- (i) Who, if anyone, is responsible for the reliability of supply of electricity;
- (ii) Whether market prices will give appropriate signals for new investment in generation and transmission capacity;
- (iii) Whether the generation and distribution enterprises created over the past few years are large enough to achieve economies of scale (or, equivalently, whether mergers resulting in horizontal reintegration will be required); and
- (iv) Whether the separation of the industry into generation, distribution and retail components is economically sustainable, (or, equivalently, whether mergers resulting in vertical reintegration will be required).

On points (iii) and (iv), representatives of the electricity industry are already advocating reintegration, primarily through mergers across state boundaries. It appears that the competitive phase of the national market will be short-lived.

From the viewpoint of suppliers of generation, transmission and distribution services, the question of responsibility for reliability raises concerns about possible legal liability in the event of large-scale breakdowns such as those that occurred in Auckland and, on a smaller scale, in Queensland earlier this year. The problem of prices as market signals is associated with the more general issue of price risk in the new market.

The performance of ETSA under public ownership

ETSA was consistently profitable, and exhibited strong productivity growth for most of the postwar period. Estimates of total factor productivity (TFP) computed by the Bureau of Industry Economics (1994) suggest that:

- (i) ETSA had the highest TFP of any electricity authority in the mid-1970s;
- (ii) TFP declined both absolutely and relative to other electricity authorities from the mid-1970s to the mid-1980s; and
- (iii) TFP growth since the mid-1980s has been strong in all states.

Estimates for earlier periods reported by the Industry Commission () show strong TFP growth over the 1950s and 1960s.

While the conclusion that the electricity industry in South Australia has exhibited strong growth in TFP over the long term is sound, comparisons over short periods of times and between states, or between Australian and US utilities, must be treated with caution. Short-term comparisons depend primarily on changes in capacity utilisation and on the way in which capital assets are valued and depreciated. The Bureau of Industry Economics (1994) uses a constant rate of depreciation, but the performance of electricity generating stations tends to improve over the early years of operation, remain stable for some years and then deteriorate rapidly. As a result, the ratio of output capacity to the Bureau's estimate of depreciated value is low for very new and very old stations and high for stations in the middle of their operating life.

The decline in TFP measured in the early 1980s reflected the fact that new generating plant, built on the basis of over-optimistic estimates of demand was coming into operation and capacity utilisation was low. The subsequent rapid growth in measured TFP resulted from the fact that old plants were scrapped, capacity utilisation rose, and the new plants approached peak performance while their estimated value depreciated.

A second major factor distorting recent measurements of TFP growth is the contracting out of functions previously performed by employees. Where contracting out

takes place partial productivity measures such as output per employee are valueless. In principle, TFP measures can take account of the effects of contracting out, but, in practice, it is difficult to distinguish between improvements in efficiency and reductions in wages or increases in work intensity (Quiggin 1994).

The flow of income to the public sector from ETSA operations

ETSA has generated a substantial flow of income to the South Australian public sector, much of which has been ignored by analysts advocating privatisation. The main components of this income flow are

- (i) interest paid to the South Australian Government Financing Authority
- (ii) tax equivalent payments
- (iii) dividends;
- (iv) retained earnings;
- (v) statutory sales levy; and
- (vi) uncompensated performance of Community Service Obligations

The first four of these items together constitute earnings before interest and tax (EBIT) which have grown from around \$140 million per year in the late 1980s to around \$300 million per year in 1996-97 (excluding extraordinary and abnormal items, which added \$100 million to profits in 1996-97). Within this total there have been wide variations in the shares of the four components. Interest payments have generally declined as retained earnings have permitted the repayment of debt. However, the increase in gearing associated with the special dividend of 1997 has temporarily reversed this trend.

It is important to note that the interest rate paid by ETSA to the South Australian Government Financing Authority is higher than the current market rate. Hence, the market value of the stream of interest payments is higher than the face value of the debt. It is, therefore, inappropriate to analyse privatisation on the assumption that the face value of debt will be deducted from the sale price, as is done by Sheridan (1998). Rather, it is necessary to compare the current flow of income, including interest payments, with that which would

arise from privatisation, assuming the debt was extinguished at the time of privatisation.

The payment of company tax equivalents commenced with corporatisation in 1995. Although the payment of company tax equivalents by state government instrumentalities has been justified on the basis of competitive neutrality with private firms, all recent privatisations have employed financial structures designed to eliminate payments of company tax through high rates of gearing and depreciation or to ensure that such payments are fully offset by franking credits under dividend imputation. For publicly owned companies, the company tax equivalents is simply a component of the return to taxpayers.

Dividends have normally accounted for about 70 per cent of post-tax profits, with the remaining 30 per cent, classed as retained earnings, to be invested in new projects or allocated to reserves. However, when it has been considered desirable to transfer this profit from the non-budget to the budget sector, this has been done through devices such as the \$450 million special dividend in 1997. It is important to emphasise that, from the viewpoint of taxpayers, the allocation of profit between dividends, retained earnings and tax equivalent payments is a matter of accounting convenience. The total flow of earnings is the amount that the public can draw on without increasing net debt, and this is the only relevant variable.

