SUBMISSION TO

THE QUEENSLAND PARLIAMENT TRANSPORT AND PUBLIC WORKS COMMITTEE

INQUIRY INTO

THE OPERATIONS OF TOLL ROADS IN QUEENSLAND

(Revised 8 August 2018)

Stephen Morris

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1. INTRODUCTION

This submission has been prepared for the Transport and Public Works Committee Inquiry (the "Inquiry") into the operations of toll roads in Queensland. It addresses the following terms of reference:

- (a) the operation of existing toll roads in South-East Queensland;
- (b) toll pricing and incentive options to deliver better outcomes for Queenslanders; and
- (d) possible measures to continue to improve customer service standards.

The submission addresses issues concerning the private financing and ownership of tolling concessions. Specifically it:

- sets out the background to road tolling in Queensland and the evolution of privatisation programs;
- examines using actual example the commercial and political realities of dealings between private firms and government agencies, including in particular the role of "independent" advisers;
- sets out the economic theory for assessing the efficiency of private ownership;
- illustrates the actual cost of road privatisation using publicly available information;
- discusses the cost of capital both in theory and in practice, especially as it applies to toll roads;
- critically examines arguments commonly used to justify privatisation;
- places modern road tolling in the historical context of tax farming;
- provides examples of alternative models of privatisation; and
- discusses alternative sources of revenue, including road pricing revenue.

I would particularly like to draw the Committee's attention to Attachment A which summarises the findings of the United Kingdom National Audit Office reports of 2003 and 2018 concerning the private financing of infrastructure.

The submission has been prepared by a retired investment banker with experience of infrastructure financing – and specifically of toll road financing – both in Australia and overseas.

The submission argues:

- that the issues of:
 - *- tolling*;
 - private *financing* (which may include private debt financing without private ownership); and
 - private *ownership*,

should be distinguished and considered separately;

- that Queensland had a perfectly satisfactory system of publicly owned toll roads, including the Gateway Bridge and Logan Motorway, from 1986 until the privatisation of Queensland Motorways in 2014. These facilities were operated for the public benefit with revenues available to be re-invested in the road system. The problems which have led to the establishment of this present Inquiry are not problems of tolling *per se* but of private ownership;
- that the privatisation of Queensland's toll roads failed to properly address the types and sources of efficiency in infrastructure;
- that for technologically mature, capital intensive assets such as roads the most important source of efficiency is financing efficiency, and that the State is the most efficient financier;
- that private *financing* of infrastructure monopolies in general is often (although not always) an unnecessarily expensive means of finance which:
 - provides no efficiency gains which cannot be obtained by other means;
 - is detrimental to efficient capital rationing and accountability by allowing debt to be effectively hidden off budget;
 - imposes unnecessary additional costs on infrastructure users, including in particular small businesses, and reduces overall economic efficiency;
 - is subversive of the system of transparent tendering the cornerstone of accountability in the provision of public works and this defect cannot be overcome by the use of supposedly "independent" experts to assess projects;
 - produces an environment conducive to cronyism, capture and corruption;
 - is corrosive of public trust in the institutions of government;
 - allows governments to avoid addressing the underlying fiscal problem which is the inadequacy of current taxing arrangements, especially in relation to the taxation of economic rent; and

- has been severely criticised in other jurisdictions, in particular in two reports by the United Kingdom National Audit Office which comprehensively debunk almost every claim made in support of private finance;
- that proposals for private financing of infrastructure be assessed according to the "Ryrie Rules";
- that the methodology for comparing public and private *ownership* of infrastructure is systematically flawed because it does not adequately account for the value of "real options" given away with a private equity interest, and that this is especially the case with network assets such as roads;
- that the private *ownership* of tolling concessions (i.e. the transfer of an equity interest in road tax revenues to private "tax farmers") is especially detrimental to the interests of Queenslanders and the Queensland economy because:
 - it represents an irrational and unnecessarily expensive allocation of risk to parties which cannot manage that risk and which charge an exorbitant premium for accepting it;
 - it gives away for no consideration valuable real options to benefit from expansion of the road network in future; and
 - it limits the flexibility of future governments to deal with technological developments in relation to economically efficient road pricing;
 - that there are other more economically efficient models of ownership and financing available, including "semi-private" models;
 - that:
 - the practice of "commercial-in-confidence" secrecy surrounding privately financed public works projects has no justification and should be abolished; and
 - underlying construction and financing costs of such projects should be as transparent as under the traditional system of competitive public tendering and public bond financing;
- that former public officials and Ministers involved in the award of private infrastructure projects should be prohibited from taking remunerative employment either in the industry or from the associated construction and finance industries, as this practice is especially corrosive of public trust in the institutions of government;
- that the underlying fiscal problem facing Queensland (and other jurisdictions) is a failure to collect sufficient tax especially tax on economic rent and that ultimately it is unsustainable to paper over that problem through the sale of monopolies and tax farms, and by pushing borrowings off-budget;

- that it is likely in the near future that tolling will become obsolete and will be replaced by a comprehensive system of road pricing which has the potential to promote economic efficiency;
- that it would be hugely detrimental to the people of Queensland if such a system of comprehensive road pricing were to fall into the hands of a politically powerful private monopolist. Motorists would find themselves being forced to pay a private company the moment they left their driveway. It would undermine the very notion of freedom of movement as we currently know it; and
- that existing road tax farms should be re-purchased by the State on terms which provide minimal super-profits to the current tax farmers, and that the cost of this should be met by new and more efficient taxes such as (publicly administered) road pricing and taxes on economic rent.

In summary, if one set out to devise a transaction which would:

- create the greatest unnecessary costs for the motorists and taxpayers of Queensland;
- while producing no net efficiency gains;
- at the same time limiting the flexibility of future governments to deal with traffic growth and technological change;
- while also subverting the system of transparent competitive tendering and undermining trust in government,

one could not come up with anything better than to sell an equity interest in toll roads.

The Committee will no doubt hear from parties seeking to defend the private toll road industry and the private financing of infrastructure in general. Members of the Committee may like to ask two questions of all such submissions:

• do they come from people who have both practical experience and theoretical knowledge of infrastructure finance?

On the one hand, there are academic economists with simplistic models of privatisation who lack firsthand experience of how privatisation works in practice. On the other hand, there are practitioners who have experience of putting together deals but lack an economic understanding of the direct and indirect consequences of these transactions; and

• what is the agenda of the parties making these submissions? Are they motivated by private gain, or the prospect of private gain?

This is especially relevant to submissions from industry participants as well those submissions – possibly from purported experts – which have been commissioned by and paid for by industry participants.

Members of the Committee may care to examine submissions from professional advisory firms and contemplate how many of these are designed merely to ingratiate the authors with potential industry clients or with the State Government.

The Committee may expect to encounter many attempts to discredit, dismiss, or silence any critical examination of the private toll road industry and of infrastructure privatisation in general. I would invite members of the Committee to ask:

- whose agenda is being promoted by these attempts?
- what is the motivation of those doing so?

For my own part, my motivation is to bring to the attention of the Parliament matters of which I have some theoretical knowledge and to which I have had some practical exposure.

A quarter of a century ago my colleagues and I fought to prevent the very situation which has now come to pass. The precise predictions we made then have proved depressingly prescient. I hope this submission may help begin the process of reversing the mistakes of the past.

2. BACKGROUND

This section sets out some background to provide context for the remainder of the submission.

Queensland toll roads

The modern era of road tolling in Queensland began with the opening of the Gateway Bridge in January 1986. While ostensibly a "private" company, the Gateway Bridge Company was in effect publicly owned. A management agreement with the State guaranteed its working capital – thereby effectively guaranteeing its loans – and in return required surplus cash to be returned to the Treasury thereby ensuring that the beneficial equity interest in the Company remained with the State.

The reason for this awkward financing structure was the system of quantitative borrowing limits administered by the Australian Loan Council. Under the rules as then applied the borrowing of the Gateway Bridge Company were regarded as being outside the State's Global Borrowing Limit.

The success of the Gateway Bridge Company led to the creation of the Logan Motorway Company and the Sunshine Motorway Company. Under the Goss Government these were amalgamated under the umbrella of Queensland Motorways, although still effectively publicly owned.

Tolls on the Sunshine Motorway were removed in the mid-1990s by the Borbidge Government, the Treasurer at that time being the local member.

The spectacular profits earned by private toll roads in Sydney and Melbourne and the irrational financial exuberance immediately preceding the Global Financial Crisis led to a boom in private toll roads, not unlike the British Railway Boom of the 1840s. This saw the creation of two private companies to build what are now known as the Clem7 and the Airport Link. Both of these companies eventually failed due to over-optimistic traffic forecasts and excessive reliance on bank debt which could not be serviced in the short run.

Both of the failed companies were eventually acquired by Queensland Motorways.

The failure of these private toll road companies has led Australian bankers to adopt a "nolose" approach to privatisation under which taxpayers are asked to accept the risks of toll road development and investors buy the resulting "tax farms" on terms which expose them to minimal risk but give them the opportunity to benefit from any future renegotiations. This has been seen¹ both in Legacy Way in Brisbane and Westconnex in Sydney.

The privatisation of Queensland Motorways – along with other public assets - was first floated by the Bligh Government in 2009. However, the company was sold not to external owners but was transferred to Queensland Investment Corporation in 2011.

The sale of Queensland Motorways and Legacy Way to interests associated with Transurban took place under the Newman Government in 2014.

¹ To the extent that public information allows us to know.

It is worth noting that road tolling under public ownership in Queensland worked successfully for almost 30 years, with the proceeds from road tolls available for re-investment in the road network or for distribution to Treasury.

The very fact that this Inquiry has been commissioned is evidence of the problems that arise when ownership of strategic network assets is sold to companies which are determined profitmaximisers. A reasonable person might reasonably conclude that:

- it has created conflicts of interest which did not previously exist;
- it has produced no efficiency gains, but rather (as discussed later) has led to efficiency losses; and
- it has undermined public confidence in the institutions of government.

The issue facing this Inquiry is not tolling *per se*. Tolling worked successfully for many decades. The issue facing this Inquiry is the grave and continuing policy error of selling private *ownership* of road tolling tax farms.

Private financing without private tolling

Just as tolling can exist without private finance, so private finance can exist without private tolling or without any tolling at all.

It is possible to privately finance a road through availability payments made by government to the private financier in the same way that government departments may lease office space from private landlords². The road might even be tolled, with revenues collected by the State or by some semi-private entity. Such arrangement need to be considered on their merits according to the "Ryrie Rules".

Again, this highlights that the issue of tolling is distinct from the issue of private ownership of tolling revenues. Again, the issue facing this Inquiry is the grave and continuing policy error of selling private *ownership* of road tolling tax farms.

The Ryrie Rules

The Ryrie Rules were developed by Treasury official Sir William Ryrie during the era of "economically rational" privatisation in the mid-Thatcher years before the program was subverted by the private infrastructure lobby and the "Private Finance Initiative" of the Major Government, and even more so by the Blair and Brown Governments.

² Some proposals involve "shadow tolling" in which government pays an amount per vehicle. In financial terms, pure shadow tolling is highly inefficient because it transfers to the private financier the very risk that it is unable to manage. A small shadow toll to cover the marginal cost of each vehicle is more justifiable but would go nowhere near covering the capital cost of a road.

As they inform much of this submission, I have re-stated the rules here. The Ryrie Rules required that³:

- decisions to provide funds for investment should be taken under conditions of fair competition with private sector borrowers;
- any links with the rest of the public sector, Government guarantees or commitments, or monopoly power should not result in the schemes offering investors a degree of security significantly greater than that available on private sector projects; and
- such projects should yield benefits in terms of improved efficiency and profit from the additional investment commensurate with the cost of raising risk capital from financial markets.

Then underlying principles of the Ryrie Rules were⁴:

- private finance could only be introduced where it offered cost effectiveness; and
- privately financed projects for public sector programs had to be taken into account by the Government in its public expenditure planning.

It is the contention of this author that the sale of private ownership of road tolling tax farms has breached the Ryrie Rules to such a degree that serious consideration should be given to reversing it before any more damage is done.

About the author

From 1982 to 1995 I was employed in the Corporate Finance Divisions of Schroders Australia investment bank, at that time a subsidiary of Schroders plc, initially in the Sydney office and later in London and Brisbane.

From 1987 to 1988 I was seconded to the London office of Schroders plc to work in the International Projects Department.

My period in London coincided with the era of economically rational privatisation in the mid-Thatcher years, Specifically, it occurred during the era of the Ryrie Rules.

In 1988 I returned to Sydney and until 1993 was part of the project finance team working under its director David Lennon in the fields of corporatisation, privatisation and infrastructure finance, especially in relation to roads and the electricity industry.

During this period I was fortunate to work extensively with the French group Transroute (not to be confused with Transurban or Transfield) which represented the highly successful association of (then) publicly-owned toll road companies in France⁵. As a result I was

³ Graheme Allen, The Private Finance Initiative, House of Commons Library Research Paper 01/117, 2001, p 13. ⁴ ibid, p14.

⁵ In 2005, the conservative French Government succumbed to pressure from the private infrastructure lobby and reorganised the French toll road industry, selling a majority stake to private investors. This brought to an end

fortunate to gain exposure not only to the narrow conventional models of privately owned infrastructure which have prevailed in Australia but also to the wider range of innovative "semi-private" financing structures used elsewhere in the world.

In January 1993 I appeared, together with Schroders' Chief Economist Brett Allender, before the Senate Select Committee on the Functions, Powers and Operation of the Australian Loan Council. Our submission⁶:

- drew attention to the important difference between *quantity* of debt and *quality* of debt (i.e. the way in which borrowed money was used and the ability to service the debt);
- drew attention to the perverse incentives created by Loan Council's quantitative borrowing limits which encouraged the use of inefficient and expensive privatisation as a means of hiding State debt off balance sheet; and
- proposed a system of capital rationing based on the maintenance of debt servicing ability as assessed by credit ratings, with quantitative limits to be applied as a sanction against States which lost their rating.

Also at this time I was actively engaged in preparing the initial financial analysis for Vicroads of the proposed Melbourne Western Bypass toll road⁷. The Western Bypass was later combined with the Southern Bypass to form the CityLink project.

During 1992 and 1993, David Lennon and I began to develop alternative semi-private models of road finance drawing on the models of semi-private ownership seen overseas. This was motivated largely by our concern at the extraordinary super-profits which seemed to be flowing from the recently opened M4 toll road as well as the non-tendered renegotiation of the M5 toll road concession on terms which seemed to us to be incomprehensibly generous. It was our belief that a semi-private alternative would provide much better value for motorists and taxpayers in the long run. Variants of this proposal were presented to road authorities in Queensland, New South Wales and Victoria.

In early 1994 I returned home to Brisbane and to the Brisbane office of Schroders where I became involved in advising the Queensland Treasury's Government Owned Enterprises unit on matters to do with capital structure, rates of return and dividend policy.

Although I had withdrawn from actively pursuing toll road proposals I was – together with David Lennon – invited to present a paper (the "AAA Paper") on road finance to the Australian Automobile Association's Land Transport Infrastructure Symposium held in Canberra on 22nd March 1994 and attended by representatives from the three eastern State road authorities and other interested parties. A copy of that paper is attached to and forms part of this submission.

the successful era of automatic re-investment of road revenues into the extension and development of the French road network.

⁶ Brett Allender, Stephen Morris, *Public Borrowing in Australia. The Function, Powers and Operation of the Australian Loan Council*, submission to Senate Select Committee on the Functions, Powers and Operation of the Australian Loan Council.

⁷ This initial report analysed a conventional privately owned structure.

The AAA Paper and its consequences are discussed in subsequent sections.

With the closure of Schroders' Brisbane office in late 1995 I withdrew from full time employment in investment banking to pursue other interests in the development of financial and technical analysis software. I continued in a consulting role until the closure of Schroders Australia Corporate Finance⁸ in 1999.

My academic qualifications are a degree in Civil Engineering with first class honours from the University of Queensland. In 1985 I completed the Securities Institute Graduate Diploma course and I am a Fellow of Finsia. Since leaving investment banking I have completed postgraduate subjects in micro and macro economics and comparative constitutional law⁹. I have not taken any further degrees.

⁸ The remainder of Schroders' investment banking operations other than funds management were subsequently sold to Citigroup. ⁹ Investigating the parallels between the mechanisms of utility regulation and those of constitutional law.

3. CITYLINK AND THE ROLE OF INDEPENDENT ADVISERS

As noted above, during 1992 and 1993 David Lennon and I began to develop alternative semi-private models of road finance which proposed using State automobile associations as owners/trustees of tolling concessions to avoid the obvious conflicts of interest associated with private ownership¹⁰. Variants of this proposal, highlighting the problems of the fully-private model, were presented to road authorities in Queensland, New South Wales and Victoria.

We received a favourable hearing from the Queensland Department of Transport but the issue was not then relevant to Queensland since it had a fully public tolling system and no plans to change it.

We received a very hostile reception from the NSW Roads and Traffic Authority and from certain officers within Vicroads¹¹.

During this period David and I were invited to a private evening meeting at the offices of a major Australia law firm which specialised in advising State road authorities. There we were warned off by one of the senior partners with the following words, "People keep saying to me, 'Why is Schroders trying to spoil the party?' "

By early 1994 David and I had largely abandoned our efforts to promote alternative financing structures. Nevertheless, because of our previous discussions with the State automobile associations, we were invited to make a presentation to the Australian Automobile Association's Land Transport Infrastructure Symposium, and on 22nd March 1994 delivered a paper entitled *Public Equity, Private Debt: The Efficient Financing of Roads* in which we:

- highlighted the problems of fully private ownership of toll roads; and
- outlined the semi-private model based upon the successful and (then) publicly owned French road system.

The most significant conclusion was:

"The conventional view is that private tolling concessions will run their term and that the roads will revert to government. This view is commercially naive. Having established a private taxing monopoly, government cannot gain access to the tax flow without either waiting for the concession to expire or negotiating (without the possibility of tender) with the incumbent monopolist. Incumbents use such renegotiations to progressively extend tolling concessions creating permanent private monopolies."¹²

¹⁰ This was based on the French *société d'économie mixte* which used local chambers of commerce and chambers of agriculture as owners of semi-private tolling entities.

¹¹ At some time in 1993 – possibly early 1994 – I was invited, together with Alan Molyneux of Schroders' Melbourne office, to a private meeting with a director of Vicroads. There I was asked to outline the semiprivate proposal, after which we were calmly told, "Thank you. I just wanted to know what you were suggesting so I can shoot it down when it comes up for discussion."

¹² Abstract, paragraph 3. A fuller explanation appears at paragraph 24 of the main paper. The abstract was appended to the file copy on 23 March 1994 and reflects the contents of the oral presentation.

During the question and answer session which followed, we were publicly abused by representatives of the NSW Roads and Traffic Authority who specifically dismissed as ridiculous the notion that tolling concessions would ever be extended.

Despite our having been retained by Vicroads on the Western Bypass, and despite the adviser on the Southern Bypass having joined one of the bidding consortiums, we were not retained for the combined CityLink project. Vicroads proceeded to implement a fully privatised project – along the same lines as the NSW projects – which led to the creation of Transurban.

It is a matter of record that the CityLink concession and other toll road concessions around Australia have been repeatedly renegotiated – without any possibility of competitive tender – precisely as we had warned in the AAA Paper.

Shortly after the AAA presentation, I was advised by David Lennon that the project finance team had been effectively dismissed from at least one other advisory role in relation to infrastructure finance.

I submit that this history goes to the heart of any system which relies on advisers who are also industry participants.

Even if an "independent" adviser is motivated by the highest standards of probity, it is all but impossible to stand in the way of a transaction – or a type of transaction – which has already been effectively agreed, either by the senior public officials involved or by the relevant Minister. At most, the adviser may suggest some cosmetic changes to justify their role. If they go further they run the risk of being blacklisted from further appointments and in extreme cases being dismissed pre-emptively before they can submit written advice.

Moreover, it is far from assured that all such advisers are motivated by the highest standards of probity. On the contrary, they are often participants – or would-be participants – in other such transactions. A reasonable person might reasonably conclude that they are motivated primarily by a desire to stay on good terms both with contractors and financiers and to be "invited to the party" next time.

This is a cause for concern when assessing tendered projects. It is an even greater cause for concern when there is no competitive tender¹³.