The statutory sales levy, which is now being eliminated, has returned around \$45 million per year. The removal of the levy implies that ETSA can increase its profits by \$45 million per year with no change in prices or costs, or alternatively that existing profits can be sustained with a 5 per cent reduction in prices.

No information is available on the value of Community Service Obligations, although observation of similar government business enterprises suggests that the cost of delivering Community Service Obligations is likely to be around 5 per cent of revenue or \$50 million per year.

In total, the flow to the public sector from ETSA in 1996-97 was around \$340 million per year, without taking account of Community Service Obligations. The analysis of Sheridan (1998), focusing on annual flows of \$215 million from ETSA to the SA budget

sector, is defective because it fails to take account of the statutory sales levy, interest payments and retained earnings. Sheridan notes, but does not estimate, the value of Community Service Obligations.

Fallacious arguments in favour of privatisation

Most of the arguments that have been used to justify privatisation are fallacious. The purpose of this section is to present, and refute, a number of fallacious arguments commonly offered in support of privatisation.

Privatisation permits higher levels of current government expenditure

The first countries to adopt policies of large scale privatisation in the 1980s were the United Kingdom, Australia and New Zealand. In all three countries, it was assumed that the proceeds of privatisation could be treated as if they were current income. For example, in his memoirs, former Prime Minister Hawke (1994, p. 391) says:

When it came to privatisation, Brian [Howe] was able to argue that one dollar simply could not do two jobs. Putting a dollar of equity into the running of an airline was paid at the expense of programs for the unemployed or the single mother.

The governments of the United Kingdom and New Zealand used privatisation proceeds to finance large cuts in income taxes. In all cases, the result was the same. Once the supply of assets for sale was exhausted, there was no source of revenue to finance the increased expenditure or reduced taxation. Not only were there no further privatisation proceeds, but the flow of income formerly generated by the assets was lost. In all three countries, the initial privatisations contributed to the growth of intractable budget deficits.

The fallacious assumption that privatisation proceeds were equivalent to current income was based on the conventions used to draw up the Budget, under which the proceeds of asset sales are treated as negative outlays. In assessing privatisation, it is important to take account of economic reality rather than accounting conventions.

The present Treasurer, Peter Costello, has correctly criticised his predecessors for using asset sales to conceal Budget deficits and has focussed on the underlying Budget deficit, which excludes the proceeds of asset sales and repayments of state and government business enterprise debt. Thus, the inappropriateness of treating the proceeds of asset sales as revenue has been clearly recognised.

Unfortunately, governments have continued the practice of ‘financing’ current expenditure out of the proceeds of privatisation. The partial privatisation of Telstra in 1996, the sale of the New South Wales Government Insurance Office, and the proposed full privatisation of Telstra are only a few examples where part of the proceeds of privatisation have been, in the words of the Commonwealth Minister for Communications, Senator Alston, ‘splashed up against the wall’.

Interest savings from privatisation more than offset the loss of dividends to the public

The idea, derived from Budget conventions, that the proceeds from asset sales can be treated like current income is now generally recognised as fallacious. However, a subtler form of the fallacy remains influential. By convention, government business enterprises are located in the ‘non-budget’ sector of government. The earnings of these enterprises are therefore not counted as part of the government’s budget income. Instead, budget income includes only dividends paid by government business enterprises into the government budget. In general, dividends are less than earnings since some earnings are retained to finance future investments. However, there is no reason why dividends cannot exceed earnings. In 1995-96, for example, ETSA paid a special dividend of \$450 million, in addition to its ordinary dividend, even though earnings for that year were only about \$180 million.

The simplest way to refute the fallacy of valuing an enterprise based on its dividend flow is to observe that the government, as majority owner, can set ETSA’s dividend at any level it chooses. If the government so desires, it could require dividends of \$500 million every year, just as it did in 1995-96. Of course, to the extent that dividends exceed earnings, the value of the government’s holding in ETSA would decline. Conversely, to the extent that

dividends are less than earnings, the retained earnings increase the value of the government's holding.

This simple observation ought to be sufficient to refute the idea that public holdings in ETSA should be valued in terms of dividends rather than earnings. However, since the fallacious analysis in terms of dividends has been repeated widely, and endorsed by most Australian advocates of privatisation, including the Commonwealth Department of Finance, it is worth analysing in more detail.

The fallacy that a private enterprise should be valued by its owners solely in terms of the flow of dividends it generates and that retained earnings are in some sense 'locked up', and inaccessible to the owners, was popular until the 1950s. This fallacy was refuted by the economists Modigliani and Miller (1958), both of whom received the Nobel Prize for their work. Modigliani and Miller showed that, in the absence of differential tax treatment, and assuming that capital markets work smoothly, the value of shares in an enterprise is unaffected by the dividend policy adopted by that enterprise. The interests of shareholders are not affected whether the enterprise pays out all its earnings in dividends, using new issues of equity and debt to finance new investments, or pays no dividends, using retained earnings to finance new investment. In the latter case, shareholders who wish to realise the income associated with retained earnings can do so by borrowing against the increased value of their shares.

The analysis of Modigliani and Miller forms the basis of the modern theory of finance. In particular, it leads directly to the Capital Asset Pricing Model and its generalisations such as Arbitrage Pricing Theory. In these models, firms are valued according to the expected flow of future earnings to shareholders, with an adjustment for risk. Dividend policy is irrelevant to the valuation of the enterprise. A policy of paying high dividends and financing new investment through debt will result in a higher debt–equity ratio, commonly referred to as a higher level of 'gearing'. This will imply a higher, but riskier rate of return to equity. The Capital Asset Pricing Model shows that the effects of higher earnings and higher risk cancel out, confirming the basic result of Modigliani and

Miller.

In practice, considerations of corporate governance lead firms to avoid very high levels of gearing (which arise if all earnings are paid out as dividends) and very low levels of gearing (which arise if all earnings are retained). The relationship between corporate governance and dividend policy been analysed in recent years using concepts of agency theory. With these minor modifications, however, there has been no successful challenge to the Modigliani–Miller analysis since it was put forward forty years ago. The standard finance text by Fama and Miller (1972), presents the same analysis, as do Australian texts such as Juttner (1987) and analyses of market valuation in Australia such as that of Higgins, Johnston and Coghlan (1976), who suggest that on average, a valuation based solely on the flow of dividends represents less than half the value of a business enterprise.

A representative discussion is the article on dividend policy by Brickley and McConnell (1987, p. 120), who observe that:

After a brief flurry of debate, the Modigliani-Miller irrelevance proposition was essentially universally accepted as correct under their assumptions [of neutral tax treatment and full information]’.

Brickley and McConnell go on to discuss reasons why shareholders might not be totally indifferent to dividend flow, such as the considerations of corporate governance mentioned above. However, the idea that retained earnings should be disregarded in the valuation of an enterprise, or treated as being less valuable to shareholders than earnings paid out as dividends, is generally recognised as a fallacy.

Privatisation is desirable because it permits government to reduce debt

A number of Australian governments have pursued policies aimed at reducing or eliminating financial debt. Privatisation and private ownership of public infrastructure are often advocated as a way of achieving this target.

Other things being equal, a reduction in debt is desirable for governments, as it is for households or private business. However, a focus on debt as such is irrational for a

government just as it would be for a household or a private business. What matters, as the Commonwealth Commission of Audit and others have observed, is net worth. A reduction in debt achieved by selling off income-earning assets will not, in general, increase net worth. If the interest savings achieved by selling assets and reducing debt are less than the income generated by the assets in question, net worth will be reduced, not increased, by asset sales.

Opponents of privatisation of any particular enterprise must support wholesale nationalisation

Rather than dispute the argument that the loss of income from privatisation of ETSA and other government enterprises will exceed the interest savings arising from the use of privatisation proceeds to repay debt, a number of opponents of privatisation (Hathaway 1997; Ergas 1998) have resorted to the form of argument known as *reductio ad absurdum*, claiming that anyone opposed to privatisation of ETSA (or any other proposed privatisation) must support nationalisation of all existing private enterprises.

If Hathaway and Ergas are correct, the only consistent policy options available to us are complete privatisation or complete nationalisation. This is a surprising claim, since Australia has always had a mixture of public and private ownership and this 'mixed economy' enjoyed bipartisan support for many decades.

Furthermore, the economic performance of the mixed economy in the 1950s and 1960s was the best observed at any time in history. By contrast, both comprehensive nationalisation, which was closely approximated by the Soviet economy, and comprehensive private ownership, which prevailed in most countries before World War II, produced very poor economic outcomes.

The fallacy in the argument put forward by Hathaway and Ergas is obvious. A comparison of the income accruing to government from ownership of ETSA with that which would be derived from privatisation shows that continued public ownership is preferable. However, in other cases, a similar comparison of income from public ownership and interest savings from lower debt may show that public ownership is not desirable.

Australia will be best served by maintenance of the mixed economy and not by adoption of either of the extremes proposed by Hathaway and Ergas.

Privatisation policies contributed to economic 'miracles' in the United Kingdom and New Zealand

The first major privatisation in the OECD was the sale of British Telecom by the Thatcher government in 1985. This privatisation occurred in the early stages of a strong economic expansion in the United Kingdom, which was widely attributed to the adoption of policies of radical economic reform and referred to as the 'Thatcher miracle'. Similarly, privatisation in New Zealand in the late 1980s was accompanied by strong productivity growth which was seen as creating the potential for strong and sustained economic growth.