Moreover:

- the use of commercial-in-confidence secrecy to hide details of such transactions; and
- the range of uncertainty surrounding what might be considered reasonable commercial terms¹⁴,

minimises the risk that an "independent" adviser could ever be called to account for their actions.

¹³ I am aware of at least one case in NSW where this became a significant issue.

¹⁴ Especially the valuation of "real options" discussed later.

In addition, the growing practice whereby retiring senior public officials – and even former Ministers – obtain lucrative employment from parties enriched by such transactions is corrosive to public faith in the institutions of government.

To fully grasp the surreal absurdity of this system, consider a counter-factual "thought experiment".

Imagine, if you will, a judicial system in which supposedly "independent" judges were selected by the Minister on a case-by-case basis from a pool of lawyers. Imagine that their deliberations were held in secret (we might call it "judicial-in-confidence"). Imagine that those same lawyers were themselves hoping to be involved in other commercial dealings either with one of the litigants or with the government. Imagine that the Minister had made it clear that he wanted a particular verdict to be reached. And imagine that he himself later took up a lucrative directorship with one of the parties which had been successful in its litigation.

Given the existence of precisely these conditions in the provision of public works, is it any wonder that voters' trust in the institutions of elective government has fallen to dangerously low levels?

4. EFFICIENCY

If there is one word more abused than any other in relation to privatisation and privately owned infrastructure, it is the word "efficiency". Efficiency is not a single thing. It has several dimensions which are often in conflict with one another.

Types of efficiency

A common taxonomy of efficiency breaks it down into three types:

- internal efficiency;
- allocative efficiency; and
- dynamic efficiency.

When journalists and spruikers of private sector ownership talk loosely about "private sector efficiency", they are almost always referring to internal efficiency. This is – as the name suggests – the efficiency of an organisation's internal operations. It is the efficiency with which it produces a given bundle of goods or services, the resources it consumes for a given amount of output.

Typically, profit-maximising private firms seek to maximise internal efficiency. The owners gain nothing from waste in the production of a given bundle of goods or services.

For many people that is where efficiency stops. But privatised businesses often exercise – and abuse – market power. They are often monopolies or near-monopolies. This is especially true of infrastructure. It is necessary to consider also their allocative efficiency. That is the efficiency with which they allocate resources in their interaction with other parts of society.

Private monopolies and near-monopolies are classically allocatively *inefficient* in two ways:

- subject to any regulation they might operate under (which might change their behaviour), they price their services for profit maximisation leading to over-pricing and inefficiently low demand; and
- they under-invest in capacity so as to earn a higher rate of return on their limited capital base.

These conditions are typical of infrastructure facilities characterised by:

• economies of scale. For example, it is cheaper to build one road than two competing roads in parallel; and

indivisibilities of provision. For example, it is not feasible to expand the capacity of a road by infinitesimal increments; one cannot build half a road, and additions to existing capacity typically need to be provided in increments of one lane^{15 16}.

We may see how such allocative inefficiency arises with examples of over-pricing and underprovision.

In the case of over-pricing, a tolled road which is operating at less than full capacity allocates too little of the "resource" (i.e. the available road space) to motorists for use at a price they are prepared to pay. The resource is sitting there and is available for use *at almost zero marginal cost* but motorists who value it at less than the profit-maximising toll¹⁷ will incur the cost of diverting onto other roads. In the process they impose further costs (external costs) on the users of already congested roads, not to mention the loss of amenity for those living or working near such roads.

In the case of under-provision, we can look to Brisbane Airport where the provision of a second runway was deferred for years by the private owner¹⁸. The same is true of a private road tax farmer whose decision to add extra capacity to the roadway is determined by the desire to maximise profit, not to maximise the efficient allocation of resources.

Allocative inefficiency doesn't show up in any profit and loss account. A private monopoly happily over-pricing and under-investing may generate a huge profit, and the average finance journalist will look at its rate of return and say, "Gosh, what an 'efficient' business!"

But a monopoly's gain comes at other people's loss. This might be the public at large and it might be small businesses which are not in the fortunate position of being able to exercise market power.

Toll levels which exceed the economically efficient level not only represent a transfer of wealth from motorists to the monopolist; they also impose a cost on the economy as a whole by not allowing the most efficient use of available resources.

The delay in building a second runway in Brisbane manifests itself in the wasted time of passengers and the wasted jet fuel of aircraft waiting in holding patterns for a chance to land, or in the reduction of flights in and out of Brisbane at the most desirable times due to the inadequacy of landing space.

There is a third dimension of efficiency which needs to be addressed briefly. This is dynamic efficiency.

¹⁵ Pedants might argue that tidal flow systems add increments of half a lane, or that traffic flow measures increase capacity incrementally, but the essential principle remains.

¹⁶ This may be contrasted, for example, with electricity generation infrastructure. Quite apart from the fact that generation is a competitive market, additions to generating capacity can be made in increments which represent only a tiny fraction of the capacity of the entire system.

¹⁷ The inadequacy of toll indexation or rate-of-return limits as a means of eliminating this inefficiency is discussed below.

¹⁸ We still do not know –at least I do not know – what concessions were made by the Abbott Government to secure the seemingly amazing agreement to build a second runway just weeks after the 2013 election. No doubt we will find out in due course what has been given away on our behalf.

The world doesn't stand still, and dynamic efficiency refers to the speed with which an organisation responds to such change. Large bureaucratic organisations (public or private) with multiple levels of management and rigorous accountability requirements are unlikely to be dynamically efficient. Governments and large private firms are unlikely to match small private firms where there are rapidly changing fashions or rapidly changing technology.

We might expect that a government-owned Silicon Valley would not have produced innovation at the same rate as the private one has¹⁹.

Be that as it may, these conditions simply do not apply to mature infrastructure industries²⁰.

Sources of efficiency and inefficiency

Another taxonomy of efficiency looks at its sources. In relation to roads, we may identify:

- construction;
- maintenance and operation; and
- financing.

Construction, maintenance and operation efficiencies may be accessed by contracting out (i.e. privatising) without the need for private ownership or even financing²¹.

As discussed in Section 6 one of the things that governments are very efficient at is financing.

In technologically mature capital intensive monopolies where the allocative inefficiency of private ownership is likely to offset the internal efficiencies of construction and maintenance (which can in any event be accessed through contracting out), there is no rational economic case to be made for privatisation.

This is the basis of the Ryrie Rules discussed earlier.

Regulation and ownership

It is an irony of privatisation that the ideologues who argue most vociferously that government is incapable of doing anything properly are also those who argue most vociferously that government is capable of constructing perfect regulatory regimes to eliminate all problems of private monopolisation.

¹⁹ Even here one must be careful. Private firms often benefit from public research. Tim Berners-Lee developed the hypertext transfer protocol – the foundation of the modern information world – while working for CERN, and the intellectual property was made available free of charge.

²⁰ To the extent they apply to new technologies for delivering infrastructure, or even operating infrastructure, they can usually be accessed through the contracting out of construction and operation.

²¹ This might include the Build-Finance-Transfer model discussed in the AAA Paper which involves private ownership for a short period (one or two years) before transfer to long term public ownership at a fixed price. The NAO's 2018 report touches on this possibility.

Without going into the details, regulation typically takes the form of:

- rate of return limits; and/or
- price caps, which need to be reset periodically to target rates of return.

Both methods have been applied to toll road concessions in Australia. However, their effectiveness is limited.

For reasons explained more fully in Section 6, price caps calculated in advance do not reflect the value of real options given away with tolling concessions.

Rate of return regulation has also proved ineffective. This is because:

- concession agreements have been renegotiated before the cumulative rate of return has been achieved; and
- the renegotiations have taken place in circumstances which:
 - allow for no possibility of competition;
 - give the incumbent monopolist an overwhelming bargaining advantage.

Rate of return regulation of this type works for established networks in which the regulated firm has an "obligation to supply". For example, electricity distribution companies have an obligation to supply customers and to incur the capital expenditure necessary to achieve this.

Toll road monopolists on the other hand collect farmed taxes on limited sections of road or on specific roads. They have no obligation to incur capital expenditure in expanding the road network. Accordingly, they may simply refuse to renegotiate, forcing the government to wait until the target cumulative rate of return is reached.

In practice, politicians²² have shown that they cave in first at the prospect of "ready cash" offered to them on a take-it-or-leave-it basis with no prospect of competition. This imbalance of bargaining power is greatest where – as in Brisbane – one tax farmer has been given access to *all* toll revenues.

Of course, the most effective form of rate of return regulation is debt in the absence of private ownership. The interest rate becomes the rate of return cap.

A semi-private, debt financed entity²³ may be effectively subjected to a kind of "competitive regulation". As its existing debts are paid down and excess borrowing capacity becomes available, it cannot pay dividends. Its only options are to lower price or use the freed borrowing capacity to reinvest in providing extra capacity. Such debt can be raised through competitive, transparent bond tenders and the actual works put out to competitive, transparent construction tenders.

²² For example, the Victorian Government in the widening of the Tullamarine section of CityLink and in the latest West Gate project.

²³ And the debt may be non-recourse to the State, a "Revenue Bond" as opposed to a "General Obligation Bond" to use the United States parlance. Revenue Bonds are discussed further in Section 9.

For governments, the initial indexed toll which they allow to a semi-private entity can be far more generous because they know that any surplus revenue will be re-captured and reinvested. The problem of regulation vanishes – even for a privately *financed* entity – provided that *ownership* has not been given away. The more flexible indexation allows for better initial debt coverage and goes some way to offsetting the fact that no equity is raised.

Moreover this provides an automated approach to capital rationing. If and when demand increases, so does the revenue available to pay for extra capacity. It does precisely what the price mechanism is *supposed* to do^{24} .

In marked contrast, under the system of private ownership an increase in demand simply enriches the tax farmer but does not automatically lead to any increased supply.

There has never been any adequate explanation provided for why Australian State governments have comprehensively rejected this economically efficient approach. The public, however, may have reached their own conclusions.

²⁴ This is the capital rationing by debt concept alluded to in Allender and Morris, *op cit*.

5. THE COST OF PRIVATE TOLL ROADS

Just as allocative inefficiency doesn't show up in any profit and loss account, so the cost of privately owned toll roads is difficult to measure. Like allocative inefficiency, it manifests itself as an opportunity cost, a forgone benefit.

There have, however, been a couple of cases which allows us to get a direct measure of it.

M4

When expressions of interest were sought for the M4 toll road in New South Wales in late 1988, it was presented as a new toll road between Parramatta and Mays Hill to the west. It was evident that the traffic on such a road could not support the level of debt required to finance it.

In early 1989 it was announced that the tender had been awarded to Statewide Roads²⁵. However, when the contract was awarded it wasn't for a toll road west of Parramatta. Rather, there was to be some road widening of the F4 freeway east of Parramatta, with a toll gate placed on the existing road to capture all the traffic between Parramatta and Sydney. The public were given no warning that this would happen.

The statutory accounts of Statewide Roads for 1990/91 show that the original capital of Statewide Roads was only \$460,250 (*sic*, that's thousands not millions)²⁶. The tolling concession awarded to Statewide Roads was so generous that the company was able to borrow the entire construction cost from the Commonwealth Bank. Commonwealth Bank received a preference share entitling it to 12.5% of any retained profit. The thinly capitalised Statewide Roads had no construction capacity. Construction of the road was simply contracted out for a cost of about \$200 million.

In July 1999 Macquarie Bank's Infrastructure Trust of Australia (as it was then known) acquired a 57% interest in Statewide Roads for a publicly disclosed price of \$150 million. That valued the original promoters' shareholding (\$460,250) at about \$243 million²⁷.

From a financial journalist's perspective that might seem to indicate an "efficient" company. But in economic terms it represented an *opportunity cost* to the State (and the taxpayers) of \$242.54 million, more than the entire cost of building the road.

Had it been retained in public ownership – even if financed with private debt – it would have had sufficient value (i.e. sufficient underlying cash flow to support further borrowing) to seed all further toll roads in New South Wales.

²⁵ A company that included among its shareholders a former Main Roads Commissioner.

²⁶ Extracts from the 1990/91 accounts may be found at Attachment II of the AAA Paper, although at that time the actual value of Statewide Roads was not publicly known. There was only press speculation which vastly *under*-estimated the actual value.

²⁷ It was not clear whether the \$150 million purchase price included the Commonwealth Bank preference share. If it did, it valued the ordinary equity in Statewide Roads at \$243 million. The proportion of total "real equity" acquired would be (57 + 12.5) / 112.5 = 61.8%. This implied a value for the whole company of

^{150/0.618 = \$243} million and a superprofit of about \$240 million after allowing a generous rate of return on the original \$460,000 of equity. If it didn't it valued the original equity even higher at \$263 million.

M2

A similar story is found with the M2 toll road in north-west Sydney.

The original Hills Motorway Group raised \$155 million of equity from a public float and another \$30 million of equity from the project promoters. A further \$311 million was borrowed in the form of term debt and bonds to finance the \$500 million total cost of building the M2 motorway. As disclosed in the prospectus, construction was contracted out "by Abigroup Limited and Obayashi Corporation under a predominantly fixed price and fixed-time design and construction contract."²⁸

The only significant risk borne by investors was the traffic risk.

In its first seven years of operation the M2 never come close to meeting the levels of traffic forecast in the prospectus. By 2004, average daily traffic - about 73,000 – had only just reached the level forecast for the opening year of 1998. By 2005 average daily traffic should have been 83,000.

And yet, the tolling monopoly granted to Hills Motorway Group by the New South Wales government for an original investment of \$185 million was readily bought by Transurban in April 2005 for \$2.07 billion.

To put that in perspective, the \$1.885 billion profit to Hills Motorway was almost four times the total cost of building the road.

Again, whilst from a simplistic financial perspective that might seem to represent an "efficient" company, it was is in fact an enormous opportunity loss to the State. If a State Government announced that it had just lost almost \$2 billion building a road worth \$500 million it would be a scandal. But it can readily waste the same amount of money in a private infrastructure deal without anyone seeming to notice.

But why would Transurban have placed such a high value on Hills Motorway?

Because the original concession agreement is not the final concession agreement. A tolling concession is an asset far more valuable than the present value of the toll income expected under its current terms at any point in time. It contains valuable "real options". As we had warned in our AAA presentation some 11 years earlier:

"The conventional view is that private tolling concessions will run their term and that the roads will revert to government. This view is commercially naive. Having established a private taxing monopoly, government cannot gain access to the tax flow without either waiting for the concession to expire or negotiating (without the possibility of tender) with the incumbent monopolist. Incumbents use such renegotiations to progressively extend tolling concessions creating permanent private monopolies."

²⁸ This information is all taken from the Hills Motorway prospectus.

Failed toll roads

Of course, it is necessary to consider those private toll roads such as Clem 7 and Airport Link which have fallen into insolvency. It is tempting to see these as an "opportunity gain" to taxpayers.

While there is some truth in that, several caveats need to be considered in this interpretation:

- these roads failed financially because they relied on excessive short term bank debt which could not be supported by the *initial concession agreement*;
- the final cost to the taxpayers needs to take into account the renegotiation or multiple renegotiations – of concession agreements which are likely to occur over the coming decades;
- the failure was due to over-optimistic traffic forecasts which are unlikely to be repeated; and
- various insurance claims recovered a considerable amount of this loss²⁹.

Moreover, the "modern" approach - seen in Legacy Way and Westconnex - seems³⁰ to be for taxpayers to foot the bill and the risk for toll road development and then for private firms to buy the completed "tax farm" on terms which reflect the actual traffic achieved. In this process the private buyer takes the upside option of any benefit which may arise from future re-negotiation of the initial concession agreement.

²⁹ The Australian Financial Review, 15 November 2017 reported a \$100 million settlement on the Airport Link project from Arup, and two settlements of \$280 million and \$121 million from AECOM in relation to Clem 7. While these amounts are small in relation to the total cost, they represent much of the equity that was contributed to the projects. The actual proportion lost by lenders was less. ³⁰ From the information publicly available.

6. FINANCIAL ISSUES AND THE COST OF CAPITAL

For mature, capital intensive industries such as roads the most important source of efficiency is financing efficiency. In most cases for assets of this type, States are the most efficient financiers.

In order to understand the cost of privately owned roads, it is necessary to consider some aspects of the cost of capital and how it might vary between public and private ownership. It is especially necessary to consider how the actual cost of capital might differ from simplistic economic models.

Simplistic models of cost of capital underestimate the true cost of privatisation.

Cost of equity, black swans and real options

The conventional theory of the cost of equity (the famous Capital Asset Pricing Model) is that it comprises two components³¹:

- a risk free rate; plus
- a risk premium proportional to the non-diversifiable volatility of the cash flows.

This model was developed from a study of *historical* rates of return of existing companies listed on stock exchanges. The problem arises in applying it to *future* undertakings.

Historical market returns are necessarily the actual returns of firms in the study sample, and their historical probability distribution is known. But for a future undertaking it is generally not possible to know the probability distribution. Except in the case of the most tightly bound contractual payments, any projection of future cash flows is an estimate which may be biased.

Future cash flows are therefore not just unknowns (the probability distribution of which is known); they are *unknown* unknowns (the probability distribution of which is *not* known). They should reflect "all possible future states of the world" ³² but as the future world is populated by an unknown number of "Black Swans"³³ this is simply not possible.

In practice, much of the discount rate applied to future cash flows reflects not the nondiversifiable volatility – as CAPM might suggest – but rather a rough-and-ready attempt by practitioners to account for biases in the projected cash flows. For any rate of return, one can

³¹ $R_e = R_f + \beta * (R_m - R_f)$ where R_f is the risk free rate, R_m is the rate of return expected of the market as a whole and β is the coefficient relating variations in the return of a security to variations in the overall return of the market.

³² My last commission as an investment banker was to compare the present values of a fixed-price electricity contract – with a State Government as counterparty – against a supposedly equivalent bundle of market contracts. The State had engaged an eminent economist who argued that the two should be discounted at the risk free rate on the grounds that he had "considered all possible states of the future world". Fortunately the clients accepted our advice to ignore this theology and stayed with their State-backed contract. A year later the Commonwealth introduced a tax on non-renewable electricity bought on market, apparently a "state of the future world" that had not been contemplated!

³³ To use Nassim Taleb's now famous terminology.

always make a project look better (by arbitrarily increasing the projected cash flows, no matter how improbable that might be) or worse (by arbitrarily reducing the projected cash flows).

Given that the probabilities are unknowable, this is essentially a value judgement. It is one of the reasons that "independent experts" have so much latitude in delivering up the answers expected of them.

One way of looking at this is to consider it in terms of "real options". A real option is the right, but not the obligation, to undertake certain future actions.

Real options have enormous potential value. For example, a bundle of real options in relation to a company constitutes "control" of the company. Corporate financiers – those who deal with takeovers – are familiar with the "control premium", the amount paid to gain control of a company over and above its normal value as it trades on the market in the absence of a takeover offer. Control premiums of 20% to 40% are not uncommon, and they may be much higher.

Unfortunately, although real options may have enormous value, their unknowable nature means that they are typically ignored completely when comparing public and private ownership of infrastructure assets. And yet the real options may be by far the most valuable part of a business.

As in the case of company takeovers, real options are especially valuable when one acquires a bundle of them and gains control.

Going back to the previous section, the enormous premium paid by Transurban to acquire Hills Motorway – a company which on paper had never met its income projections – reflects the huge value of real options over future of the road network and public transport in general³⁴.

As the network is expanded and traffic flows increase, an incumbent tax farmer has the options of:

- sitting put and reaping the extra income from the extra traffic which network extension direct onto his existing road for no extra outlay³⁵; and/or
- vetoing and delaying competing public transport facilities.

Or, the government may go cap-in-hand and beg for a renegotiation.

As pointed out in the AAA Paper, the conventional view of toll road concessions was – and remains – commercially naive if it fails to acknowledge the value of these options.

³⁴ The Hills Motorway contract contained a clause restricting the State from building competing public transport facilities to the north-west without compensating the owner of the tolling concession.

³⁵ This is precisely the situation which arose with the M5 extension (discussed at Attachment III of the AAA Paper) where the extended road promised to pour vast amounts of new traffic onto the existing road. The incumbent monopolist obtained the most extraordinarily generous renegotiation.

This is especially true of a company like Transurban which in Brisbane has control of the *entire toll road network* in the city.