The apparent improvement in economic performance contrasted with relatively poor economic performance over the post-war period, as a result of which both countries were ranked around 20th place in 'league tables' of income per capita (Such rankings vary slightly with the choice of measure, and the set of countries under consideration.), whereas they had been among the richest countries in the immediate postwar period. It was widely anticipated that the economic 'miracles' generated by radical reforms such as privatisation would enable the United Kingdom and New Zealand to regain a position of leadership in income per capita. Since Australia had a similar history of decline in income per capita, relative to other developed countries, it was widely claimed that we should adopt policies similar to those of the United Kingdom and New Zealand.

It is now generally recognised that the 'economic miracles' of the 1980s were mere cyclical fluctuations — the 'Thatcher miracle' is now generally referred to in the United Kingdom as the 'Lawson boom' after the Chancellor of the Exchequer whose fiscal and monetary policies generated an unsustainable expansion. Both the United Kingdom and New Zealand experienced severe recessions in 1989-91, as did Australia.

Nevertheless, as the United Kingdom and New Zealand have enjoyed the usual cyclical recovery from recession, claims that economic reform has generated large benefits

have been revived. An analysis of economic performance over the entire period since reform, as opposed to the cyclical recovery of the past few years, is sufficient to refute these claims. The United Kingdom has experienced growth rates slightly above those for the OECD as a whole over the period since the election of the Thatcher government in 1979, as has Australia. This is consistent with the hypothesis of 'convergence' which states that, other things being equal, growth will be faster in countries with lower initial income.

Economic performance in New Zealand has been far worse than in other OECD countries. Per capita income has fallen by about 15 per cent relative to Australia, and the gap is widening. The experience of New Zealand does not support the hypothesis that radical economic reform such as widespread privatisation leads to improved economic performance.

Public enterprises are necessarily unprofitable

Considerable attention has been paid to studies of privatisation undertaken by the World Bank, summarised by Kikeri, Nellis and Shirley (1992). However, this work has little relationship to the question of whether South Australian taxpayers would benefit from privatising enterprises such as ETSA. Most of the analysis deals with privatisation in less developed countries where state-owned enterprises (SOEs) have been chronically unprofitable. The only example of a major privatisation in an OECD country that is considered is that of British Telecom². Thus, the principal reason for privatisation offered by Kikeri et al. (p. 15) is that ‘

evidence from a wide variety of countries shows that far too many SOEs have been inefficient and have incurred heavy financial losses ... In many countries SOEs have become an unsustainable burden on the budget and banking system, absorbing scarce public resources’.

² While the World Bank takes a very favourable view of the sale of British Telecom, it is forced to concede that the government lost money and that there was a significant decline in quality of services, which was only remedied by the reimposition of regulation.

This analysis is clearly not applicable to Australian government business enterprises in general or ETSA in particular. Not only are most public enterprises profitable, but unprofitable public enterprises are generally considered unsaleable. This point is illustrated by the shipping line ANL, an unprofitable enterprise of which the responsible minister, Mr. Brereton is reported to have said 'You couldn't give it away.'

In assessing the profitability of government business enterprises, it is important to recall that, unlike private corporations, many government business enterprises have not operated with a profit-maximisation objective. Before the election of the Thatcher government, public owned business enterprises in the United Kingdom were normally required to break even but not to yield a commercial return on capital. Furthermore, most government business enterprises were required to pursue social objectives inconsistent with profit maximisation, such as the preservation of jobs and the provision of unprofitable services. One effect of microeconomic reform has been to remove these requirements, and replace them with a direction to maximise profit, subject to the satisfaction of narrowly defined community service obligations. Where this requirement has been imposed, profits have, in most cases, increased rapidly, with rates of return to capital approaching or exceeding those of comparable private enterprises.

The process of converting government business enterprises into profit-maximising firms has been implemented systematically in Australia through the *Competition Policy Reform Act 1995* (Cwlth), generally referred to as the 'Hilmer reforms', which requires state government services to be provided on a commercialised or corporatised basis or to be subject to penalties such as the withdrawal of Commonwealth grants. Although this process is logically consistent with privatisation, Hilmer (1995), claims that competition policy does not imply a requirement for privatisation.

Privatisation is internationally popular and therefore correct

In recent years, policies of privatisation have been adopted by governments in many

countries. Australian advocates of privatisation have used the 'argument from fashion', namely that a policy so popular must be correct. To refute this argument, it is sufficient to note that policies of nationalisation and expanded public ownership were equally popular in the 1950s and 1960s.

More generally, it may be observed that policy ideas enjoy international vogues in much the same way as do fashions in clothes. In economic policy, for example, the last thirty years have seen Keynesian fiscal policies replaced by monetary targeting based on Friedman's theories of monetarism. These in turn were displaced by the theory of rational expectations and then by real business cycle models. Currently most policy makers favour policies based on inflation targets, but these are being challenged by advocates of rules incorporating multiple objectives. Clearly, it is impossible that all of these ideas could be right, but all of them have enjoyed the same international popularity that is now accorded to privatisation.

The allocation of risk

A critical issue in evaluating the desirability of public and private ownership is the appropriate allocation of risk. Government business enterprises in Australia have a long history of undertaking risky investments, in general with a high degree of success. On the other hand, notably failures of publicly owned enterprise, such as those of the State banks of South Australia and Victoria may be traced primarily to inappropriate decisions regarding risk. Advocates of privatisation have claimed that it will free taxpayers from the risk associated with ownership of business enterprises. However, they have in general confused enterprise-specific risks, which are best handled by private enterprises, with regulatory and systematic risks, which are best handled by governments.

Enterprise-specific risk

Enterprise-specific risk is derived from factors specific to a given enterprise, such as the effects of good or bad management or of demand fluctuations in particular markets. Enterprise-specific risk for one enterprise is uncorrelated with the enterprise-specific risks facing firms in general or with fluctuations in the economy as a whole. Because enterprise-specific risks are uncorrelated, when a large number of enterprises subject only to enterprise-specific risks are combined the aggregate rate of return will display very little risk. The capacity to pool risk through private mechanisms, such as insurance and portfolio diversification, mean that enterprise-specific risk, *qua* risk, is unimportant in evaluating the market value of a enterprise or enterprise.

However, the existence of enterprise-specific risk gives rise to agency problems, which are analysed by economists using principal–agent theory (Laffont 1989, Chapter 11). The theoretical framework for principal–agent theory is based on the idea of a productive activity characterised by enterprise-specific risk. Agency problems arise when one party (the agent) undertakes a enterprise on behalf of another party (the principal). The agent has private information about the outcomes of enterprise-specific risk. If returns are uncertain and the agent has private information or some other strategic advantage, it will be preferable, other things being equal, for the agent to bear the risk associated with the venture. If the risk is assumed by the principal, the agent will have an incentive to shirk or to divert some of the assets to private uses, then to claim that the bad outcomes of the venture were simply the result of bad luck.

The central implication of the principal–agent literature is that, where possible, the party that has most control over risk should be the owner, that is, the recipient of the residual income. In cases where enterprise-specific risk is associated with response to firm-specific market conditions or with management skill, the implications of principal–agent theory support private ownership.

Regulatory risk

Regulatory risk is the risk arising from changes in government policy, including public authorities established to regulate particular sectors of the economy. For firms operating in competitive markets, regulatory risk is normally a fairly minor concern. However, for firms in natural monopoly industries, such as electricity distribution, or in closely related activities such as electricity generation, regulatory risk is crucial. The returns to electricity distribution will be determined directly by the decisions of regulators. Although regulation does not directly determine the returns to generation, decisions regarding the structure of electricity pool markets are the primary determinants of the long-run average returns to participants in those markets.

Systematic risk

Systematic risk refers to the risk associated with fluctuations in aggregate output. Because systematic risk is correlated across projects, it is not eliminated by risk pooling. Nevertheless, market mechanisms such as portfolio diversification mean that systematic risk can be spread. A number of studies have shown that the private capital market does not spread systematic risk perfectly. As a result, the equity premium (the difference between the rate of return on equity capital and the rate of return on low-risk assets, such as high-quality bonds) is larger than it would be under the 'efficient markets' hypothesis. The efficient markets hypothesis, which is equivalent to the assumption of zero transactions costs, is implicit in much current advocacy of privatisation and private sector infrastructure provision.

The equity premium may be explained as the result of imperfect risk-spreading by private sector capital markets and the existence of transactions costs which restrict borrowing and lending (Mankiw, Lucas and Heaton). Public ownership implies a capacity to spread risk through the tax system, thereby providing a degree of insurance against systematic risk. The superior capacity of governments to bear systematic risk implies the desirability of public ownership of capital-intensive enterprises such as those in the infrastructure sector.

Summary

In view of ETSA's long and successful history under public ownership, enterprise risk does not appear to be a significant problem. The primary sources of risk faced by ETSA are regulatory and systematic and these risks are best handled in public ownership.

Future earnings prospects for ETSA

Costs

ETSA staff numbers have been greatly reduced in recent years. In 1991, ETSA had 5186 employees. In 1997 its successor corporations had only 2470. However, the associated reductions in costs have been offset, in the short term, by payments to workers including accumulated leave entitlements, superannuation and special redundancy payments. In 1995-96, such payments contributed \$30 million to operating expenses and a further \$17 million to abnormal expenses. Once employment has stabilised at a reduced level, special payments of this kind will cease, and labour costs will therefore decline further. The effect of staff reductions has been to reduce avoidable costs (that is, costs other than depreciation, interest and fuel purchases) from \$350 million in 1991 to \$260 million in 1996, at a time when sales and revenues have been increasing steadily.