Cost of debt

We may turn now to the cost of debt financing which does not have an equity upside interest.

The simple theory of cost of debt is that it also comprises two components:

- risk free rate; plus
- a risk premium to reflect the probability of default.

As there is no equity interest, the value of real options is of less relevance 36 .

There is, however, another element which affects the cost the cost of debt. This is the illiquidity component³⁷. Irrespective of underlying default risk, larger borrowers tend to raise debt more cheaply, especially for long term debt such as might be associated with infrastructure facilities.

It is useful to consider the underlying economics of why this might be so. Primary lenders need to consider not only the risk of default but also the possibility that they may need to sell their securities before they reach maturity. Any secondary buyer will, however, need to undertake due diligence before buying, and those transaction costs must be covered in the price they pay. The smaller the issue and the more idiosyncratic the cash flows securing it, the greater the due diligence costs relative to the principal amount.

Secondary market buyers must also consider the possibility that they in turn might need to sell the securities before maturity, and so the problem compounds.

Liquidity differences underpin the interest rate swaps market. Smaller, more idiosyncratic borrowers, desiring a fixed rate but unable to secure long term debt might borrow at shorter tenure (necessarily floating) and swap with a larger, more well-known counterparty.

The liquidity effect is also why State Treasuries focus their borrowing on a few maturities ("hot dates") to promote their liquidity. Well known, highly liquid, State Treasury debt securities can be traded at a moment's notice.

States are efficient borrowers.

The magnitude of illiquidity costs for any illiquidity premium can be assessed by considering an annuity. For a 30 year annuity at 5% per annum, a 50 basis point³⁸ illiquidity premium

³⁶ Except to the extent that borrowing covenants may veto certain actions. In some cases, this may be desirable. For example, had the Sunshine Motorway been financed by non-recourse revenue bonds, the Borbidge Government would not have been able to remove the toll without paying out the debt and acknowledging the cost explicitly.

 $^{^{37}}$ Liquidity affects the cost of equity also. Fama and French, *The Cross-Section of Expected Stock Returns*, The Journal of Finance, Vol. 47, No. 2, June, 1992, found that size (market capitalisation) and book-to-market equity were as powerful explanatory variables as β factor: small – presumably less liquid – companies showed a higher rate of return.

³⁸ A basis point is 1/100th of 1% per annum.

translates to a 5% reduction in the capital value. A 100 basis point illiquidity premium translates to a 9.6% reduction in capital value. For the taxpayers this is "pure loss" due to financing inefficiency.

Larger private or semi-private borrowers can reduce the illiquidity premium in borrowing. The AAA Paper proposed a non-recourse centralised borrowing entity (modelled on the French *Caisse National des Autoroutes*) to consolidate toll road debt and issue liquid bonds without the evident disadvantages of establishing a private tax farmer.

Finally, it is necessary to consider the initial costs and fees associated with the establishment of private financing structures.

It is a triumph of dogma over evidence – and a triumph of special interest over the public interest – that the traditional system of transparent, competitive public works tendering financed by highly liquid State bonds has been replaced by a system of byzantine complexity.

Private financing of specific projects involves the creation of special purpose financing companies and reams of idiosyncratic contracts which must be checked by teams of lawyers, accountants and bankers – all to do something that used to be done cheaply and efficiently by the State.

It is an expensive make-work scheme for finance professionals paid for by the rest of the community.

Finance and risk allocation

A key principle of efficient financing both for equity and debt is the appropriate allocation of risk. Risks should be allocated to parties which are best able to:

- assess them; and/or
- manage them.

Fully private ownership of road tolling concessions represents the worst possible allocation of traffic risk. Government is the party best able to manage traffic risk:

- in the short run through its traffic management functions; and
- in the long run through its transport planning functions.

Allocating traffic risk to a private owner requires:

- an unnecessarily high rate of return, for no public benefit; and/or
- onerous conditions placed upon the State in relation to road development and public transport development, limiting its options to deal with future traffic and population growth.

If one set out to devise a transaction which would create the greatest unnecessary costs for the taxpayers of Queensland while producing no net efficiency gains, and at the same time

limiting the flexibility of future governments to deal with traffic growth and technological change, one could not think of anything better than selling an equity interest in toll roads.

7. PRIVATISATION FALLACIES

We are now in a position to consider some of the fallacies surrounding private ownership of infrastructure.

The new money fallacy

Private financing creates "new money" for governments to build more infrastructure.

This reflects a common confusion between "funding" and "financing".

Funding represents the ultimate source of cash needed to pay for the resources used to produce and maintain infrastructure. It may comprise any or all of:

- user charges, where these are feasible and do not cause adverse consequences;
- non-user charges, such as rates and taxes at various levels of government;
- negotiated, voluntary contributions from external beneficiaries, such as negotiated payments from existing owners of adjacent properties whose assets will increase in value if and only if infrastructure is built; and
- other sources, such as transfer payments from other levels of government (relevant to decisions made by sub-national governments), or aid (relevant to countries in receipt of development aid).

Financing, on the other hand, relates to transactions in the capital markets to bridge the timing difference between the cash outlays required to build and maintain infrastructure, and the eventual receipt of the funding (from whatever source) to pay for it.

Private financing does not create new funding. Private financiers are not philanthropists. Private financing merely changes the way in which the timing difference is bridged.

In fact, the added cost of private financing (over and above that which reflects legitimate risk transfer, as discussed earlier) actually *decreases* the net funding available for infrastructure.

Asset recycling

This is a simple semantic fallacy, a type of rhetoric commonly used by those trying to defend the indefensible. Who isn't in favour of "recycling"?

If and when the street outside your house is pulled up and re-laid in a new suburb then that will be asset recycling. If - slightly more plausibly - an old generating unit is removed and re-used in a remote power station then that will be asset recycling.

The sale of strategic monopolies and tax farms to private owners is not asset recycling.

Private sector investment decisions

This fallacy claims that privatisation ensures infrastructure investment decisions are made according to private sector criteria. It is almost always nonsense.

There are some rare exceptions but the large scale investment decision for infrastructure is almost always made by government which then puts in place the necessary subsidy or risk sharing or grants of monopoly power³⁹ needed to bring the rate of return up to the level demanded by private sector investors.

There are good reasons for this:

- because of its economies of scale and indivisibilities of supply, infrastructure is characterised by high levels of consumer surplus (i.e. benefits in excess of recoverable revenue); and
- infrastructure typically generates external benefits which are not captured as revenue.

As a result good infrastructure is typically justified on cost benefit and cost effectiveness warrants long before it would be financially viable without government support.

There may be cases which *are* profitable without government support but these fall within the Ryrie Rules and are not a source of concern. An example from Australia is the rail freight network built by BHP and Hamersley Iron in the 1960s to service their mines in Western Australia. The investment decisions made by independent power producers operating within the electricity market are also genuinely private sector.

Small scale investment decisions may be made by private infrastructure providers, for example in the construction, operation and maintenance of facilities. However, these are typically captured through contracting out without private finance, and certainly without private ownership of facilities

Price discovery and accountability

One of the original motivations for privatisation was a desire to extend the application of market forces including in particular the mechanism of "price discovery". Prices transmit valuable information concerning supply and demand throughout the economy allowing market participants to direct resources towards uses which are most in demand. It is a valuable element of allocative efficiency.

This philosophy underpinned economically rational privatisation such as the restructuring of the electricity generation industry, creating a market in power which signalled supply and demand.

Price discovery used to operate in traditional public works. Transparent, competitive pricebased tendering transmitted information on construction costs and the balance of supply and demand. The bond market transmitted information on the cost of debt finance.

³⁹ Or extensions of monopoly power in the case of renegotiated tolling concessions.

However, for reasons which have never been adequately explained, the combination of construction and financing turns this economically efficient system on its head. For reasons which have never been adequately explained, the moment construction and financing are combined it becomes essential to hide all prices behind a veil of commercial-in-confidence secrecy.

Far from promoting price discovery and economic efficiency, the privatisation of infrastructure behind a veil of commercial-in-confidence secrecy detracts from it.

Moreover it subverts the cornerstone of accountability in the provision of public works and is corrosive of public trust in the institutions of government. It is especially pernicious in an environment where former public officials and politicians take up employment with providers of infrastructure or the related contractors and financiers.

Innovation

It is often claimed that a private promoter must be given ownership – and indeed monopoly ownership – of a facility because they were "innovative" in suggesting it.

There may indeed be some cases of genuine innovation, especially involving high technology (the realm of dynamic efficiency discussed earlier). However, in the case of mature infrastructure there is usually no real innovation. The claim of innovation is merely a pretext for avoiding the tender process.

Genuine innovation – for example, in construction techniques - will be captured through normal tendering.

On the other hand, merely suggesting that a road be widened and that the cost be hidden off budget is hardly innovation of the type which warrants the unnecessary cost of private finance, let alone subversion of accountability by waiving the transparent and competitive tendering process.

Private sector efficiency

The simplistic claim that the private sector is more "efficient" was dealt with earlier.

Privatisation improves credit rating and lowers financing costs

The fallacy claims that:

- raising cash through the sale of existing strategic monopolies, essential services and tax farms assets; or
- avoiding expenditure through private financing of new infrastructure,

improves the State's credit rating and lowers its overall financing costs by enough to offset the higher cost of private finance.

At the outset, it is worth nothing that this argument at least acknowledges the higher cost of private finance.

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However, in the short run any improvement to the State's credit rating benefits not the State but the holders of outstanding bonds. If the yield to maturity falls, the price of exiting bonds rises. If the State were to try to buy them back it would have to pay more. There is no benefit to the State.

The State can benefit only in the long run as existing bonds mature and are rolled over. However, evidence suggests that this does not happen. What actually happens is that governments quickly squander the available cash (or use up the available borrowing capacity) on other – often lower-quality – spending. Projects which would not otherwise have satisfied cost benefit and cost effectiveness warrants - but which are politically attractive – gobble it up.

This is precisely the outcome the Ryrie Rules sought to avoid.

UK net debt as a percentage of GDP^{40} fell from 42% in 1978/79 to 21.8% in 1990/91 (the very point at which the Ryrie Rules were being debased). By 1996/97 it had returned to 36.9%. At the onset of the Global Financial Crisis it stood at 35.2% and has never since fallen below that figure.

A similar story occurred in Australia with the Howard-Costello government which reduced debt in part by selling public assets during a time of record tax receipts, but then largely offset this gain with tax policies in a vain attempt to win the 2007 election.

More recently the New South Wales Government proposed spending the proceeds from selling the Land Titles monopoly almost literally on "bread-and-circuses": renovating sports stadiums.

Accordingly to some economic models⁴¹, debt has a positive role as a means of enforcing "incomplete contracts", whether between shareholders and company directors or between citizens and elected political agents. Unable to control every decision of their agents, the principals restrain them in a blunt fashion by limiting how much they can spend. Spending is rationed to the best uses⁴².

But even if this were not the case - even if politicians were perfect agents – it would still not justify private *ownership* of roads. That is because it is possible to borrow without recourse to the State using one of the many models of semi-private ownership. These are discussed in Section 9.

Privatisation reduces taxes

Privatisation of strategic monopolies, essential services, critical databases and "tax farms" simply replaces public tax collection with private tax collection. The "private tax" takes the form of the economic rent earned by the monopolist. The deadweight losses of monopoly pricing or tax farming are no less deadweight just because they're deemed to be "private".

⁴⁰ Briefing paper 05745, "Government borrowing, debt and debt interest: historical statistics and forecast", House of Commons Library, 29 June 2018, retrieved 2 August 2018.

⁴¹ See, for example, "Firms, Contracts and Financial Structure" by (Nobel laureate) Oliver Hart, Oxford University Press, 1995.

⁴² This is the rationing principle set out in Allender and Morris, *op cit*.

Every time one buys an imported car, one pays a "private port tax" to have it transferred through the privatised port monopoly. Every time one buys imported clothes one pays a "private airport tax" to have them transferred through privatised airport monopoly. The deadweight losses of these private imposts are no less deadweight simply because they've been sold off to the private sector.

Trucks transporting produce from the Darling Downs to the Port of Brisbane via the Warrego Highway are now obliged to use the Logan Motorway⁴³ and pay the private road tax. The deadweight losses of these imposts are no less deadweight simply because the tax has been sold off to a private owner.

Private ownership is modern and innovative

Nothing could be further from the truth. The sale of private monopolies and tax farms is in fact a throw-back to the failed fiscal policies of the Stuart monarchs in England the *ancien regime* of pre-revolutionary France.

The latter, which has most similarity to the system of farming road taxes, is discussed in the next section.

⁴³ Signs on the eastbound lanes of the Ipswich Motorway at Goodna warn of the penalties which apply for contravention. The original promises of free alternative routes to toll roads seem to have fallen by the wayside.

8. THE HORRIBLE HISTORY OF THE FERME GÉNÉRALE⁴⁴

If you visit Paris and pass through Place de la Bataille de Stalingrad not far from Gare du Nord railway station you may be struck by the unusual round building that overlooks the square.



Designed by architect Claude Nicolas Ledoux, the Rotunda de la Villette (or Saint-Martin barrier) is one of 62 toll barriers built between 1784 and 1791 which formed the *Mur des Fermiers généraux*, or "Wall of the Farmers' General". It is a visible reminder of a bizarre and ultimately catastrophic experiment in public finance undertaken by the French government in the decades before the Revolution.

The *ferme générale* or "farmers general" which built the wall was a consortium of private financiers who had been granted by the King the right to levy private taxes on the French people. It was a system of privatised public finance known as "tax farming".

A tax farm is a contract under which a private agent, or "Tax Farmer", agrees to pay a fee to the government, in exchange for the right to collect tax for a period of time.

The origins of tax farming go back to antiquity. The reviled tax collectors of the New Testament were private businessmen who had bought from the Roman government the right to levy taxes on their fellow citizens. But it was in pre-revolutionary France that the system was brought to a disastrous perfection.

⁴⁴ Some of this section draws from Eugene N White, *France's Slow Transition from Privatized to Government-Administered Tax Collection: Tax Farming in the Eighteenth Century,* Rutgers University and NBER Department of Economics, and Noel D Johnson *The Cost of Credibility: The Company of General Farms and Fiscal Stagnation in Eighteenth Century France,* California State University. The inferences drawn, however, are my own and may not necessarily reflect with those of the authors.

An underlying fiscal problem of the *ancien regime* was the reluctance of the aristocracy and the clergy to contribute to the costs of running the state. Their income came from their estates, what today we might call "economic rent". And yet they were widely exempt from the *taille* or direct tax on land. They might have argued that since they themselves were self-sufficient and received no net benefit from the state they ought not to be obliged to contribute to the cost of running it. The result, however, was a chronic problem of how to extract revenue from the rest of society.

Like so many disasters of public policy, the *ferme générale* started out with a pretext of noble intentions combined with a naive theory of economics.

The theory was one of private sector efficiency. If a government auctions tax farms by competitive tender then the auction should theoretically be won by the lowest cost collector. Auctioning tax farms thus promotes efficient collection. Moreover, the tender process forces would-be collectors to assess the value of the tax incomes likely to be collected over the life of their contract and reveal that information in their bid price. In the language of modern business it would be called private sector risk assessment and price discovery.

What this theory failed to take into account was the motives of politicians and the complex web of relationships that would inevitably develop between public officials and private financiers where there was so much money to be made.

There are two systems of tax farming:

- a *régie* under which the *government pays the farmer a fixed salary* for collection and receives all the tax collected. The farmer is little more than a salaried government employee under contract; and
- a *bail*, under which the *farmer pays the government a fixed amount* or lease and receives all the tax collected. The government gets a known amount of money without needing to concern itself with the unpleasantness of tax collection and the farmer takes the risks and profits of collection.

But the *bail* has another advantage for the government: some or all of the lease payment can be made up-front. The government gets ready cash today from taxes which will not be collected until sometime in the future. And since ready cash is readily spent, the government eventually comes to depend on further advances from the farmer.

Meanwhile, the noble ideal of competitive tendering quickly disappeared, replaced by a rather different conception of "efficiency": the efficiency of avoiding duplication⁴⁵ and negotiating with just one tax farm. In 1726, Louis XV's finance minister Cardinal Fleury abandoned the last attempt at *régie* and signed a *bail* with a cartel of forty *fermiers généraux*, the Ferme Générale. The seeds of fiscal disaster and ultimate revolution were sown.

As financiers to the King and collectors of taxes, the *fermiers généraux* soon amassed colossal fortunes. Their daughters married into the aristocracy. Their sons bought their own

⁴⁵ "Internal efficiency" in modern terminology.
titles of nobility. With wealth came political power, a power that would soon made reform of the system impossible.

Critics like Montesquieu denounced the excessive profits of the *fermiers*. The taxes it collected were seen as arbitrary and inefficient. The price of basic commodities like salt varied wildly from town to town place depending on how much tax was levied in each. The tax farmers – acting with royal authority - inflicted brutal punishment, including hanging, on those who attempted to smuggled goods around tax collection points.

Across the English Channel, Adam Smith recognised that the capital required to run a tax farm would tend to make it a natural monopoly. The naive theory of competitive farms could never have worked.

But though the types of indirect taxes being collected by the *ferme* were increasingly seen as inefficient, and even though the leakage of revenue to the *fermiers* deprived the Crown of desperately needed revenue, any attempt at reform ran headlong into the power of entrenched wealth.

Attempts at reform by Jacques-Etienne Turgot early in the reign of Louis XVI came to nothing with Turgot soon falling victim to a campaign to have him removed from his post as Controller-General of Finances. Turgot's successor, the Swiss-born banker Jacques Necker, managed to keep the system afloat for a time essentially by out-negotiating the farmers. In 1780 he split the farm into three, managing to buy out some of the existing farmers with the proceeds from selling off the newly created farms. In the process, however, he conceded to the *fermiers généraux* a law which made it illegal for anyone other the sons of current *fermiers généraux* to become *fermiers généraux*. In 1781 Necker also falls victim to Court intrigue and is forced to resign.

One of the key planks of the *ferme*'s political power was the "*croupier*" system. While formal membership of the *ferme générale* might be limited to around forty, the number of people with a financial stake in the system was much larger. *Fermiers généraux* could onsell a share of their income – a *croupe* - while retaining management of the *ferme* in their own hands. Today we would readily recognise it as the difference between the director of a company and the individual investors who hold shares.

Another plank was the *pot de vin* or bribe offered by the *ferme* to the government's negotiators. Turgot donated his *pot de vin* to charity and Necker abolished it during his period of office.

In 1776 Turgot managed to publish the list of croupiers. It was seen to include none other than the King himself in his personal capacity along with influential members of Court. With a direct personal interest in the *ferme* it was hardly surprising that the King would be reluctant to see it reformed. But even beyond the Court, the large body of croupiers represented a powerful political constituency with an interest in the *ferme* 's continuing success.

By 1783, with the situation becoming ever more desperate, a new and politically naive Controller-General - Henri d'Ormesson - tried to abrogate the *ferme's* lease. Thirty of the *fermiers généraux* demanded an audience with the King and quietly explained to him what such a default would mean to the croupiers and others who had loaned money to the *ferme*. Within the week d'Ormesson was dismissed from office.

The following year the *ferme* started work on encircling Paris with its wall of toll gates to levy tax on goods entering the city.



The magnificence of its architecture is powerful testimony to the wealth and power of the organisation behind it.

Pour augmenter son numéraire Et raccourcir notre horizon, La Ferme a jugé nécessaire De mettre Paris en prison.

(To increase its cash And to shorten our horizon The Farm judges it necessary To put Paris in prison)

However, even before the Wall could be finished the precarious financial system of the *ancien regime* had collapsed.