Apart from labour, the major variable cost for an electricity enterprise is the cost of fuel. The South Australian electricity industry currently faces high fuel costs, compared to those of other states because of reliance on relatively expensive Leigh Creek coal and because of the existence of 'take or pay' gas contracts requiring the purchase of gas at relatively high prices. A significant reduction in costs could be achieved if gas contracts were renegotiated, and it seems likely that such a reduction will take place in the future. Reductions in the cost of coal are more problematic.

Price and quantity risk

On past experience, it seems reasonable to predict that the quantity of electricity consumed in South Australia will grow roughly in line with gross state product. The monopoly status of distribution and transmission components of the enterprise means that sales are equal to total consumption. On the other hand, the creation of a national electricity market means that electricity generators and retailers are subject to potential competition from new entrants or interstate suppliers. In the absence of a significant increase in prices (which would obviously raise the profits of existing firms) it seems unlikely that large new generators will enter the national market, and particularly unlikely that any new entrants will choose to locate in South Australia. Hence the main risk faced by generators is the loss of market share to interstate suppliers.

Generation costs are higher in South Australia than in other states. A simple model of cost-minimising provision of electricity implies that electricity should be imported up to the maximum capacity of the interstate connection, and that South Australian generators should supply the remainder of the market. Practical considerations, such as the fact that it is costly to stop and restart coal-fired generators mean that an optimal policy will differ somewhat from this simple model.

A properly functioning electricity market will yield an outcome similar to that which would be achieved by an ideal 'merit order' allocation. Interstate generators with low marginal costs will, in general, be able to underbid South Australian generators. Thus, it is to be expected that South Australia will be a net importer of electricity in a competitive national market.

However, this is already the case. South Australia imported electricity under the Interconnection Operating Agreement prevailing until 1996, and continues to import electricity from the national pool. The primary constraint is not the existence of restrictions on competition but the limited capacity of the interconnection with the national grid. Hence, there is little likelihood that South Australian generators will face significant quantity risk in the short or medium term. The development of a national grid raises the possibility that increased electricity demand in South Australia could be met by an expansion of the

capacity of the interconnection rather than by the construction of new generating plants. However, this possibility does not significantly affect the value of existing generating assets, whether these are privatised or remain in public hands.

The risk that ETSA will lose retail markets to competitors has been emphasised by advocates of privatisation. This is doubtful. Evidence from reforms in areas such as telecommunications suggests that, in the absence of discrimination against incumbent firms, monopolies subject to competitive entry have retained market dominance for long periods. For consumers, the advantage of dealing with a single supplier offsets minor cost reductions that competitors can supply.

More importantly, all suppliers of electricity must use ETSA's distribution network. The charge for access to this network will be determined by regulation, which is supposed to ensure that distributors earn adequate returns on capital. Unless the access charge is set at a rate which permits supernormal profits to be made in retail activities, the question of whether retailing is undertaken by ETSA or by another firm is of little moment as far as profitability is concerned. Indeed, it is likely that, if ETSA retains retail market dominance, many retail services will be contracted out in any case.

Regulatory risk

The most significant risk facing ETSA as a result of the introduction of the National Electricity Market is regulatory risk, that is, the possibility that regulators will make decisions which have the effect of setting electricity prices at levels so low as to reduce ETSA profits below sustainable levels. The most obvious possibility is that the access price for use of the ETSA distribution network may be set at a level that does not yield an adequate return to capital. Unless such a decision discriminated specifically against ETSA, it is likely that it would also render unprofitable the publicly owned distributors in New South Wales and Queensland, and more significantly, the privatised Victorian distributors. In the latter case, high purchase prices were paid for, in large measure, through the use of debt and non-recourse loans, leaving little capacity to bear reductions in income imposed by

regulation.

In assessing the risk of adverse regulatory outcomes, it is important to remember that the regulatory framework is itself the product of agreements between the Commonwealth and state governments. When these agreements were made it was repeatedly stated that they did not imply any requirement for privatisation. In any case, it is paradoxical in the extreme to suggest that governments should artificially create risk for themselves, then use that risk as a justification for divesting themselves of profitable assets.

Medium-term projections of the fiscal impact of privatisation

To compare the likely effects of privatisation and continued public ownership, three projections have been considered. The first, referred to as the central projection, is based on the assumption that the trend of the last few years will continue, with total revenue rising by around 1 per cent per year in real terms. The second, referred to as the low projection, incorporates an immediate 5 per cent reduction in gross revenue and an annual decline of 1 per cent in real revenue. This projection incorporates both a drop in prices and a significant loss in market share, around 20 per cent over ten years, arising from the introduction of the National Electricity Market. Bearing in mind that ETSA has an unchallenged monopoly in transmission and distribution and that the competition in generation is limited by interconnection capacity, this projection allows for very poor performance in markets open to competition. The third, referred to as the high projection, is based on the assumption that real revenue will grow in line with gross state product, at a rate of around 3 per cent per year. This is consistent with experience over the medium term, and incorporates an assumption that any loss of South Australian retail markets will be offset by gains in other markets. This would be a better-than-expected, but not improbable outcome. Although the actual outcome will doubtless be different from any *ex ante* projection, the central projection appears to be the most reasonable, at least assuming a stable regulatory outcome.

Tables 1-3 show estimates of revenue, expenses and profits for ETSA (including ETSA generation) under the three projections. It is assumed that reductions in employment

continue, but at a slower pace, consistent with natural attrition, and that unit costs of gas decline in real terms. Other variable costs are assumed to grow in line with revenues. Columns 2 and 3 show projected revenues and costs (excluding interest) for the financial year shown in Column 1. Column 4 represents earnings before interest and tax. Column 5 shows tax equivalent payments and for the period up to 1997, the statutory levy. The sum of columns 4 and 5, shown in Column 6, is the flow of income to South Australian taxpayers, including dividends, retained earnings, interest and tax payments.

Table 1: Projections of revenue and profit ETSA

Medium projection					
Year ending June 30	Revenue (\$m)	Expense (\$m)	EBIT ^a (\$m)	Taxes (\$m)	Total ^b (\$m)
1996	913	436	257	99	299
1997	937	426	299	117	439
1998	961	433	363	98	363
1999	986	439	382	107	382
2000	1011	446	394	112	394
2001	1038	453	406	117	406
2002	1064	460	419	122	419
2003	1092	468	432	128	432
2004	1120	476	445	133	445
2005	1149	484	458	139	458
2006	1179	493	471	144	471
2007	1209	502	485	150	485

a: Earnings before interest, tax and abnormal and extraordinary items

b: Company tax equivalent paid to SA government and statutory levy for 1996 and 1997

c: Includes abnormal items for 1996 and 1997

Table 2: Projections of revenue and profit ETSA

Low projection					
Year ending June 30	Revenue (\$m)	Expense (\$m)	EBIT ^a (\$m)	Taxes (\$m)	Total ^b (\$m)
1996	913	436	257	99	299
1997	937	426	299	117	439
1998	899	427	307	78	307
1999	908	427	315	83	315
2000	917	428	322	89	322
2001	926	429	329	95	329
2002	935	429	336	101	336
2003	945	430	343	107	343
2004	954	431	350	114	350
2005	964	432	357	120	357
2006	973	432	365	127	365
2007	983	433	372	135	372

a: Earnings before interest, tax and abnormal and extraordinary items

b: Company tax equivalent paid to SA government and statutory levy for 1996 and 1997

c: Includes abnormal items for 1996 and 1997

Table 3: Projections of revenue and profit ETSA

High projection					
Year ending June 30	Revenue (\$m)	Expense (\$m)	EBIT ^a (\$m)	Taxes ^b (\$m)	Total ^c (\$m)
1996	913	436	257	99	299
1997	959	431	317	117	457
1998	1007	444	397	111	397
1999	1057	459	433	125	433
2000	1110	474	464	137	464
2001	1166	490	497	151	497
2002	1224	508	531	165	531
2003	1285	526	567	179	567
2004	1349	545	605	195	605
2005	1417	565	645	212	645
2006	1488	587	686	230	686
2007	1562	609	730	249	730

a: Earnings before interest, tax and abnormal and extraordinary items

b: Company tax equivalent paid to SA government and statutory levy for 1996 and 1997

c: Includes abnormal items for 1996 and 1997

Impact of privatisation

The projections presented in Tables 1-3 may be used as the basis for an assessment of the financial impact of privatisation. For illustrative purposes, a sale price of \$5 billion for the state's electricity assets has been assumed. This is in the middle of the range of public estimates. However, the relevant value for a comparative analysis is the price net of any expenses associated with the sale. Privatisation is assumed to take place in 1997-98. Assuming an interest rate of 6 per cent, and that all privatisation proceeds are used entirely to repay debt, use of sale proceeds repay debt will yield annual savings on public debt interest of \$84 million.

As noted above, it is assumed that debts to the South Australian Government Financing Authority are extinguished prior to sale, so these debts do not represent a deduction from the sale price. However, it is necessary to take account of provisions of around \$300 million for superannuation which is not part of state debt and would presumably not be absorbed by a buyer. In addition, costs of sale are likely to be around 1 per cent of the gross proceeds. Finally, it is necessary to take account of the value of any contingent guarantees against adverse tax or regulatory outcomes. Such guarantees have been provided in previous privatisations, and have been called upon in a number of cases.

Table 4 is derived from the moderate projections presented in Table 1. With net sale proceeds of \$5 billion, the profits foregone as a result of privatisation consistently exceed the interest savings. By 2007, the present value of net loss is approximately \$900 million.