Those with a passion for historical parallels might see several similarities between this story and the current environment:

• the underlying fiscal problem is the same as that facing the *ancien regime*: not only in Queensland and Australia but in most developed countries, there is a determination on the part of politicians to reduce – or at least, not to increase – tax on those who earn economic rent⁴⁶. The result is the same chronic problem of how to extract revenue from the rest of society;

⁴⁶ With an obvious exception in Australia of taxes on rent earned from mineral resources. This may, however, be an idiosyncratic feature of Australia's demography and federal system. At the federal level, the Commonwealth uses resource rent taxes to transfer revenue from the exporting States of Queensland and Western Australia to the population centres of the south-east. At the State level, traditional royalties are used in the same way to transfer revenue from the exporting regions to the political capitals. Attempts to broaden rent tax to cover all economic rent have been quickly rebuffed. This goes some way to explaining the odd

- there is the same recourse to privatised taxes through the sale of monopolies and tax farms. This distances politicians from the unpleasant business of actually collecting taxes while being very lucrative for those monopolists and tax farmers entrusted with the job;
- the system was justified by a naive theory of economics but failed to account for complex web of relationships that would inevitably develop between public officials and private financiers;
- the taxes most suitable for farming such tolls on some but not all roads are arbitrary and inefficient;
- the process is often veiled in secrecy;
- as with Turgot, Necker and d'Ormesson, we see the difficulty faced by those "independent experts" who challenge this cosy system;
- politicians provided with ready cash tend to spend it readily and are forced to go capin-hand back to the farmers;
- as predicted by Adam Smith, there has been a tendency for road tax farming to become monopolised as the originally separate farms are consolidated;
- as with the farmed taxes of the *ferme*, modern tolls are backed by the force of statute. Unlike other debts, debts to toll collectors may be enforced by the threat of imprisonment; and
- the rings of tolling points encircling Brisbane, Sydney and Melbourne are starting to look ever more like electronic versions of the Wall of the Farmers' General. They tax not the value of the goods passing through them, but the right to pass through at all.

For the Farmers' General this story does not have a happy ending. On the 8th May 1794 the 28 remaining members of the *Ferme* were led to Place de la Revolution . . . and guillotined.

This is not to suggest that Queensland is in imminent danger of revolution. But history is a long process, and it would be naive to imagine that we're living at the end of it. The failure to address the underlying problems of the tax base – and to paper over the problem by farming inefficient taxes – is not sustainable in the long run.

concentration of population in Australia's political capitals, engaging in activities which enjoy no comparative advantage.

9. ALTERNATIVE APPROACHES

Australia's approach to privatisation has been characterised by:

- a provincially narrow-minded attitude which has refused to consider other models of privatisation used elsewhere in the world to improve service delivery;
- a focus on hiding debt rather than promoting efficiency gains; and
- an inexplicably obsequious attitude of politicians to the finance and construction industries⁴⁷.

This section sets out some examples of alternatives to private ownership of roads.

Revenue bonds

The simplest form of semi-private entity is a public entity with "revenue bond" financing.

A revenue bond is a bond which is secured solely by revenues generated by the issuing entity. Unlike "general obligation bonds", which are secured by general taxation revenues, only the revenues specified in the contract between issuer and bond holder are *required* to be used for repayment.

An issuing State may also enact legal provisions limiting its *ability* to use general taxation revenues to service the bond, thereby minimising the risk of perception of an implicit guarantee. In some States, the ability to apply general taxation revenues must be approved by referendum, thereby removing virtually all perception of an implicit guarantee.

Accordingly, a revenue bond does not detract from the credit rating of the issuing State.

If the revenues of the issuing entity are not sufficient to meet interest payments, these may be capitalised until such time as there is sufficient revenue. In extreme cases, the bond may default altogether.

If the revenues of the issuing entity exceed that required to meet interest and principal payments, the excess may be reinvested in further capacity or prices may be lowered (subject to maintaining debt service ratios specified in the bond agreement).

The advantages of revenue bond financing for toll roads are:

- the government may be more generous in the initial concession agreement (or other initial support) in the knowledge that any surplus revenue will be recovered in full;
- any excess revenue may be used to support further revenue bond issues to finance further capital works, and both the bond issues and the capital works may be subject to transparent competitive tendering;

⁴⁷ This reached surreal levels in the case of the Melbourne East West Link Project in which the State Government paid over \$600 million for a road that was never even built.

- the value of real options (which are especially valuable in the case of road and public transport networks) is retained by the State; and
- construction, maintenance or operation of the road may still be contracted out.

Sociétés d'économie mixte

Under French law a *Société d'économie mixte* ("SEM") is a public limited company which is majority owned by one or more public entities. These may be the French Government, the département, local municipalities, or other public institutions. Since 2002 the public shareholding has been capped at 85%.

The majority public shareholding ensures that the problems of private ownership outlined in this submission are minimised or eliminated.

Following the failure of most private French toll roads during the oil crisis and recessions of the 1970s, the industry was re-constituted (with the exception of one private toll road) under the ownership of a series of regional SEMs in which the private shareholdings were held by local chambers of commerce or chambers of agriculture. The SEMs coordinated their engineering and financing functions. For example borrowings were consolidated through the (then publicly controlled) *Caisse National des Autoroutes* which issued revenue bonds secured against the entire toll road network to improve liquidity and reduce the cost of borrowing.

As with revenue bond financing, this allowed surplus revenues to be reinvested resulting in a massive expansion of the French road network through the 1980s and 1990s.

In 2005, the conservative French Government succumbed to pressure from the private infrastructure lobby offering the prospect of ready cash and privatised the industry.

Small minority private shareholdings: Rhaetian Railway

The Rhaetian Railway is an example of a semi-private company with a very small minority private shareholding. After the Swiss Federal Railways, Rhaetian Railway is the largest railway operator in Switzerland. Its 384 km network of narrow gauge railways covers the canton of Graubünden, running through Klosters, Davos and St Moritz and including the UNESCO World Heritage listed Albula-Bernina railway.

The Rhaetian Railway is owned 51.3% by the cantonal government of Graubünden, 43.1% by the Swiss Government, and 1% by a collection of local communities.

The remaining 4.6% is owned by private shareholders.

The Rhaetian Railway operates as a commercial business with private shareholders but its overwhelming public ownership ensures that it is run for the public benefit.

In marked contrast to the experience of France's motorways, under Switzerland's system of popular direct democracy politicians have not been able to sell off the Rhaetian Railway (or other semi-private entities) to profit-maximising private investors.

Canal and River Trust⁴⁸

The Canal and River Trust is a not-for-profit charitable trust created by the Cameron Government in Britain in 2012 to take over the canal and river assets of the former British Waterways Board.

The Trust is registered with and regulated by the Charity Commission for England and Wales.

The Trust is governed directly by a Board of Trustees and indirectly by a Council of Members.

Currently up to 34 Council members are elected (12), nominated (16) or appointed ex officio (6) by stakeholders such as private boaters, boating businesses, walkers, anglers and cyclists.

Nominating organisations include Cycling UK, the Angling Trust, local governments (in consultation with the Local Government Association and the Society of Local Authority Chief Executives), the Institute of Historic Building Conservation, and the Chartered Institution of Water and Environmental Management.

Members of the Board of Trustees are proposed by an Appointments Committee and appointed by the Council. The Appointments Committee in turn consists of an equal number of representatives of the Council and the Board of Trustees itself.

This is a complex system of governance which reflects the wide range of stakeholders who have an interest in waterways.

The AAA Paper had proposed a similar charitable trust structure⁴⁹ some 18 years earlier with the State motoring organisations as a nominating organisation to represent the interests of motorist stakeholders.

Cooperatives

For completeness it is worth mentioning cooperatives as a means of providing private ownership while minimising the conflict of interest between for-profit owners and customers.

Cooperatives were the foundation of Australia – especially rural Australia – where they were used by dairy farmers for milk processing and cheese production, cane farmers for running tramways and mills, fruit growers for packaging and canning, cotton growers for ginning, fishermen for processing the catch, and grain farmers for storing and transporting the crop. Building societies were cooperative structures (although in some cases management was contracted out to a separate firm). Most life insurance companies (like the Australian Mutual Provident Society and National Mutual) were "mutual" associations. The various State

https://canalrivertrust.org.uk/refresh/media/thumbnail/26919-governance-handbook.pdf

⁴⁸ Canal and River Trust Governance Handbook, June 2018 accessible at

⁴⁹ In 1992 or early 1993, David Lennon and I met with the Commonwealth Treasury deputy secretary responsible for Loan Council to discuss the possibility that the borrowings of charitable trusts in general might be excluded from the public sector Global Borrowing Limits. We were sent packing with the words, "This is precisely the sort of thing we're trying to get *away* from!" As a result we revised the structure to include motoring organisations as private stakeholders in the entity.

motoring clubs are cooperatives providing roadside assistance and insurance to their members. The stock exchanges were cooperatives owned by brokers. Sporting clubs were cooperatives.

From the 1980s there was a steady trend towards "privatisation" of cooperatives in parallel with the privatisation of government services. Existing customers/owners – especially older ones leaving the industry – "cashed in their chips" by selling monopoly processors to private firms. Building societies, mutual insurance companies and stock exchanges either sold out to private buyers or floated themselves as private listed companies. Motoring clubs sold their insurance businesses. And sporting leagues were infiltrated by private owners.

The conventional analysis of cooperatives in Australia has tended to emphasise their shortcomings compared with for-profit firms. However, this ignores:

- the enormous contribution of successful cooperatives; and
- the problems of "privatised" cooperatives.

To take just one example of the latter, following the demutualisation in January 1998 of AMP – Australia's oldest mutual society – the board of the newly privatised company decided to launch a takeover for insurer GIO. In the space of just a few years the privatised company managed to burn through generations of accumulated members' funds. Listed at \$23 in 1998, AMP shares were reduced to \$4.26 just five years later. More recently, the royal commission into banking misconduct has recommended that AMP should face criminal prosecution in relation to charging customers for services not provided.

For-profit privatisation creates conflicts of interest.

In the field of infrastructure, cooperatives are used in many US States to operate electricity distribution networks.

Municipal Utility Districts are cooperatives with local taxing powers which provide utility services to members/residents of the district.

Although of interest in the broader field of semi-private infrastructure entities, and as an example of privatisation not motivated solely by profit, such cooperatives are unlikely to be suitable for toll roads.

10. NEW REVENUE SOURCES

In Section 8 we saw that the underlying fiscal problem facing States, which has encouraged them to engage in private tax farming ventures, is the same as that which confronted the *ancien regime*. The fundamental solution is to identify new and economically efficient sources of revenue.

Road pricing

Whatever happens with Queensland's toll roads, technological advances mean that comprehensive pricing of roads will soon be a real possibility.

Unlike allocatively inefficient tolling, road pricing offers the prospect of variable road charges which match the differing marginal costs of different roads and of road usage at different times of day.

Moreover, road pricing revenue need not be spent only on roads. The most efficient use of road pricing revenue might be to improve public transport, to promote telecommuting, or even to fund the construction of satellite towns.

At present these are unknown unknowns. The real options have enormous potential value.

Accordingly, road pricing presents both an opportunity and a threat.

It offers the opportunity to ration demand in an economically efficient way while flexibly directing revenues towards funding new "supply", not all of which might be roads.

It presents the threat that this revenue will be privately appropriated for purposes which are anything but economically efficient. The gift of real options over the future application of road pricing would represent a massive transfer of public wealth to private interests.

It would be hugely detrimental to the people of Queensland if such a system of comprehensive road pricing were to fall into the hands of a politically powerful private monopolist.

Motorists would find themselves being forced to pay a private company the moment they left their driveway.

It would undermine the very notion of freedom of movement as we currently know it.

And a valuable source of revenue would be alienated for the benefit of narrow private gain.

Direct rent taxes

There is widespread agreement amongst economists that taxes on economic rent would have a miraculous double benefit of:

- improving economic efficiency; and
- reducing inequality.

Some estimates put total economic rent in Australia at about 23% of GDP ⁵⁰ and calculate that the taxing of economic rent could replace existing taxes at all levels of government.

At present Australia levies direct rent taxes only on natural resources through the Commonwealth's Petroleum Resource Rent Tax. A Mineral Resource Rent Tax operated briefly from 2012 to 2014.

The possibility of extending direct rent tax to all rents earned by taxable businesses was floated by the Future Tax System Review (The "Henry Review") in 2010⁵¹. However, only the Mineral Resource Rent Tax proceeded⁵².

As any such tax would probably need to be administered by the Commonwealth Government, it is not immediately relevant to this submission.

Property tax, net wealth tax and corporate commons tax

The alternative to the direct taxation of economic rent is an annual tax on the capitalised value of future rent: an annual tax on "wealth" or some components thereof. Possibilities include:

- property tax;
- net wealth tax: and
- corporate commons tax

A large proportion of economic rent is represented by the value of land⁵³. The advantages of *land tax* are obvious:

- it is a tax on rent;
- as land is not moveable, there is minimal scope for avoidance through change of taxing jurisdiction; and
- (in the context of this submission) it may be readily administered by the State Government.

One disadvantage of a wealth tax levied on the gross value of property is that it may be "regressive" in the sense that recipients of large rent flows often receive relatively little of it in the form of land rent, while smaller rentiers can receive a very large proportion.

⁵⁰ Karl Fitzgerald, *Total Resource Rents of Australia*, Prosper Australia, December 2013.

⁵¹ The mechanism by which rent is calculated is set out in the following link:

http://taxreview.treasury.gov.au/content/ConsultationPaper.aspx?doc=html/publications/Papers/Consultation Pa per/appendix_e htm ⁵² The possible political reasons for this were touched upon in the footnotes to Section 8.

⁵³ See, for example, Gavin Putland, Trickle Up Economics: Assessing the impact of privatized land rent on economic growth, Prosper Australia, April 2018.

This may be illustrated by comparing:

- a billionaire with a \$10 million unencumbered house; and
- a first home buyer with wealth of \$0.75 million, comprising \$1 million of land, \$0.5 million of debt, and \$0.25 million of other property.

A 1% per annum tax on the gross value of land would translate to a 0.01% per annum tax on the net wealth of the billionaire but a 1.3% per annum tax on the first home buyer. Phasing the tax in over time might not resolve the problem because it would still cause the capital value of houses to fall by an amount approximating the present value of the future tax. And the slower the phase-in, the lower the present value of tax collected.

An alternative is a *net wealth tax*. Not only does this include a wider range of sources of rent, but it also accounts for liabilities which produce the greatest distortion in the case of property tax. As of 2010, the only OECD jurisdictions collecting significant sums of net wealth tax were Norway and Switzerland with Switzerland collecting about 1% of GDP⁵⁴.

Significantly in the context of this submission, Swiss net wealth tax is collected by the cantons – not the Federal Government – at rates of up to 1% per annum. Wealth subject to the tax includes real estate, securities and other investments, cash, gold, precious metals, cash value of life assurance policies, shares in undistributed inheritances, business capital, shares in a partnership, motor vehicles, boats, etc. Pension funds are not considered as assets, and all liabilities can be deducted in order to determine net wealth⁵⁵.

Taxpayers must declare worldwide assets belonging to all immediate family members. Foreign real estate and qualifying business interest are exempt but made be taken into account in determining the tax rate. Liabilities are allocated according to the location of gross assets.

It is worth noting that Swiss net wealth taxes evidently have public support as they could at any time be removed through the system of initiative-and-referendum which operates federally and in every canton. Moreover, there is no evidence that net wealth taxes at these rates have led to a flight of capital.

A further option – which may complement either of the others – is a *corporate commons tax* levied on the market capitalisation of listed companies⁵⁶ and possibly on the assessed capitalisation of other companies.

Fanciful elaborations of all these – involving, for example, imputation credits on corporate commons tax being available to offset personal net wealth tax – can be imagined. However that goes well beyond the scope of this submission.

⁵⁴ Kayte Lawton and Howard Reed, *Property and Wealth Taxes in the UK*, Institute for Public Policy Research, March 2013, Figure 1.2.

⁵⁵ See PwC's Worldwide Tax Summaries: http://taxsummaries.pwc.com/ID/Switzerland-Individual-Other-taxes (This site is updated periodically and the link may cease to be available at this address.)

⁵⁶ Karl Fitzgerald, op cit, p 27.

ATTACHMENT A

NATIONAL AUDIT OFFICE REPORTS

The United Kingdom National Audit Office ("NAO") has produced two reports into the Private Finance Initiative ("PFI"), both of which were highly critical.

In its 2003 report the NAO found that PFI projects "delivered price certainty" *after award of contract*, and that they projects were delivered on time or earlier *than specified in the contract*.

While it may appear to be an advantage of PFI, this is in fact a failing. Because PFI projects are complex packages which involve private negotiation with a "preferred bidder" (rather than being put to transparent, price-based tendering) there is greater scope for the contractor to set its own budget and schedule. It would be astonishing if PFI projects did not perform well against such soft targets.

Significantly, in its 2003 report the NAO concluded that "it is not possible to judge whether these projects would have achieved these results using a different procurement route."

The most recent NAO Report⁵⁷ is even more damning (emphasis added):

Construction costs

As part of this 2017 study we surveyed 11 government departments. Responses showed cost certainty was generally seen as a benefit of PFI (five of the eight departments that responded to this question considered that certainty over construction costs was better under PFI). **Increased certainty about price does not necessarily mean that the cost the public sector pays for construction is lower**: the Treasury Committee found that some PFI projects charge higher prices for construction to cover unforeseen costs. Prices can still increase in PFI projects, particularly before final terms are agreed at financial close. **Our report on PFI in housing reported significant capital cost increases compared to initial estimates**. (page 9)

In order to understand the impact of private finance procurement on construction costs it is important to compare similar projects. The Department for Education is currently collecting data and developing methodology and has, so far, found that **the financing route has little or no effect on the construction costs** of schools being built as part of the Priority School Building Programme (PSBP). (page 9)

Some of these benefits can also be achieved without the use of a long-term private finance contract. The use of fixed-price contracts for publicly financed projects can be effective in reducing cost overruns. The risk of construction cost overruns could also be transferred using a shorter private finance contract that only covers the construction period but this option has never been pursued in the UK under PFI contracts⁵⁸. (page 9)

⁵⁷ *Report of the Comptroller and Auditor General: PFI and PF2*, National Audit Office, January 2018. A copy may be accessed at the NAO website: https://www.nao.org.uk/press-release/pfi-and-pf2/

⁵⁸ This is the Build-Finance-Transfer model outlined in the AAA Paper of 1994.

Operational efficiency

Our work on PFI hospitals found no evidence of operational efficiency: the costs of services in the samples we analysed were similar. Some of those data are more than 10 years old. More recent data from the NHS London Procurement Partnership shows that the cost of services, like cleaning, in London hospitals is higher under PFI contracts. The Department of Health and Social Care considers these costs may not be comparable owing to the risk transfer of the PFI contracts and the potential for differing cleaning standards between contracts. **Departments who responded to our 2017 survey** *question considered that operational costs were either similar or higher under PFI* (four departments provided a response to this question – three considered operational costs were higher under PFI and the other department considered they were the same). (page 10)

Capital budgeting

However, most private finance debt is off-balance sheet for National Accounts purposes. This results in short-term incentives for the government and public bodies to use private finance procurement. This is because private finance:

• Results in lower recorded levels of government debt and public spending in the short term

• Allows public bodies to invest in capital projects when they do not have sufficient capital budgets (page 11)

Private finance increases departments' budget flexibility and spending power in the short term, as no upfront capital outlay is required. But departments face a long-term financial commitment – any additional investment will need to be paid back. (page 12)

The Office for Budget Responsibility's (OBR's) July 2017 fiscal risks report cited the use of off-balance sheet vehicles like PFI as an example of a "fiscal illusion". Most PFI debt finance raised to construct the asset is transparently reported to Parliament, where the debt is considered to be on-balance, via departmental financial statements and the Whole of Government Accounts (WGA). The debt is recorded as a financial liability but as noted by the OBR "most public and political attention, and the government's fiscal rules, still concentrate on the National Accounts measures of PSND (Public Sector Net Debt) and PSNB (Public Sector Net Borrowing)", which does not reflect fully PFI liabilities. PFI can be attractive to government as recorded levels of debt will be lower over the short to medium term (five years ahead) even if it costs significantly more over the full term of a 25–30 year contract. (page 12)

Finance costs

Private finance procurement results in additional costs compared to publicly financed procurement, the most visible being the higher cost of finance. The 2010 National Infrastructure Plan estimated an indicative cost of capital for PFI as 2% to 3.75% above the cost of government gilts. Data collected by IPA on PFI and PF2 deals entered into since 2013 show that debt and equity investors are forecast to receive a return of between 2% and 4% above government borrowing. However, some 2013 deals, agreed when credit market conditions were poor, projected an annual return for debt and equity investors of over 8%; this was more than 5% higher than the cost of government borrowing at the time. **Small changes to the cost of capital can have a significant impact** on costs – as an illustration: paying off a debt of £100 million over 30 years with interest 2% costs £34 million in interest; at 4% this more than doubles to £73 million. (page 14)⁵⁹

Other costs (page 15)

There are other areas where the private finance model can result in additional costs and also ways in which it differs to the approach HM Treasury would usually recommend. These include:

• Insurance

HM Treasury recommends that the public sector self-insures as it considers the government is best placed to pool these risks but the PFI/PF2 model requires the SPV to take out buildings and business interruption insurance.

• Cash management

The PFI structure means that SPVs hold surplus cash to meet the requirements of lenders. HM Treasury normally discourages holding any excess cash in commercial accounts. We estimate that they hold more than £4 billion collectively. Interest paid on these balances will be factored into the unitary charges paid by the public sector.

• Costs of external advisers

*The complex nature of private finance procurement means there is a greater need for both the public sector and potential bidders to use advisers.*⁶⁰

• Fees to lenders

Arrangement fees are typically about 1% of the amount lent but can be as high as 2%. In some cases fees are also paid to credit rating agencies.

• SPV management and administration fees

With a PFI/PF2 deal, there are costs associated with the SPV, such as company management and production and auditing of accounts. **These amount to around 1% to 2% of the total PFI payment**.

The higher cost of finance, combined with these other costs, means that overall cash spending on PFI and PF2 projects is higher than publicly financed alternatives. The Department for Education has estimated the expected spend on PF2 schools compared with a public sector comparator (PSC). Our analysis of these data for one

⁵⁹ This is especially relevant for mature technology, capital intensive assets such as roads where there is minimal scope for other efficiency gains . . . even if those efficiencies gains existed, which they do not.
⁶⁰ The Committee may wish to consider this when considering the credibility of submissions it receives from

⁶⁰ The Committee may wish to consider this when considering the credibility of submissions it receives from advisory firms.

group of schools shows that PF2 costs are around **forty per cent higher** than the costs of a project financed by government borrowing. The Treasury Committee undertook a similar analysis in 2011, which estimated the cost of a privately financed hospital to be **70%** higher than the PSC.

Flexibility⁶¹ (page 17)

In our 2017 survey departments reported that **operational inflexibility was a drawback of PFI** (five out of six departments able to provide an answer to our survey question considered operational flexibility worse under PFI). HM Treasury does not normally allow departments to enter contracts lasting longer than seven years; however, PFI contracts often last over 25 years. The PFI structure means that **changes in contracts can be expensive with lenders and investors charging administrative and management fees**. For example, additional capital works of approximately £60,000 in a local authority PFI school increased to over £100,000 once fees were factored in – the local authority challenged this and the SPV agreed to reduce some of the management and approval fees although bank fees of £20,000 will still have to be paid.

Department of Health and Social Care papers similarly highlight that some trusts with PFI facilities have to use alternative forms of procurement for capital variations. **Government can also be locked into paying for services it no longer requires**: for example, Liverpool City Council is paying around £4 million each year for Parklands High School which is now empty. Between 2017-18 and the contract end in 2027-28, it will pay an estimated £47 million, which includes interest, debt and facilities management payments, if no changes are made to the contract.23 The school cost an estimated £24 million to build.

Cost premium for risk transfer (page 18)

One of the challenges of long-term PFI and PF2 contracts is the need to price costs far into the future. Lenders will want to ensure that future costs are not underestimated to ensure that they get their money back. The Department of Health, in a paper on PFI prepared for HM Treasury in 2012, noted that "there is an inbuilt incentive to price cautiously for lifecycle risk, requiring the build up of significant reserves. This may not necessarily result in optimum value for money for the public sector, although data illustrating out-turn costs for lifecycle is scarce". It also reported that bidders were currently pricing the cost of insurance at a 20% premium to the market price in order to provide protection against future price rises. To mitigate this, HM Treasury introduced insurance gain-share arrangements in the standard PFI contract). There are also other risks, for example potential tax increases, that investors may factor into the prices they bid at the outset. These risks may not materialise and in some cases subsequent changes, such as reductions in corporation tax rates, have increased rather than reduced investor returns.

Potential for biased assessment processes⁶²

A robust VfM assessment is important for all public sector investment decisions. Any public body procuring an asset which will be privately financed has to compare

⁶¹ This relates directly to the discussion of "real options" in Section 6 of this submission.

⁶² This relates directly to the role of "independent" advisers discussed in Section 3 of this submission.

the VfM of private finance against a public sector comparator (PSC). It has an incentive to show that private finance offers better value for money than the PSC as unless alternative capital funding is made available the project is unlikely to proceed. We previously concluded in our 2013 report Review of the VfM assessment process for PFI that these VfM assessments have features which favour and advantage PFI in comparison to a publicly financed approach. HM Treasury considers that these projects are rigorously tested to ensure that they are forecast to provide VfM. HM Treasury disagrees with the NAO's criticisms of the VfM assessment process and a full explanation of its position can be found in our 2013 report. (page 19)

To compare the costs of alternatives, it is important to consider the timing of payments. Future payments are discounted to a present value so that comparisons can be made. Private finance deals allow repayment of the upfront investment to be spread over time – future repayment of debt and interest are reduced through discounting. In our previous work we remodelled the VfM assessment to allow for the fact that the government can also issue debt and spread out repayments. Making this change resulted in a reduction in the costs of the public sector comparator. In the majority of cases this also meant the assessment outcome changed to show that the public finance option was best value.(page 19)

Making changes to the discount rate applied to future costs can also affect which financing route is assessed as VfM. The VfM assessment compares private finance costs with a government discount rate of 3.5%, which is 6.09% with inflation, known as the Social Time Preference Rate (STPR), which is higher than government's actual borrowing costs. The higher the rate applied, the lower the present value of future payments. For example a payment of £100 in 12 years will have a present value of just £49 when discounted by the STPR. **Discounting using a lower discount rate, which compares private** finance with the actual cost of government borrowing, results in fewer private finance deals being assessed as VfM. (page 20)

We have criticised the use of adjustments in the VfM assessment model, such as "optimism bias" and "risk transfer", that were not evidenced and increased the relative cost of the public sector comparator more than the private finance option. An important part of these adjustments relates to the benefits of transferring construction risk but there is little evidence that overall construction cost is lower under PFI. (page 20)

ATTACHMENT B

FUNDS MANAGEMENT AND PRIVATE FINANCING

It is relevant to consider briefly the relationship between infrastructure finance and funds management because:

- it is likely to have an impact on Queenslanders in the near future; and
- it goes to the heart of the failure to address the underlying problems of taxation referred to in the body of this submission.

From the outset, promoters of for-profit privatised infrastructure projects have recognised the benefit (to themselves) of forcing superannuation funds to invest in their projects.

In the late 1980s, this took the form lobbying to have "infrastructure" included as a separate Stock Exchange class. Such classifications have the effect of tacitly pressuring fund managers to hold a minimum proportion of their funds in the class.

With the development of the Global Industry Classification Standard ("GICS") in 1999, ASX industry groupings became less relevant. GICS has neither a Sector nor an Industry Group dedicated to infrastructure. There is only a "Transport Infrastructure" Industry which is just one sub-industry of the "Transport" Industry Group, which is in turn just one sub-group of the "Industrials" Sector. The only other possibility is the Utilities Sector covering electric, gas and water utilities, as well as independent power producers, but this is not useful for transport project promoters.

Possibly in response to this, proposals currently being floated – and supported by the private infrastructure lobby – would see:

- an increase in the preservation age for superannuation, or even an abolition of lump sum payments; and
- a mandated proportion of Australian superannuation funds forcibly "invested" in private infrastructure projects.

The latter proposal has a precedent in the "30/20 Rule" which prevailed before the introduction of the compulsory superannuation system in 1985. The 30/20 Rule required complying superannuation funds to invest 30% of their portfolio in government and semi-government securities of which 20% had to be in Commonwealth Government securities.

This arrangement was approved by the High Court in *Fairfax v Federal Commissioner of Taxation*, 1965⁶³.

The Ghost of 30/20 would see superannuation funds (which are now compulsory for Australian wage and salary earners) "invest" a portion of their funds in complying private infrastructure projects. Given the mandatory nature of this "investment" it may be imagined

⁶³ http://www8.austlii.edu.au/cgi-bin/viewdoc/au/cases/cth/HCA/1965/64 html

that it would be on terms less attractive than genuine investments, otherwise compulsion would not be required.

It may be readily foreseen that a large pot of money, not able to be withdrawn from the system, will prove irresistible to governments seeking hidden ways of raising revenue.

This threatens to be yet another private tax administered at great expense by a "Funds Management – Financing Complex" comprising:

- union-run industry superannuation funds; and
- investment bankers,

and targeted specifically at wage and salary earners who hold a greater portion of their life savings in the form of superannuation.

ATTACHMENT C

PUBLIC EQUITY, PRIVATE DEBT: THE EFFICIENT FINANCING OF ROADS

A paper delivered to the Australian Automobile Association's Land Transport Infrastructure Symposium, on 22nd March 1994.

(A copy of this paper has been forwarded as a separate pdf file.)



PUBLIC EQUITY, PRIVATE DEBT

THE EFFICIENT FINANCING OF ROADS

PRESENTATION TO AUSTRALIAN AUTOMOBILE ASSOCIATION LAND TRANSPORT INFRASTRUCTURE SYMPOSIUM CANBERRA, 22 MARCH 1994 Inquiry into the operations of Toll Roads in Queensland

Submission No. 165

Schroders

ABSTRACT

- 1. The risks facing lenders and investors in the toll road industry are quite unlike the risks facing lenders and investors in other industries. The involvement of government in roads even privately owned roads is much greater than in other utilities. The most efficient form of private sector involvement in roads is different from that in other utilities.
 - 2. The spectrum of possible private sector involvement in roads may be considered in three zones: public ownership with public debt finance, public ownership with private debt finance, and private ownership with private debt finance. Public ownership with private debt finance achieves private sector efficiencies with the lowest long term cost of finance and without problems of monopolisation.
 - 3. The conventional view is that private tolling concessions will run their term and that the roads will revert to government. This view is commercially naive. Having established a private taxing monopoly, government cannot gain access to the tax flow without either waiting for the concession to expire or negotiating (without the possibility of tender) with the incumbent monopolist. Incumbents use such renegotiations to progressively extend tolling concessions creating permanent private monopolies.
 - 4. One such untendered renegotiation has already occurred in Australia.
 - 5. At present Loan Council rules discourage the combination of public ownership and private debt, thereby forcing State governments to establish private tolling monopolies. If Loan Council rules are not changed, it may be possible to work around them by using motoring clubs as private sector owners of convenience.



INTRODUCTION

- 1. It is an undeniable fact of life that the process of government is often conducted through buzzwords and catchy slogans. In the mid-1940s we were told that government had to capture the "high ground of economic activity" in order to create a socialist utopia. Forty years later we were told that this was all a terrible mistake and that all government activities had to be sold in order to secure "private sector efficiencies".
- 2. For those of us who have no particular financial interest in the outcome of these affairs, the challenge is to steer between these extreme views and diligently seek the policy which will best deliver services to the public at least cost to them and to the taxpayer. This involves not just promoting private sector efficiencies, but capturing those efficiencies for the benefit of the public.
- 3. Nowhere is this challenge greater than in the provision of road infrastructure.

PECULIARITIES OF ROADS

- 4. Roads are extraordinary candidates for privatisation. Consider the following:
 - any particular toll road is almost always competing with free roads. This is particularly so in the urban road network. Yet consider how Arnotts would behave if it were government policy to have a free biscuit maker. Consider how BHP would behave if it were government policy to have a free steel or oil producer;
 - whether roads are public or private, the government still has detailed involvement in their planning, including control over the timing of their construction, the route which they must take, and the standard to which they are built;
 - once the road is built there is little a private owner can do to increase its traffic. Traffic volumes depend largely on development of access roads and alternative free roads;
 - motorists drive their own cars, so (unlike, say, private railways) there is little a private owner can do to improve the quality of service on board the vehicle;
 - if tolls are charged, they are usually set in advance with an indexation formula so there is little scope for improving allocative efficiency by changing prices to match demand. (Indeed, any toll road which is operating at less than capacity is a living example of allocative inefficiency. The scarce resources which were sunk into building it are not being used to full benefit); and



in developed countries, roads are never funded privately without government subsidy -: grants, subordinated "loans", tolling monopolies on existing roads, traffic underwriting agreements, or grants of public land.

SPECTRUM OF PRIVATE SECTOR INVOLVEMENT

5.

6.

What then does the private sector have to offer in the area of road provision? To answer this we consider the spectrum of private sector involvement. This is shown below, roughly in order of increasing risk transfer to the private sector. Three zones are shown. The first involves only project delivery, the second project delivery and financing, and the third private ownership.

Cost-plus construction contract

Least private sector risk and profit

Fixed-price construction contract

Fixed-price, lump sum construction contract

Build, finance, transfer

......

Build, finance, and transfer to independent

agency (Revenue bonds)

BUILD, TRANSFER, OPERATE

Build, own, operate (transfer)

Most private sector risk and profit

Under the traditional cost-plus contract, the contractor works at unit rates. Provided that such a contract is well project managed, it may be quite cost effective. However, there is clearly no incentive on the contractor to innovate and reduce costs. If the contract is not well managed, costs can blow out.



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- 7. The fixed price contract gives the contractor that incentive. If he can bring the project in below his tendered price, he profits. While attractive in theory, lump sum contracts run into practical difficulties with "variations". If unforeseen circumstances arise, the additional costs must be met on a cost-plus basis. Especially on large projects for government clients, there may be a temptation to profit from variations. The responsibility for variations may be in doubt, and the contractor may prefer to delay or to litigate, knowing that the government has a deep pocket and would prefer to see the facility completed rather than face an embarrassing delay. It is sometimes said in the construction industry that "you make your money on the variations".
- 8. The fixed-price lump sum contract removes some of the incentive to haggle over variations, and provides the contractor with an additional incentive to bring the work in ahead of schedule. Because it is the contractor rather than the government who bears the cost of capitalised interest during delay there is an incentive to complete on time or earlier.
- 9. The fixed price lump sum contract can be elaborated to strengthen the incentive and reward for early completion. In build-finance-transfer contracts a consortium may be established to build and finance the facility and then to transfer it for a lump sum after, say, a year of successful operation. The consortium may receive the income of the facility in the period before it is transferred. Schroders used a variation of the build-finance-transfer contract for the Manchester Light Rapid Transit. The project developer was required to build the facility and to hold it for a minimum of three years before it could be transferred back to the public sector.
- 10. The build-finance-transfer contract also captures the private sector's flexibility in project delivery. There is a story (possibly apocryphal) of the private road developer who discovered that an additional few metres of corridor was required at one spot. Rather than going through the delay of public sector land valuation and resumption procedures, the matter was resolved within days with a generous payment to the landowner. The developer was able to weigh up the relative benefits of saving money on land resumption and saving time on completion.
- 11. None of the contract forms mentioned so far requires ongoing private financing or ownership. They are project delivery options, and it is in project delivery that almost all of the private sector efficiencies are obtained.
- 12. There may still be a risk, even with build-finance-transfer, that government will succumb to delaying tactics by the development consortium seeking to renegotiate the lump sum transfer price. Alternatively, government may simply not wish to undertake the borrowing needed to pay for the facility. It may be concerned about its credit rating. It may wish to ensure that toll income is dedicated to repaying road construction loans.
- 13. In any of these cases it may be very effective to arrange for the developer to enter into a lump sum contract or a build-finance-transfer contract with an independent non-guaranteed agency. This is the essence of the "revenue bond" widely used in the United States. The agency can only pay out what it can borrow, and it can only draw down loans when the facility is up and working.



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- 14. An added feature of this approach is that government can present the transaction as a "private" undertaking (even though it remains the beneficial owner of the facility). Any delays can be attributed to the private developers.
- 15. Revenue bonds are also used on a massive scale on the French toll road system. Individual toll roads are owned by sociétés d'economie mixte ("SEMs") whose shareholders are central, regional and local government together with chambers of commerce or chambers of agriculture. The SEMs borrow from a central borrowing agency - the Caisse Nationale des Autoroutes ("CNA"). CNA in turn issues non-guaranteed bonds to institutional investors. Because of the broad spread of traffic risk, CNA has achieved an AAA credit rating despite the absence of a government guarantee.
- 16. Throughout the world, revenue bonds, or a variation thereon, are the most common form of road finance. They may be pure revenue bonds in the United States, the French public-private system, or the Autostrade in Italy. The common feature is private debt, but beneficial ownership retained in the public sector.
- 17. The revenue bond approach may also incorporate an operating and maintenance contract with a private firm. This has sometimes been described as the "build-transfer-operate" approach. It transfers to the private sector all the risks which the private sector can manage without transferring unmanageable risks and without creating unregulated private monopolies.
- 18. In our view, build-transfer-operate represents the optimum level of risk transfer to the private sector. The private sector provides design, construction, project management, operation and debt finance. A description of the build-transferoperate model applied to the San Joaquin toll road is set out at Attachment I.
- 19. It is possible to go further and to transfer equity ownership and control to the private sector. This is the essence of the build-own-operate-transfer ("BOOT") and build-own-operate models which have been embraced by Australian governments. Leaving aside for the moment the issue of Loan Council (which is discussed below), it is our view that these models do not give taxpayers or motorists the same value for money as the build-transfer-operate model.

DISADVANTAGES OF THE BOOT MODEL

Inappropriate risk transfer

20. As noted earlier, one of the peculiarities of roads is that the main postconstruction risk - traffic risk - is one which a private sector owner is powerless to manage. Typically, government is in a much better position to manage traffic risk through its road planning and traffic management functions.





- 21. This is the very reason why successful toll road programs around the world rely on private debt financing rather than on private equity and ownership. With private debt financing the rate of return to investors is fixed. Government may subsidise the project, or give it more traffic than it needs for the construction being undertaken, in the knowledge that all excess income will be recaptured.
- 22. If there is private equity in the road, government may get away with a lower initial subsidy. But it (or the motorists) will pay in the long run as the private equity investors demand a high rate of return for taking unmanageable risks.
- 23. In some cases it appears that private investors contribute very little equity. Attachment II seeks to estimate the value of risk capital in the M4 project in Sydney. The accounts suggest only \$460,000 of ordinary equity in the \$180 million project. Even ascribing a value to the preference capital (determined from recent share transfers) puts the total equity at only \$11 million, or 6% of the project cost. The contribution of an additional 6% private equity, which will demand a high rate of return, does not seem to justify the difficulties associated with private ownership.

Permanent unregulated private monopolies

24. In theory, the BOOT model gives the private owner a "temporary" concession to collect tolls from a particular stretch of road. Indeed, it is AAA policy that roads should become toll-free when the tolling concessions expire. In practice, the temporary concession may turn into a permanent unregulated private monopoly. The reason for this can be seen in Figure 1.

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25. Figure 1 shows the gross and net borrowing capacity of a public toll road financed with revenue bonds over a 20 year concession expressed as a percentage of the original construction cost. (A full list of assumptions is set out at Attachment IV.)

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- 26. In the pre-opening phase the gross borrowing capacity is equal to the construction cost. The net borrowing capacity is zero.
- 27. Before opening, lenders are relying on uncertain traffic forecasts. Shortly after opening, lenders can ascertain the actual traffic flows. In the analysis underlying Figure 1, it is assumed that the required loan life cover ratio falls from 2.0 times to 1.4 times and concession life cover falls from 2.5 times to 1.75 times as the risk of traffic flow falls away. Assuming that the projected traffic flows are achieved, the gross borrowing capacity of the road rises by about 100%. Thereafter, gross borrowing capacity slowly falls.
- 28. However, the original loan is also being repaid so the net borrowing capacity rises sharply. Figure 2 shows the net capital raising capacity of the road.

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29. This additional capital raising capacity is a valuable asset. If the road is publicly owned, the government may raise further debt finance to build more facilities without drawing on government guarantees or subsidies.