Table 4: Impact of privatisation on public income^a

Central Projection				
Year ending June 30	Total Income (\$m)	Interest saving (\$m)	Effect of privatisation (\$m)	Present value ^b (\$m)
1998	363	300	-63	-60
1999	382	300	-82	-133
2000	394	300	-94	-211
2001	406	300	-106	-296
2002	419	300	-119	-385
2003	432	300	-132	-478
2004	445	300	-145	-574
2005	458	300	-158	-673
2006	471	300	-171	-775
2007	485	300	-185	-878

a: Assumes net sale proceeds of \$5 billion

b: Cumulative present value of net impact of privatisation

Table 5 is derived from the low projections presented in Table 2. Even with this unfavourable outcome, the profits foregone as a result of privatisation exceed the interest savings. By 2007, the present value of net loss is approximately \$250 million.

Table 5: Impact of privatisation on public income^a

Low Projection				
Year ending June 30	Total Income (\$m)	Interest saving (\$m)	Effect of privatisation (\$m)	Present value ^b (\$m)
1998	307	300	-7	-7
1999	315	300	-15	-20
2000	322	300	-22	-39
2001	329	300	-29	-62
2002	336	300	-36	-89
2003	343	300	-43	-120
2004	350	300	-50	-153
2005	357	300	-57	-189
2006	365	300	-65	-228
2007	372	300	-72	-268

a: Assumes net sale proceeds of \$5 billion

b: Cumulative present value of net impact of privatisation

Table 6 is derived from the high projections presented in Table 6, in which revenue grows in line with gross state product. Even with this unfavourable outcome, the profits foregone as a result of privatisation exceed the interest savings. By 2007, the present value of net losses exceeds \$1.7 billion. This is an indication of the scale of the losses that could be incurred as a result of privatisation. Most previous privatisations, occurring after a process of efficiency gains achieved under public ownership have generated losses on a similar scale.

Table 6: Impact of privatisation on public income^a

High Projection				
Year ending June 30	Total Income (\$m)	Interest saving (\$m)	Effect of privatisation (\$m)	Present value ^b (\$m)
1998	397	300	-97	-92
1999	433	300	-133	-211
2000	464	300	-164	-349
2001	497	300	-197	-505
2002	531	300	-231	-678
2003	567	300	-267	-866
2004	605	300	-305	-1069
2005	645	300	-345	-1285
2006	686	300	-386	-1514
2007	730	300	-430	-1754

a: Assumes net sale proceeds of \$5 billion

b: Cumulative present value of net impact of privatisation

The same method of analysis may be applied for a range of possible sale prices. In Table 7, summary results are presented for each of the three projections with the sale price ranging from \$4 billion to \$7 billion. As shown above, even under the low projection, the interest savings from privatisation are less than the income foregone when the sale price, net of selling costs, is \$5.5 billion or less. If the central projection is taken as a ‘best guess’ estimate, a sale price of more than \$7 billion would be required to generate a sustained net improvement in the state’s fiscal position. If sale proceeds are between \$5.5 billion and

\$6.5 billion, short-term net benefits will be more than offset by long-term losses. This reflects the fact that interest savings are fixed in nominal terms, while income foregone is likely to rise over time. Even at these prices as high as \$7 billion, there is still a significant risk of loss associated with privatisation, as is shown by the high projection.

Table 7: Impact of privatisation on public income for a range of sale prices

Sale price ^a (\$m)	Interest saving (\$m)	Effect under <u>Central projection</u>		Effect under <u>Low projection</u>		Effect under <u>High projection</u>	
		Initial	Present value	Initial	Present value	Initial	Present value
4000	240	-123	-1319	-67	-710	-157	-2196
4500	270	-93	-1099	-37	-489	-127	-1975
5000	300	-63	-878	-7	-268	-97	-1754
5500	330	-33	-657	23	-47	-67	-1533
6000	360	-3	-436	53	174	-37	-1312
6500	390	27	-215	83	394	-7	-1092
7000	420	57	5	113	615	23	-871

a: Net of sale costs and provisions

Concluding Comments

Privatisation has been an attractive financial expedient for governments seeking to deliver unfunded tax cuts or to make cosmetic improvements to measures of the budget deficit and public debt. However, experience in the United Kingdom, New Zealand and Australia has shown that the long-term losses to the public sector from privatisation greatly exceed the once-off value of sale proceeds, even where these are used exclusively to repay debt.

The analysis presented here shows that a similar outcome can be expected from the privatisation of ETSA. Under a projection in which real revenues grow at 1 per cent per year, it is shown that a sale price of \$7 billion would be required to compensate taxpayers for the loss of income from ETSA. Even under a projection incorporating price reductions and loss of market share, a break-even price of \$6 billion is required. Under a projection in

which revenue growth is maintained in line with state gross product, privatisation would entail losses of more than \$1 billion in the first ten years.

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