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- 30. However, if the facility is privately owned under a BOOT arrangement, then it is clear what is going to happen. Sometime in the first five or six years of operation the owner, who may have contributed negligible original equity and who can now borrow against the established traffic flows, will approach government and offer to build some "free" road in return for an extension of the concession or a renegotiation of the maximum toll. Of course the extra road is not free at all. It is paid for by motorists in the form of a longer tolling period, higher tolls, some more government subsidy taken from the roads budget, or all three.
- 31. Moreover, such an extension contract is not subject to tendering either in the construction or in the financing. Government is placed in the invidious position of either dealing with the incumbent monopolist or waiting 15 years for the concession to expire before it can gain access to the cash flow.
- 32. The incumbent monopolist may have another advantage. The original financing will usually have been based on the existing road configuration. If the new work is an extension of the original, and increases traffic flows above the original projections, this flows as a superprofit to the incumbent. The incumbent may agree to contribute part of this superprofit towards the new road (keeping the other part) provided that the extension contract is not put out to tender. (Sometimes there may be a notional superprofit cap. However, as shown below, this is generally ineffective.)
- 33. The progressive extension of toll road concessions is not necessarily a bad thing. The French tolled motorway system was developed by progressively extending the concessions of the SEMs and borrowing against their established traffic flows to finance new works. However, unlike privately owned toll roads, the SEMs are not seeking to profit from their monopoly position. Their role is to develop the road system, and they let out construction to tender so as to maintain competition and to capture the benefits of private sector efficiency.
- 34. Nor are private monopolies necessarily a bad thing. Private natural monopolies occur in the gas, water and electricity distribution industries. But, where competitive tendering is not practicable, they are invariably subject to some form of independent profit regulation.
- 35. The most worrying aspect of the BOOT model is that it may be creating permanent, unregulated, private monopolies. This is likely to increase rather than decrease the costs faced by motorists over time.
- 36. Appendix III sets out press coverage of the M5 extension contract which was awarded without tender.



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Superprofit recovery

- 37. It is often claimed that BOOT contracts contain superprofit "sharing" clauses. Leaving aside the question of why superprofits should be shared at all, it is unlikely that such limits on superprofits will work.
 - 38. Superprofit caps and sharing arrangements require the owner to achieve a cumulative rate of return before they are activated. Moreover, they are usually subordinate to the repayment of debt. Just as the owner can renegotiate the length of the concession period long before it terminates, so the owner is likely to renegotiate the superprofit cap away long before it becomes effective.
 - 39. It should also be remembered that the most effective form of superprofit cap is the fixed rate loan. Superprofit caps only become an issue because the BOOT approach uses private equity and ownership.

Income tax

40. Federal income tax is payable on the profits earned by investors in BOOT arrangements. This further increases the cost of the equity component of the financing.

LOAN COUNCIL AND TOLL ROADS

- 41. Given the disadvantages of the BOOT approach, one might well ask why Australian governments don't use revenue bonds and build-transfer-operate schemes. The reason is Loan Council, which forces the States into unnecessarily expensive transactions with the private sector in order to bypass the Global Borrowing Limits. (Why a State which is not constrained by Global Borrowing Limits would enter into a BOOT contract is a complete mystery.)
- 42. Under the "old" Loan Council rules, borrowings were included in Global Borrowing Limits if they were undertaken by entities which were "owned or controlled" by a State or Territory. It made no difference that the borrowings were not guaranteed by the State. On the other hand, borrowings by other entities fell outside the Global Limits, regardless of whether the project was subsidised or otherwise assisted by the State.
- 43. The definition of "control" was a not fixed. For the Sydney Harbour Tunnel project it was decided that the entity was not controlled by the State, even though its income was guaranteed by the State. However, this view was then suddenly reversed and it was decided that any further "private" toll roads could not rely on income streams guaranteed by the State.
- 44. In 1993, in an attempt to bring some order to the apparently arbitrary application of Loan Council rules, a new set of guidelines was released. These were based on the concept of actual and contingent liabilities incurred by the States. Specifically, paragraph 39 of the new guidelines states:

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39. Any attempt to draw a public/private boundary line based on the underlying economic arrangements would simply take us back to the original problem of trying to allocate risk between the public and private sectors. The best approach is to adopt a boundary line that is readily identified and admit that it is an arbitrary line determined only by considerations of simplicity.

The boundary proposed is to only apply the risk weightings to any public sector infrastructure project with private sector involvement which operate for 10 years or longer (including options for renewal) and which involve the provision of services direct to a public sector entity or the underwriting by the public sector (that is, the generation of any financial exposure by the public sector, whether actual or contingent) of services provided directly to consumers.

- 45. One might reasonably have interpreted this to mean that a build-transferoperate project with revenue bond finance, providing services directly to motorists, would not have its borrowings included in the Global Borrowing Limits.
- 46. Unfortunately, this is not so. Our discussions with State Treasury officials in December 1993, revealed a hitherto undisclosed aspect of the new guidelines: that they operate in conjunction with the old guidelines. In other words, the old rules concerning "control" still apply and presumably are as arbitrary as ever.

AN ALTERNATIVE TO BOOT TOLL ROADS

- 47. Unhappy with private toll road monopolies, we have sought to devise a better alternative.
- 48. If Loan Council will not permit build-transfer-operate projects; if Loan Council insists that there be a profit maximising private owner of the toll road monopolies, then let that owner be an organisation which will reinvest the profits for the benefit of motorists.
- 49. In France this role is filled by the SEMs with their chamber of commerce shareholders. In Australia, we are fortunate in having organisations such as AAA, and its motoring club members, who can fill this role. Moreover, such organisations have a long history of running successful commercial businesses. Most have a commercially run insurance business.
- 50. There are a number of ways in which motoring club participation could be implemented. One such structure is illustrated below:



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- 51. In this model, the concession is owned by a profit-seeking trust whose trustees are the State motoring club and a representative of the lenders to the project. Important features include the following:
 - the trust would be required under its deed, under its concession agreement, and under its borrowing covenants, to put out to competitive tender all aspects of design, construction and operation;
 - the motoring club trustees would seek competitive financing; and
 - (in order to avoid the creation of an unaccountable and cash rich agency) it would be a requirement of the trust deed that surplus income be reinvested in roadworks, or placed on deposit until suitable works are approved by government. It is proposed that the trust should be a financing and administrative agency with minimal staff and with all significant functions contracted-out to the private sector.
- 52. A further feature of note is that such a trust is likely to be tax exempt.

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Attachment I

BUILD-TRANSFER-OPERATE

THE SAN JOAQUIN TOLL ROAD



- 1. This attachment describes the San Joaquin toll road in California which is being developed on a build-transfer-operate basis.
 - 2. Interesting features include the following:
 - the facility is publicly owned initially by San Joaquin Hills Transportation Corridor Agency ("TCA") comprising Orange County and 10 southern Californian cities, and later by California Department of Transportation;
 - total construction cost before capitalised interest is about \$914 million:
 - financing includes:
 - \$1079 million BBB rated revenue bonds;
 - \$91 million unrated subordinated zero coupon bonds:
 - \$111 million State and Federal grants;
 - since the facility is publicly owned, under United States law the bonds are tax-free. The tax-exempt yield of 7.59% per annum is equivalent to about 11.4% per annum to taxpaying investors;
 - TCA will insure the "ramp-up" risk by guaranteeing the first two years of debt service after completion;
 - construction is on a fixed price, fixed time basis with incentives and penalties:
 - liquidated damages of \$192,250 per day are payable for up to 455 days. The contractors' total potential liability for all penalties is \$107 million; and
 - there is a bonus equal to 70% of net toll revenues collected for every day the road is put in service ahead of schedule; and
 - toll system supply is on a turnkey basis which guarantees 99% accuracy in toll collection. Toll collection is contracted out for five years with extension up to 25 years at TCA's option.
 - The use of revenue bonds provides the State with access to off-budget capital without establishing a privately owned and controlled tolling monopoly. Private sector efficiencies in construction and operation are realised through contracting-out.

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The international busine..s guide to public-private partnerships and innovative finance



TRANSPORTATION SPECIAL REPORT SAN JOAQUIN TOLL ROAD FUNDING BUILDS A STRONG BASE FOR NEW, URBAN INFRASTRUCTURE IN THE U.S.

By William G. Reinhardt

The successful funding and order to proceed with construction of the \$1.4 billion San Joaquin Hills toll road in Orange County, Calif., early this month represents a major advance in the development of <u>privately</u> financed in<u>frastructure</u> projects in the U.S.

After five years of strenuous and costly efforts by public and private interests in southern California, a near-record tax-exempt bond issue for a startup toll road sold out in two hours on March 3. As the dust settled, a cheer went up on the trading floor at First Boston Corp., the lead underwriter, which had been marketing the \$1.17-billion in senior and junior lien debt for months.

A geographically diverse group of about 25 sophisticated institutional investors bought the revenue bonds, despite last-minute questions raised by Standard & Poor's about the heavy reliance on senior debt and coverage of construction risk. The issue was clouded further by uncertainty over the tax implications of a federal letter of credit obtained by the project sponsors to cover some of the traffic risk during the ramp-up period.

Based on the need for the road, the serior debt was given a BBB investment-graderating on Feb. 26 by Fitch Investors Service Inc., which proved to be enough to unlock the door on a tax-exempt market starved for rated, high-yield securities.

The issuer, San Joaquin Hills Transportation Corridor Agency (TCA), a joint action agency of Orange County and 10 southern California cities, issued a notice to pro-



- Special Report San Joaquin Hills Toll Road
- \$1.4-billion San Joaquin funding builds a strong base for other urban infrastructure deals
- 3 Franklin Fund was a big believer
- 6 Banks or bonds? It came down to who believed the traffic studies
- 8 Toll roads will become the nation's new high-service highways
- 9 San Joaquin team is rich in talent
- 10 Aggressive environmental strategy, strong friends made San Joaquin go
- 13 Preventing endangered species train wrecks is expensive
- 14 Aggressive compliance works (when you're rich)
- 15 Project highlights
- 16 Bechtel and Kiewit team up for private infrastructure
- 18 A modest proposal for leveraging federal dollars
- The New Paradigm Why private infrastructure is real and how to sell it to government
- 24 Public-Private Services Directory

Public Works Financing is published monthly for \$327 a year (government), \$427 a year (private sector) and \$447 a year (outside North America) by RCC's Public Works Financing, 154 Harrison Ave., Westfield, NJ 07090-2433 Second class postage pending at Westfield, NJ. Postmaster: Send address changes to PWF, 154 Harrison Ave., Westfield, NJ 07090-2433. ceed to Kiewit Pacific and Granite Construction on March 11. Barring any unforeseen problems with environmental litigation or construction, the high-speed, heavily automated road will be the first new highway built in Orange County in decades and the first major toll road ever attempted in California.

The 15-mile corridor is the first leg of a 67-mile system of new highservice roads conceived almost 20 years ago and financially supported by private landowners and Orange County govern-

ments ever since. The state government has agreed to contribute \$110.7 million in demonstration grants for the San Joaquin segment. And the California Dept. of Transportation will maintain the completed road.

But the San Joaquin Hills revenue bonds are secured primarily by future toll revenues based on traffic projections from Wilbur

Smith Associates (WSA), New Haven, Conn.

The sale of the bonds proves that construction and traffic risks can be shared in new ways between the public and private sectors—and in ways that satisfy credit-rating agencies and investors.

It proves that there is a market for well-structured revenue-bond financings of costly, startup toll road projects in urban areas, especially those that relieve existing congestion.

And it proves that there is a successful financing path for a project hotly pursued by environmentalists and their lawyers in a state where some consider the political risk of project development to be greater than in many developing countries. TCA and its aggressive environmental compliance team have found a way through the project-permitting gauntlet in congested, smog-ridden, politically fickle—and very wealthy—southern California.

THE HISTORY

Orange County's population has tripled during the past 40 years and increased by 60% since 1970. Yet only four miles of new highway have been built in the region during the

"Since the early 1980s, I've seen an awful lot of vision by the public leadership working with the private developers out there to bring about a new system of transportation improvements."

 past 20 years. The San Joaquin Hills transportation corridor was added to Orange County's master plan in 1976 after transportation, land-use and environmental studies indicated a pressing need for a new freeway.

There was no money for a freeway, however. Starting in 1984, Orange County voters turned down two attempts before fi-

nally agreeing to increase the local sales tax to pay for transportation improvements in 1990. It didn't look like Sacramento or Washington was going to donate funds to one of the wealthiest counties in the country either.

Instead, the local governments and Orange County's private developers agreed to try to build a major new transportation system using only development-impact fees, private land proffers and in-kind services as local equity.

The plan was to pay 48.5% of the cost of construction from impact fees and borrow the rest based on future toll revenues. The real estate side of that equation fell through a few years ago when new residential de-

PWFinancing/March 1993
velopment slowed to a trickle in Orange County.

Impact fees as high as \$2,823 per new residential unit have been collected since 1986, however. Those fees are TCA's only source of funds and have allowed it to raise the \$84 million spent getting the San Joaquin Hills project to the point where it could be put before investors.

"Since the early 1980s, I've seen an awful lot of vision by the public leadership working with the private developers out there to bring about a new system of transportation improvements," says Thomas Bradshaw, Managing Director and head of First Boston's transportation group.



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CALIFORNIA FUNDS GOT THE BALL ROLLING

The Franklin Fund out of San Mateo, Calif., was among the earliest and largest purchasers of the San Joaquin Hills toll road bonds, all of which sold out within about two hours once the big California taxexempt fund and other West Coast investors made their move.

Franklin purchased \$170 million of the total \$1.17 billion in toll-road bonds issued. Of the rated, seniorlien debt, Franklin took \$50 million of the 7% current-interest bonds due in 2030 and \$60 million of the convertible capital-appreciation bonds, which sold at 7.3 to 7.7% depending on the maturity. It also bought \$60 million of the \$91 million in juniorlien bonds offered.

The subordinated debt, which sold at tax-exempt yields of 8 to 9%, went into Franklin's high-yield fund. The senior-lien bonds were placed in Franklin's California Tax Free Income Fund, which is limited to investment-grade securities.

According to Bernard Schroer, a Franklin vice president, "A lot of

people were skeptical of the credit. They wanted company. Once they got it then the whole bandwagon jumped in."

Most of the rest of the senior and subordinated debt went in smaller pieces to insurance companies and other tax-exempt funds in California, New York and Boston, he says. Other sources say Prudential and T. Rowe Price looked closely at the project. Neither was willing to talk about their investments, if any, however.

Schroer is senior portfolio manager for Franklin's California Tax-Free Income Fund, which holds \$13.6 billion in securities: Franklin's analyst Thomas Kenny had been following the project closely for a year, longer than any of the other funds. As a result, says Schroer, Franklin was among the most comfortable with the construction, environmental and traffic risks.

"The people building it are two of yo the best contractors around and it's in our opinion that once the thing is jan

built, people will have no choice but to use it. There's a real need for it," he says. "The major obstacle is environmental concerns and TCA seems to have overcome their problems so the only thing left is to get it built."

Schroer says he is not concerned about the ramp-up risk during the early years of operation. To ensure easy access, the toll project includes improvements to the free federalaid and state routes at either end. There are plenty of reserves and contingencies built into the financing. TCA is seeking federal grants for installing high-occupancy-vehicle lanes as soon as possible. And the completed road will be operated and maintained by Caltrans. "If they want you to use it, there are a lot of ways they can make you use it," says Schroer.

As a final note, Schroer adds, "I drive 45 miles each way to work every day I would gladly pay \$2.00 to use a toll road, especially when you're on your way home and you're in the middle of a two-hour traffic jam on the so-called free road."

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"This project wouldn't have gotten off the ground without the private sector's money and the solid support from The Irvine Company on the legislative front in Sacramento and Washington," he says. "The private sector was a major factor in this project's success."

THE PROJECT

The San Joaquin Hills toll road will be the first modern toll road in California and the first of three toll roads totaling 67 miles planned by TCA in Orange County. It is scheduled to open after four years of construction in March 1997 between Interstate 405, near John Wayne Airport, and I-5 to the south, near San Juan Capistrano.

Studies by WSA's Senior Vice President Edward Regan predict an average of 71,800 vehicles per day will use the heavily automated road in 1997, at an opening-day passenger-cartoll of \$2 at the main barrier. (That's the equivalent of 13.8 cents per mile in 1997 or 11.3 cents today, assuming a 4% inflation rate, making it the second most expensive toll road in the U.S. after the Orlando East-West Expressway in Florida). Most of the early traffic will be weekday commuters. WSA predicts that only 25% will be through trips; the rest will be local traffic.

The capacity of the completed sixlane limited-access highway will be 5,600 vehicles per hour in each direction. WSA estimates 5,000 vph will use the road during peak travel periods during the first year.

WSA's data indicate that only 11.9% of the projected north-south traffic in the region will use the new, premium-service route in 1997. Time savings, assuming the competing routes are operating at optimum, are estimated at 10-15 minutes for a typical 10-mile trip.

The road is designed to relieve the extreme congestion on the region's freeways and secondary roads. In 1991, the average traffic was 242,000 vehicles per day on the sections of I-5 that will be affected by the toll road. Northbound travel on I-5 peaks at about 6 a.m. and doesn't drop back into free-flow conditions until 12 hours later.

The toll road also will connect Irvine's large central busi-

ness district to wealthy residential areas in the parts of Orange County farthest from Los Angeles. Development and job growth have nearly stopped in the service area. High land values, great personal wealth and a large economic base still underpin the traffic projections, however.

CASTER.

Beach

"They did it right. They disclosed everything and left it up to the buyers to decide whether they were adequately compensated for taking the risks."

> —Laurie Mahon, Senior Vice President of Kidder Peabody Inc.

Construction involves 78 bridges and 10 interchanges over 19.4 miles of road improvements. Of that, 14.5 miles is new construction, 4.2 miles is widening work on Interstate 5, and 0.7 miles is improvements to State Route 73, which connects the toll road to I-405, the San Diego Freeway.

Three lanes will be built in each direction with room left in the 88-ft median for two reversible high-occupancy-vehicle (HOV) lanes. The north-bound traffic on the toll road is expected to reach capacity during peak travel periods in 2001.



The design is about 35% complete. All but about 3% of the rightof-way is in TCA's hands and the remaining 19 parcels are commercial property subject to 90-day takes by the joint powers agency.

The total project cost is \$1.4 billion. About \$830 million of that is needed to complete the right-of-way, design and construction. Including the \$84 million already spent by TCA, direct project costs will total about \$914 million.

TURNKEY TOLL COLLECTION

Toll collection and revenue management will be handled under a \$12.9-million turnkey contract awarded on Mar. 5 to Lockheed Information Management Services Co., Teaneck, N.J.

In addition to financing the installation and startup of its toll system, the defense contractor has agreed to provide a 100% perfor-

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mance bond, a \$10-million fidelity bond or similar instrument as a performance guarantee, and a subordinated \$9-million line of credit to TCA in case the road doesn't generate enough net cash flow during ramp-up to pay debt service and administrative costs. The contract also includes a guarantee of 99% accuracy backed by Lockheed's pledge to reimburse TCA for any difference between traffic counts and revenues collected.

An initial 5-year operating agreement may be extended four times at TCA's option. TCA estimates the value of the contract over the full 25year term will be \$600 million to \$800 million depending on the volume of traffic. Those figures are based on Lockheed's monthly management fee which includes a fixed. minimum fee and a per-transaction fee for traffic volumes beyond an annual base. The variable fee must be less than the annual fixed fee. Increases in the fixed fee are capped at 6% a year for the first five years.

A closed system comprising a mainline barrier and 14 ramp toll Submission No. 165

plazas will be used. Collection will be handled manually, by coin machines and using automatic vehicle identification (AVI) systems. Lockheed IMS will provide systems integration and operations management. Its subcontractor, AT&T IVHS Communications Systems, Bridgewater, N.J., will supply the smart card transponders, communications infrastructure and customer services for toll collections.

Lockheed has agreed to share a small percentage of its incremental gross income with TCA for its help

ESTIMATED SOURCES AND USES

Set forth below is a summary of the estimated sources and uses of funds in connection with the financing for the final design and construction of the Toll Road. For a more complete description of such estimated sources of funding and estimated costs of final design and construction, see "THE TOLL ROAD-Cost Components and Sources of Funding" herein.

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	Uses		
\$1,078,629,421	Design/Build Contract Costs(4)	S	702,922,250
90,947,437	Agency Costs(5)		127,606,123
	Project Contingency		100,000,000
31,000,000	Loan Repayment(6)		18,340,627
110,738,850	Senior Lien Capitalized		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
106,353,056	Interest(7)		289,504,725
\$1,417,668,754	Senior Lien Debt Service Reserve		
	Fund		75,000,000
	Junior Lien Debt Service Reserve		
	Fund		10,000,000
	Financing Costs(8)		24,125,173
	Original Issue Discount		70,169,856
	Total Uses	\$1	,417,668,754
	\$1,078,629,421 90,947,437 31,000,000 110,738,850 106,353,056 \$1,417,668,754	\$1,078,629,421 Design/Build Contract Costs(4) 90,947,437 Agency Costs(5) Project Contingency Project Contingency 31,000,000 Loan Repayment(6) 110,738,850 Senior Lien Capitalized 106,353,056 Interest(7) \$1,417,668,754 Senior Lien Debt Service Reserve Fund	Uses \$1,078,629,421 Design/Build Contract Costs(4) \$ 90,947,437 Agency Costs(5)

- (1) Represents certain advance funded development impact fees. See "DEVELOPMENT IMPACT FEE PROGRAM-Mission Viejo Company Agreement" herein.
- (2) Represents \$40 million allocated to the Toll Road by the California Transportation Commission through the State Transportation Improvement Program and \$70.7 million allocated to the Toll Road under the State and Local Transportation Partnership Program. See "THE TOLL ROAD-Cost Components and Sources of Funding-Sources of Funding" herein.
- Assumes an interest rate of 4.0% on moneys in the Construction Fund, 6.0% on moneys in the Reserve (3) Funds, and 4.9% on moneys in the Capitalized Interest Account.
- Reflects amounts payable to the Contractor under the Design/Build Contract reduced by price (4) adjustments for rescheduled work and amounts previously paid to the Contractor as well as the deferral of a portion of the contract payments. See "THE TOLL ROAD-The Design/Build Contract."
- (5) Includes right-of-way costs, construction engineering and design management, toll collection facilities and administrative costs.
- (6) Includes repayment of loans to the Orange County Transportation Authority and Morgan Guaranty Trust Company of New York.
- (7) Represents interest on the Senior Lien Bonds through March 1999, which date is approximately two years beyond the scheduled completion date of the Toll Road.
- Includes underwriting costs, legal, financial and consulting fees, printing costs and other miscellaneous expenses.

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in marketing Lockheed's smart card transponders for use in parking lots, buses, and other transportation services in the region.

THE FINANCING

In working with the credit-rating agencies last fall, TCA had asked Standard & Poor's for a private opinion on a transaction that sought to balance TCA's needs with S&P's concerns about the balance between the senior and junior lien bonds. Once Fitch issued its investmentgrade BBB rating last month, S&P moved quickly to market, according to Walter D. Kreutzen, TCA's Executive Vice President for Finance and Administration.

TCA would have preferred to get

a rating from all three agencies. But Kreutzen and his advisors figured that all the tax talk in Washington would create a terrific opportunity in the tax-exempt markets for any kind of rated bonds with above-average yields. They were right. "We hit a great market," says Kreutzen. "I'd rather be lucky than good any day."

Various tranches of senior and junior lien bonds were issued on March 3. According to Kreutzen, the \$1.08 billion in senior lien bonds were oversubscribed by at least two and as much as five times the amounts offered, depending on the types of bonds and terms. The high demand allowed TCA to reprice at the final hour and drop the interest rates by anywhere from 2.5 to 7.5 basis points, he says.

A little over \$91 million in unrated, junior lien zero-coupon bonds were also sold. There was strong interest in both the senior and junior lien debt, says Bradshaw. Investor interest in the current-interest senior debt was so great, he says, that TCA was able to reduce the amount of junior lien debt by about \$10 million, which lowered the overall cost of capital.

As the markets shifted in the final week, First Boston shortened the maturities of the junior bonds and lengthened the maturities on the current-interest senior debt. It also sought to avoid some of the trading volatility for TCA's deferredinterest capital appreciation bonds by adding more current-interest

BANKS VS. BONDS

For most of last year, the Transportation Corridor Agencies (TCA) was pursuing two different financing tracks. The option selected is a tiered financing using long-term, fixed-rate senior and junior bonds to fund the construction and ramp-up to full capacity. Because of their healthy yields, sophisticated institutions jumped at the chance to buy those securities earlier this month.

The rejected option was to issue variable-rate bonds secured by a bank letter of credit. In the bank plan, the agency planned to seek long-term financing after construction and three years of operation. As it turned out, however, TCA never got past the final hurdle with the banks.

TRAFFIC STUDIES

Few of the commercial bankers trying to finance startup toll roads have any experience with transportation projects, says Thomas Bradshaw, Managing Director of First Boston. They understand project finance only from the perspective of the utility take-or-pay contracts that backstop cogeneration deals, he says.

"They've been trying to get up the learning curve on transportation and all the nuances of toll-road financing," says Bradshaw. But they never got comfortable with Wilbur Smith Associates' (WSA) traffic studies. As a result, the banks heavily discounted TCA's most conservative revenue projections, so much so that it became much more difficult to structure the financing.

With U.S. bank profits up and credit restrictions easing, some believe that commercial lenders will move more aggressively on toll road financings, mainly because of their ability to manage construction risk.

That wasn't apparent on San Joaquin. The credit crunch, realestate debacle and the attractiveness of trading rather than lending has left commercial banks with little appetite for taking any type of risk. As a result, the banks that are trying to structure toll-road financings seem to focus only on the risks. That builds on itself in the market with the result that the positive side of the story often does not get told.

MACRO VS. MICRO

Karen Derenthal, Vice President at Banque Nationale de Paris, and a key player in the negotiations on the letter of credit, figures that the bond investors "took a very different view than the banks on needing to be comfortable with the details. They appear to have done a more macro sort of analysis that said in one form or fashion the road is going to get built because people need it and want it. That's a very different approach."

Banks and the institutional investors in the private placement market are most concerned about construction risk, she says, and the threat that traffic revenues won't

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CHEN HORIZON

bonds to the mix and discounting them to enhance yields.

"We listened hard to what people said they wanted to buy," says Bradshaw.

The ability to access a large, liquid and yield-hungry tax-exempt market also helped a lot. "The taxexempt marketplace has so few opportunities for yield that it will look closely at one of these transactions." says Laurie Mahon, senior vice president of Kidder Peabody Inc. and head of its infrastructure finance group. Instead of competing with a lot of corporate junk bonds, she says, "San Joaquin stands out like a beacon in the night in the tax-exempt market."

But it was also well-structured,



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Ron Hartje, Executive Vice President, West Division, 714.752.6940.

BANKS VS. BONDS

support debt service during the ramp-up period. Timeliness of payments is critical because of the banks' shorter lending horizon.

Municipal bond buyers are moreconcerned about yield and ensuring that the actuarial assumptions pan out over the full term of the bond, she says. "A bank's perspective is very different from an investor who says 'I don't need to see any cash for. 10 years, and if it's 12, I'm not so concerned as long as I get my money back over a 30-year horizon."

S&P CONCERNS

S&P noted in a press release before the bonds were issued that it found two major weaknesses in the TCA financing plan, i.e. insufficient senior-lien coverage and a builder's risk policy that did not cover every possible contingency.

S&P wanted a 70-30 split between the senior debt and more expensive subordinated bonds. TCA and its advisors were worried about their ability to sell \$300 million in juniorlien, deferred-interest bonds. When Fitch Investors Service agreed to rate the 90-10 deal, TCA jumped into the market.

Earlier, TCA considered but rejected an approach used by Smith Barney's Greg Carey on the Choctawhatchee Bridge in Florida (PWF May 1992). A Lloyd's syndicate wrapped with a rated U.S. insurer provided the security on construction risk sought by investors on that startup project.

'It turned out to be a very expensive policy for what we were going to get," says Walter Kreutzen, TCA's Executive Vice President for Administration and Finance. "We decided that we were better off taking the cost of the premium and the coinsurance on the deductible and putting it into the financing plan as part of the project contingency. We'd rather line our pockets than the underwriter's pockets."

FEDERAL GUARANTEE

Interestingly, Kreutzen and others-including Bernard Schroer, the manager of Franklin's California Tax-Free Fund, which bought most of the junior bonds-do not believe TCA paid much of a penalty, if any, for not securing its \$24-million-ayear federal letter of credit. The bond markets either ignored or quickly discounted the details of the federal credit support that was so critical to the project finance bankers

TCA successfully lobbied the ramp-up risk protection into last year's transportation appropriation bill. It couldn't get a bond counselruling, however, on whether or not the credit is an implied federal guarantee of the San Joaquin Hill revenue bonds, which would kill their federal tax exemption. Other than the fact that the federal government. tried to contribute credit support, the TCA got no tangible benefit from the \$120-million federal facility.

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says Mahon, with all the risks disclosed and discussed. "They did it right," she says. "They disclosed everything and left it up to the buyers to decide whether they were adequately compensated for taking the risks."

Although it's still not clear where the yield has to be for the next projects, "San Joaquin shows there is a market for private toll-road financings, and we're very encouraged by that," says Mahon.

COST OF CAPITAL

TCA's overall cost of capital on San Joaquin Hills was 7.59%, tax-exempt. Assuming Congress gives

President Clinton a 36% tax bracket and a 10% surcharge for the very wealthy, the taxable equivalent works out to a 11.4% on the currentinterest senior bonds, which make up the bulk of the securities issued.

"I think we paid a penalty for being the first, for being big, for the fact that we didn't have all three rating agencies rate us, for being a startup toll road in California and for potential litigation," says Kreutzen.

Though expensive by some standards-TCA's rated, senior bonds sold at about 100 basis points over U.S. Treasuries-any project financing including construction risk that comes in under 8% is considered to

TOLL ROADS TOP NEW THINKING **ON TRANSPORTATION HIERARCHY**

the mayor's level and at the Secretary of Transportation level. My sense is that this is a community that recognizes that they need to do something about the future pretty soon. And toll roads will be part of that future."

So says First Boston's Thomas W. Bradshaw Jr., Transportation Secretary in North Carolina from 1977 to 1981, former mayor of Raleigh, N.C., and a board member of about a half dozen national organizations dealing with transportation issues.

Interstate highways are at the top of the hierarchy of surface transportation systems in the U.S. Bradshaw predicts that toll roads state highway projects in planning will become the industry's choice for second-tier service across the U.S. "I believe there will be a number of projects that are not on state transportation plans that will all of a sudden be looked at as a new hierarchy of transportation network systems," he says.

A number of projects already have been identified in new transportation corridors that have evolved since the Interstate highway system was

Tive seen transportation needs at laid out in the 1940s and 50s. The economic revival in the Midwest may spur development of a high-speed truck route from Chicago to Kansas City, for example. In other places, he says, smart-road technologiesdeployed on premium-service, highspeed routes will be needed to meet the demands of just-in-time manufacturing and delivery techniques.

> "You're going to see projects like that moving now that people can see how one of these has been done," says Bradshaw. "Every one of these is like a building block. I'd like to think of San Joaquin as a good foundation that says new toll roads do work if the project itself is solid."

Bradshaw does not believe many now will be pursued as toll facilities.

Although it may be necessary and expedient, it won't be possible in most places. "The poli-tics of how that takes place is truly the question of the 90s for this industry," he says.



be a great success. "No one ever envisioned that we'd be able to do this at these attractive interest rates" on purely speculative bonds, says Bradshaw.

TCA earlier had proposed to issue variable-rate bonds secured by a bank letter of credit whose term extended through construction and three years past startup. The estimated cost of capital in that plan was 7.5%, but subjected TCA and the banks to refinancing risk.

Market conditions helped to lower the interest rate. The real key, Bradshaw says, is that the institutional investors who looked at the project all know the transportation industry well. Then in meetings,

conference calls and helicopter tours of the region during the past year, he says, "We got them comfortable that the project does work, that there is a strong underlying need for the road."

On that score, "Ed Regan [of WSA] did a tremendous job for the TCA on this project," says Bradshaw. "He knew all the numbers and was able to explain what he was doing and answer all the questions posed by the analysts."

After that, he says, it was a matter of convincing them that there was enough money to cover unanticipated delays from environmental suits or construction problems.

RAMP-UP RISK

Investors derived great comfort from the fact that Caltrans will take ownership of the road at completion, assume all tort liability, use its best efforts to maintain a 5-mile noncompetition zone on either side of the toll road and pay all costs for its maintenance and repair for the term of the bonds.

Analysts for the funds were still concerned about the rampuprisk, however. To assure them that there will be enough toll revenue to support the debt service during the traffic ramp-up

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period, TCA agreed to fund six years of capitalized interest and to pay the first two years of debt service after completion from that fund. Senior and subordinate debt-service reserves extend the ramp-up risk coverage for another 18 months, says Kreutzen.

Finally, TCA in 1992 was able to secure a project-specific federal line of credit of up to \$24 million a year for five years after the capitalized interest is exhausted. The agency was not able to get a ruling from its bond counsel that the implied federal guarantee wouldn't affect the federal tax-exemption on its bonds, however. So it has asked the IRS for a private ruling that its bonds will not be considered federally guaranteed if TCA taps the federal credit facility.

If the IRS turns it down sometime next month, Kreutzen says, TCA will consider new federal legislation to specifically address the implied guarantee question.

The Intermodal Surface Transportation Efficiency Act of 1991 allows states to commit federal funds or credit to public or private toll projects through state revolving funds. That approach may run up against similar interest exclusion questions at IRS, says Kreutzen, so someone is going to have to seek clarifying legislation from Congress.

That effort may soon be underway by a new group, the Infrastructure Alliance, which hopes to get federal loan guarantees for startup toll projects inserted into the Clinton stimulus package.

"The new Clinton Administration has focused on private infrastructure development," says Kreutzen, "so I think that kind of legislation will be possible. There are a lot of other startup toll roads and other kinds of infrastructure projects that won't move unless they deal with this, either through a change in the tax laws or a clarification from the IRS that supports" federal credit being available for tax-exempt project financings.

CONSTRUCTION RISK

Joint venture partners Kiewit Pacific Co. and Granite Construction Co. hold a \$786.7-million designbuild contract in which they share responsibilities on a 70-30 basis. Their joint venture, California Corridor Constructors, has subcontracted with Parsons DeLeuw Inc., a subsidiary of The Parsons Corp., and Greiner Engineering Inc. to complete the design. The turnkey contract was reduced to \$702.9 million, mainly by rescheduling work, deferring progress payments and through value engineering.

THE PLAYERS

What is the secret of success?

"You have to be flexible, creative and you have to believe. This thing was like a chameleon. It could change two or three times in a week, and I mean significant changes. You also have to be a counter-puncher. You get hit and you have to hit back fast and keep going. When problems come up, you have to restructure around them. That's why you need a great investment banking team and a strong group of attorneys, financial advisors and staff that's going to just keep pushing and believing that there is a way to move forward."

So says Walter D. Kreutzen, TCA's Executive Vice President for Administration and Finance, and the leader of the San Joaquin financing effort.

Among the other key players are:

TCA

John Cox and Thomas Riley, Chair and Vice Chair of the San Joaquin Board of Directors; CEO Bill Woollett; Colleen Clark, Director of Finance; and Greg Henk, Executive VP Design and Construction.

Nossaman, Guthner, Knox & Elliott, lead counsel

Robert Thornton, general counsel; John Flynn, litigator; Barney Allison, financing specialist; Geoffrey Yarema, Caltrans negotiations; Nancy Smith, design-build contract.

Investment Banking Group

Senior manager, First Boston Corp.—Thomas Bradshaw, coordinator since 1988; Tony Hughes, director of western region; Laurie Ostendorf, vice president, investor relations; Ken Abramowitz, associate, number cruncher.

Co-senior manager, Smith Barney, Harris Upham & Co.—Henry Chanin, Managing Director, western region; Greg Carey, vice president.

Co-managers, J.P. Morgan Securities Inc. (Michael P. George, Managing Director), Bear, Stearns & Co., Goldman Sachs & Co., Lehman Brothers, Paine Webber Inc.

Stradling, Yocca, Carlson & Rauth, bond counsel John Murphy, coordinated indenture of trust.

Public Resource Advisory Group, financial advisor Wes Hough, Managing Director, Los Angeles, directed rating agency

strategy.

Caltrans

Russell Lightcap, District 12 Director; and Dan Butler, design approvals coordinator and negotiator of cooperative agreement.

Fitch Investors Service

Andrea Bozzo, Senior Vice President, coordinated San Joaquin rating review.

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Although the San Joaquin bonds were not insured or issued behind a letter of credit, Kreutzen says the markets viewed TCA's design-build contract with two of the largest, best managed highway contractors in the U.S. as a form of credit enhancement. The deep-pocket contractors assumed some of the risks typically taken by owners in a conventional, unit-price contract.

"We're changing the way business has been done," Kreutzen says. "This is the way of the future. You've got to have a fixed-term and fixedprice contract with strong guarantees to finance large projects."

The contract, written by Los Angeles attorney Nancy Smith of Nossaman, Guthner, Knox & Elliott, gives the constructors 70% of the net toll revenues collected every day any segment of the road is put in service ahead of the 1,460-day completion schedule. It penalizes them with liquidated damages of \$195,250 per day for up to 455 days past the startup deadline in March 1997. Including stipulated damages, the joint venture's total potential liability is \$107.2 million.

Richard Geary, President of Kiewit Pacific, made a powerful case for the contractors' ability to assess the construction risks in meetings with the credit agencies. Most of Kiewit's stock is held by its senior employees, and they were the ones who decided to sign the TCA contract. Kiewit Pacific's parent, Omaha-based Kiewit Construction Group, had gross revenues in calendar 1991 of \$1.4 billion and stockholders' equity of \$552 million. In addition, Granite grossed \$564 million in 1991 and holds \$155 million in equity.

Finally, Kiewit-Granite agreed to defer \$37.8 million in payments until the completed road was generating net revenue, after debt service. "That meant a lot to investors," says Bradshaw. "Kiewit and Granite believed so strongly in their capability to deliver, that they would put some of their profit in a subordinate position."

On a pass-through basis, the design-build contractors have acquired a \$200-million builder's risk policy from Allianz Insurance Co. to cover debt-service deficiencies due to late completion because of earthquakes, mudslides or other natural calamities. The road is being built to 1.5 times the current Caltrans seismic standards even though most of it is founded on bedrock and is not in a high-seismic zone.

STRONG START

By all accounts, the San Joaquin success bodes well for the half dozen other toll projects moving toward financing now.

TCA plans to be back into the markets this summer to fund a segment of its Foothill project. By design, it was careful to keep its debtservice coverage ratios on the San Joaquin securities within a range that would not restrict that effort or the financing of any other startup toll projects.

"We were very sensitive that if we set coverage levels too high, that nobody else could ever clear the hurdle, including us on the Foothill/ Eastern project," says Kreutzen.

"The credit rating agencies collectively worked very hard with us to look at lots of options," he says. "We finally chose the Fitch capital structure because it worked best for TCA when you included all the things we had to look at."

The senior bonds were issued with a coverage of 1.3 on net toll revenues only. Including the subordinated debt, the total coverage for all bonds at the time of issuance is 1.15. Kreutzen says the post-redemption coverage will be 1.35 for all debt and about 1.5 for the senior debt alone.

Projected gross toll revenues for the first full year of operation in 1998 are \$71.7 million. The net after 1% toll evasion, toll collection and revenue management costs plus administrative expenses is \$59.3 million.

David Seltzer, Senior Vice President of Lehman Brothers, says, "The wind and tide were clearly in TCA's favor. But I don't see it being a oneshot deal riding on favorable market conditions." Unanticipated environmental litigation or construction problems could still sour the market. But right now, he says, the success of the San Joaquin financing "is a strong positive." ■

CASE STUDY

JOBS TRUMP ENVIRONMENTAL ACE IN SAN JOAQUIN ROAD'S END GAME

When Interior Secretary Bruce Babbitt announced on March 25 that the California gnatcatcher would be listed as threatened rather than endangered, it was a great victory for the forces of reason—and flexibility—in the national environmental debate. Meanwhile, at ground zero, the Transportation Corridor Agencies (TCA) had already fixed its gnatcatcher problem, arranged financing and started construction on its \$1.4-billion San Joaquin Hills toll road. In addition, TCA's environmental compliance strategist had already met with Babbitt so he wouldn't get caught off guard by the toll road agency's aggressive—and expensive—drive to the bond markets.

Both moves are typical of TCA's "no-holds-barred" approach to project development, namely:

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Submission No. 165

Schroders

Attachment II

ESTIMATION OF RISK CAPITAL IN PRIVATE TOLL ROADS

THE M4 PROJECT

Submission No. 165

Schroders

- 1. The amount of equity contributed by the owner of BOOT toll roads is often very small. This attachment sets out extracts from the latest annual return of Statewide Roads Limited ("SWR"), owner of the M4 concession, together with press coverage of the sale to AIDC of 10% of the ordinary shares in SWR, and seeks to estimate the proportion of true equity in a private toll road.
- 2. Features of interest in the M4 project include the following:
 - the ordinary share capital of SWR is \$460,252;
 - in addition, the company has on issue one class "A" cumulative redeemable preference share entitling the owner (the Commonwealth Bank) to 12.5% of any retained profit. (A class "B" cumulative preference share was issued during the 1992/93 year entitling the owner to 12.5% of the profit of SWR Properties Pty Ltd);
 - as at 30 June 1992, shortly after the opening of the M4 toll road, the company had total assets of \$176 million and borrowings of \$179 million (mostly secured loans from the Commonwealth Bank);
 - in the 1992/93 year the company recorded earnings before interest and tax of \$13 million, representing a return on total assets of 7.4%. However, due to interest expense on its loans, it recorded a net loss;
 - during the 1992/93 year, AIDC Limited purchased 10% of the ordinary shares from an existing shareholder. The purchase price has not been disclosed, but **unconfirmed** reports in the Australian Financial Review suggest that it was \$7.7 million. This would value the ordinary shares at \$77 million;
 - assuming that the \$7.7 million is correct, this would value the Commonwealth Bank's participating preference share at \$11 million as follows:

	Entitlement to Profit %	Current Valuation \$ million
Commonwealth Bank AIDC (10% of remainder) Other (90% of remainder)	12.50 8.75 78.75	11.00 7.70 69.30
	100,00	88.00

As the Commonwealth Bank was lender to the project, and at risk for the project's failure, its preference share might be regarded as the true risk capital in the project;



the total original equity at risk in the project may therefore be estimated at \$11.46 million, being the Commonwealth Bank's \$11 million and the other shareholders' \$460.000. This is only 6.5% of the cost of the facility.

160527 Page 4 of 30 DocId: 004504817 ACM :003 573 572

÷.						
15 Issued shar	es and Options					
class code	description, full	title of share	nominal val	ue		
AGRP	A CLASS REDEEMABL	E PREFERENCE	1.00			
BCRP	B CLASS REDEEHABL	E PREFERENCE	1.00			
03D	ORDINARY SHARES		1.00			
	Shares				Options	
	Total	Total	******	2/25/2012/01/01		
class code	number issued	nominal value 4	istor	Salance of share	number of shar	es av.exer p
ACRP	T	f	anvant pard \$	premium account \$	entitled to	per share
BCRP	1	1	d,			
ORD	16250	16250	16250	444000		
17 List of Hem	bers (shareholdere)		1.1.1.1			
member's full	name and address				Sec. inc	
	and addieda		class code	total number	Are shares	is member
AIDC LIMITED			ORD	or anares neld	Turry paid?	ben. owner
LVL 33 MARITIM	E CENTRE			1022	4	Ŷ
201 KENT STREE	T SYDNEY NEW 2000					
CONMONWEALTH S	ANK OF AUSTRALIA		AESE			
MARTIN PLACE				1	r	Ŷ
STUNET NEW 200	Ũ					
COMMONWEALTH B.	ANK OF AUSTRALIA		BCRP	4		
MARTIN PLACE				1	1	Ţ
SYDNEY NEW 200	0					
CMPS&F PTY LIM	ITED		ÓRD.	1015		
SOUTH TOWER TH	E INTERCHANCE			3100		V
	ALC: 1 C. 1 C. A.				Ŷ	1
67 ALBERT ST C	HATSHOOD NSH 2067				X	
67 ALBERT ST C	HATSHOOD NSW 2067		GRD	542	, , , , , , , , , , , , , , , , , , ,	
67 ALBERT ST C DALGRANDO PTY. 11TH FLOUR BLI	HATSHOOD NSH 2067 LTD. GH HOUSE		GRD		Y y	н
67 ALBERT ST C DALGRANDO PTY. 11TH FLOOR BLI 4 BLIGH ST SYD	HATSHOOD NSH 2067 LTD. GN HOUSE NEY NSH 2000		GRD	513	Y Y	н
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LII	HATSHOOD NSW 2067 LTD. GN HOUSE NEY NSW 2000 MITED		GRD D3D	815	7	H
67 ALBERT ST C DALGRARDO PTY. 11TH FLOOR BLI 4 BLIGH ST SYD DAVJAN PTY. LII 11TH FL BLIGH	HATSHOOD NEW 2067 LTD. GH HOUSE NEY NEW 2000 MITED HOUSE		ORD D3D	815 3250	Y 7 Y	H
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LT 11TH FL BLIGH 4 BLIGH ST SY	HATSHOOD NSW 2067 LTB. GH HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000		ORD DRD	513 3250	Y Y Y	H
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LII 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM	HATSHOOD NEW 2067 LTD. GN HOUSE NEY NEW 2000 MITED HOUSE DNEY NEW 2000 LTED		ORD ORD ORD	813 3250 6500	Y 7 Y	H
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LI 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH	HATSHOOD NEW 2067 LTD. GN HOUSE NEY NEW 2000 MITED HOUSE DNEY NEW 2000 LTED HOUSE		ORD ORD ORD	813 3250 6500	Y 7 Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOOR BLI 4 BLIGH ST SYD DAVJAN PTY. LI 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST S	HATSHOOD NSW 2067 LTD. GH HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LTED HOUSE YDHEY NSW 2000		GRD DRD ORD	815 3250 6500	Y Y Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LII 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST S GRANDAMICO PTY	HATSHOOD NSW 2067 LTD. GM HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LITED HOUSE YDWEY NSW 2000 . LIMITED		ORD ORD ORD ORD	813 3250 6500	Y Y Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LI 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST S GRANDAMICO PTY 11TH FLOOR BLI	HATSHOOD NSW 2067 LTD. GM HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LITED HOUSE YDWEY NSW 2000 . LIMITED GH HOUSE		ORD ORD ORD CRD	813 3250 6500 220	Y Y Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOUR BLI 4 BLIGH ST SYD DAVJAN PTY. LII 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST SYD 11TH FLOOR BLI 4 BLIGH ST SYD	HATSHOOD NSW 2067 LTD. GH HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LTED HOUSE TDHEY NSW 2000 .LIMITED GH HOUSE NEY NSW 2000		ORD DRD ORD ORD	813 3250 6500 220	Y Y Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOOR BLI 4 BLIGH ST SYD DAVJAN PTY. LI 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST SYD GRANDAMICO PTY 11TH FLOOR BLI 4 BLIGH ST SYD KILUBA PTY.LTD	HATSHOOD NSW 2067 LTB. GH HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LITED HOUSE YDHEY NSW 2000 LLIMITED GH HOUSE NEY NSW 2000		ORD ORD ORD ORD	815 3250 6500 220	Y Y Y Y	H Y Y
67 ALBERT ST C DALGRARDO PTY. 11TH FLOOR BLI 4 BLIGH ST SYD DAVJAN PTY. LI 11TH FL BLIGH 4 BLIGH ST SY DEVOME PTY.LIM 11TH FL BLIGH 4 BLIGH ST SYD GRANDAMICO PTY 11TH FLOOR BLI 4 BLIGH ST SYD NILLBA PTY.LTD 10 WILCHA AVE	HATSHOOD NSW 2067 LTB. GH HOUSE NEY NSW 2000 MITED HOUSE DNEY NSW 2000 LITED HOUSE YDHEY NSW 2000 .LIMITED GH HOUSE NEY NSW 2000		GRD DRD ORD ORD ORD	815 3250 6500 220 220	Y Y Y Y	H Y Y N

STATEHIDE ROADS LIMITED A.C.N. 003 575 573

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Submission No. 165

157577 Name 14 of 30 Dontd: 004594517 ACH 1003 574 573 No. Contraction of the STATEWIDE ROADS LIMITED AND CONTROLLED ENTITIES Bar Jan PROFIT AND LOSS ACCOUNTS FOR THE YEAR ENDED 30 JUNE, 1993 Salar Consolidated Chief Entity 1993 1992 1993 同志の 1992 \$ \$ \$ \$ NOTE Revenue 3 34,903,364 5,595,499 20,537,036 16,331,868 ----saccusses supposidies IN REALESS Operating protit/(loss) before 2/3 income tax (4,618,918)(8,215,069) (190,301) 3,408,877 語じ Income tax attributable to operating protit/(loss) 22 Operating profit/(loss) after 12 (4.618.918) (8,215,069) (190, 301)3,408,877 Retained profit/(accumulated losses) at the beginning of the year (11,671,442) (3,456,373) 3,416,641 7,764 Retained profits/(accumulated losses) at the end of the year (15, 290, 360)(11.671.442) 3,226,340 3,416,641 DECESSIONER CONDERSESSE S -----STATES -

The accompanying notes form part of these financial statements

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STATEWIDE ROADS LIMITED AND CONTROLLED ENTITIES

國	B	ALANCE SHE	FTS		
	AS	AT 30 JUNE	, 1993	-	(w
		1993 \$	1992 \$	Chief 1993 \$	f Entity 1992 5
CURRENT ASSETS	NOTE				
Cash Receivables Inventory	6 7 8	5,865,738 647,310 6,655	7,885,975 325,539	3,513,633 121,611 -	1,016.327 1,032,765
TOTAL CURRENT ASSETS	9	5,526,960 12,046,663	5.882.269 14,093,833	6,218,872	3,248,706 5,297,818
NON-CURRENT ASSETS		****			*********
Receivables Property, plant and equipment	10 11	7,896,422	6,842,875	179,193,949 89,557	178,315,000 19,911
Other	13	154,334,878	154,918,774	- 24	24
TOTAL NON-CURRENT ASSETS		162,231,300	161,761,649	179,283,530	178.334,935
TOTAL ASSETS		174,277,963	175,855,482	185,502,402	183,632.753
CURRENT LIABILITIES					
Creditors and borrowings Provisions	14 15	2,729,168 609,348	7,590,108 1,161,565	2,670,810 275.000	1,020,881 460,000
TOTAL CURRENT LIABILITIES		3,338,516	8,751,673	2,945,810	1,440,861
NON-CURRENT LIABILITIES					
Creditors and borrowings Provisions	16	186,519,555 250,000	178,315,000	178,870,000	178,315,600
TOTAL NON-CURRENT LIABILITIES		186,769,555	178,315,000	178,870,000	178,315,000
TOTAL LIABILITIES		190,108,071	187,066,673	181,815,810	179,755,861
(DEFICIENCY IN) NET ASSETS	26	(15,830,108)	(11,211,191)	3,686,532 Neversese	3,875,892 200,575,892
SHAREHOLDERS' EQUITY (DEFICIT)					
Share Capital Reserves	17 18	16,252 444,000	16,251 444,000	16,252 444,000	16,251 444,000
(Accumulated Losses)		(16,290,360)	(11,671,442)	3,226,340	3,416,641
TOTAL SHAREHOLDERS' EQUITY (D	EFICIT	(15,830,108)	(11,211,191)	3,686,592	3,876,692
Ma The accompanying notes form part of t	hese lina	ncial statements			
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STATEWIDE ROADS LIMITED AND CONTROLLED ENTITIES

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 1993

NOTE 2 - OPERATING PROFIT / (LOSS) The operating profit / (loss) before income tax has been arrived at after:

	Co	insolidated	Ch	ilof Entity
	1993	1992	1993	1992
-	2	5	\$	\$
Charging as expenses:				
Depreciation - plant & equipment	1,300,610	420,105	12 474	5 522
Interest expense- other persons/ corporations	17,618,653	3,689,227	17,551,270	11,932,447
Rentals - operating leases	2,632,793	653,604	-	321 788
Loss on sale of fixed assets	45,809	2,002	-	561,100
Formation expenses written off		1.684	~	
Provision for employee entitlements	200,282	107,322	-	-
Amortisation				
- M4 Service Centre project costs	40,531		-	
 M4 Molonway project costs 	4,777,122	596,549		-
- Capitalised finance costs	1,506,842	189,716	-	
Goodwill written off	-	671	-	
Bad debts	3,101	-		-
Provision for doubtful debts	5,000	-		19
NOTE 3 - OPERATING REVENUE				
Included in the operating profit/(loss) are the items of operating revenue:	following			
es Sales Revenue	34,369,950	4 837 855	12 845	-
Interest Received & Finance Charges Reimbursed	Ş		icia io	
- Controlled entity		-	20 333 265	11 922 447
- Other persons/cornorations	328,651	290,202	139.820	44.853
Administration and Management Fee	IS	200,002	100,020	
- Controllad entities	-	_	-	3,999,651
Consulting Fees		454 917		454.917
Priceeds on sale of fixed assets	94,700	12.525		24 Mar 1
Olher	110,063	1 247-240	51,106	
63				
	34,903,364	5,595,490	20,537,036	16,331,868
EA			************	
22				

	Sales Revenue Interest Received & Finance Charges Polimburged	34,369,950	4,837,855	12,815	-
	 Controlled entity Other persons/corporations Administration and Management Fees. 	328,651	290,202	20,333,265 139,820	11,932,447 44,853
ETTER I	 Controlled entities Consulting Fees Proceeds on sale of fixed assets Other 	94,700 110,063	454,917 12,525	- - 51.106	3,899,651 454,917
Lead		34,903,364	5,595,490	20,537,036	16,331,868

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<u>델</u>	STATEWIDE ROADS	LIMITED A	ND CONTRO	OLLED ENTIT	IES
B					
	NOTE TO AND FORM FOR T	ING PART OF THE YEAR END	THE FINANCIAL : ED 30 JUNE 1993	STATEMENTS	
CURREN	T LIABILITIES	0	one fideled		-
NOTE 14	- CREDITORS AND BORROWINGS	1993 \$	1992 \$	1993 \$	Chief Entity 1992 S
Bank over	ardrait aditors and accruals due to controlled antities	2,554,250	709,912 6,587,397	239,541	600,000
Ciher	n allowance	83.391 91.527	219,120 73,679	2,431,209 - -	440,861 - -
	=	2.729.168	7,590,108	2,670,810	1,040,881
NOTES	15 - PROVISIONS				
Employa Provision	e entitlements n for additional road construction costs	251,848 357,500	51,565 1,110,000	275.000	400,000
		609,348	1.161.565	275.000	400.000 ===========
NON-C	URRENT LIABILITIES				
NOTE 1	6 - CREDITORS AND BORROWINGS				
	ad loans ==	186,519,555	178,315,000	178,870,000	178,335,000
These lo	bans are secured by a registered equital	ble mortgage ov	er all the assets o	f the controlled entit	as, Statewide Roads
(F4) Pty - 1 The Fac	Limited and SWR Properties Pty Limite sility Agreement with Commonwealth Ba	ed respectively. Ink of Australia p	provides that excer	is cash generated by	r the operation of the
E					
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	STATEWIDE HOADS E	and LD M	ED CUNTHU	Antoin by 0-111116	20
	NOTE TO AND FORMIN FOR THE	O PART OF THE YEAR ENDED	HE FINANCIAL S 30 JUNE 1993	TATEMENTS	
		Cor	nsolidated		Chief Entity
		1993	1992	1993	1992
NOTE 17 - 94	IARE CAPITAL	Ť		J.	S
Authorised Cap 100,000	iital 0,000 shares of \$1 each.			100,000,000	100,000,000
				100,000,000	100,000,000
					992395262655
Issued Capital 16.250 ordinan	y shares of \$1 each fully paid	16.250	16,250	18 250	16.050
1 class "A" cun	nulative redeemable preference sha	are 1	1	1	10,230
i class o cun	nuidave redeemable preference sha	и д 1	-	1	-
		16,252	16,251	16,252	16,251
date agreeable termination of One class "B" Pty Limited has The share is re after the expira	e to the holder of the share and the the M4 Motorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or sooner termination of the M	e company noi share was issue share has the ri e to the holder o 14 Motorway lea	t being more than ed at par during th ght to participate is of the share and the ise.	60 days after the e e year. At a time wh n dividends equal to e company not being	expiration or soone oan SWR Properties 12.5% of that profit prore than 60 days
date agreeable termination of One class 'B' Pty Limited ha The share is re after the expira NOTE 18 - Ri	e to the holder of the share and the the M4 Motorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or socher termination of the M ESERVES	ie company noi share was issue share has ihe ri e lo lhe holder o 4 Molorway lea	t being more than ed at par during th ght to participate i of the share and th ise.	60 days after the e e year. At a time wh n dividends equal to e company not being	expiration or sooner ten SWR Properties 12.5% of that profit g more than 60 days
date agreeable termination of One class 'B' Pty Limited ha The share is re after the expira NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Motorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or socher termination of the M ESERVES m reserve	e company noi share was issue share has the ri e to the holder o 4 Motorway lea 444,000	t being more than ed at par during th ght to participate i of the share and th ise. 444,000	60 days after the e e year. At a time wh n dividends equal to e company not being 444,000	expiration or sooner tan SWR Properties 12.5% of that profit g more than 60 days 444,000
data agreeable termination of One class 'B' Pty Limited ha The share is re after the expira NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or sooner termination of the M ESERVES m reserve	share was issue share has the ri e to the holder o 4 Motorway lea 444,000	t being more than ed at par during th ght to participate is of the share and the ise. 444,000	60 days after the e e year. At a time wh n dividends equal to e company not being 444,000	expiration or sooner ten SWR Properties 12.5% of that profit g more than 60 days 444,000
data agreeable termination of One class '8' Phy Limited hat The share is re after the expire NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or sooner termination of the M ESERVES m reserve	e company noi share was issue share has the ri e to the holder o 4 Motorway lea 444,000	t being more than ed at par during th ght to participate is of the share and th ise. 444,000	60 days after the e e year. At a time wh n dividends equal to e company not being 444,000	expiration or sooner tan SWR Properties 12.5% of that profit g more than 60 days 444,000
data agreeable termination of One class 'B' Pty Limited ha The share is re after the expira NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or sooner termination of the M ESERVES m reserve	e company noi share was issue share has the ri e to the holder o 4 Motorway lea 444,000	t being more than ed at par during th ght to participate is of the share and the se. 444,000	60 days after the e a year. At a time wh n dividends equal to a company not being 444,000	expiration of sooner nan SWR Properties 12.5% of that profit g more than 60 days 444,000
data agreeable termination of One class 'B' Pry Limited ha The share is re after the expire NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or socher termination of the M ESERVES m reserve	e company no share was issue share has the ri e to the holder o 4 Motorway lea 444,000	t being more than ed at par during th ght to participate is of the share and th ise. 444,000	60 days after the e e year. At a time wh n dividends equal to e company not being 444,000	Addition of sooner tean SWR Properties 12.5% of that profit g more than 60 days 444,000
data agreeable termination of One class 'B' Pry Limited ha The share is re after the expire NOTE 18 - Ri Share premiur	e to the holder of the share and the the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or sooner termination of the M ESERVES m reserve	share was issue share has the ri e to the holder of 4 Motorway lea 444,000	t being more than ed at par during th ght to participate is of the share and the se. 444,000	60 days after the e a year. At a time wh n dividends equal to a company not being 444,000	A44,000
data agreeable termination of One class 'B' Phy Limited ha The share is re after the expira NOTE 18 - Ri Share premiur	e to the holder of the share and the M4 Molorway lease. cumulative redeemable preference s retained profils, the holder of this adeemable at par at a date agreeable ation or socher termination of the M ESERVES m reserve	share was issue share has the ri e to the holder of 4 Motorway lea 444,000	t being more than ed at par during th ght to participate in of the share and the ise. 444,000	60 days after the e a year. At a time wh n dividends equal to a company not being 444,000	A44,000
a data agreeable termination of One class 'B' Phy Limited ha The share is re after the expira NOTE 18 = Ri Share premiur	e to the holder of the share and the M4 Molorway lease. cumulative redeemable preference is retained profils, the holder of this adeemable at par at a date agreeable ation or socher termination of the M ESERVES in reserve	e company noi share was issue share has the ri e to the holder of 4 Motorway lea 444,000	t being more than ed at par during th ght to participate in of the share and the ise. 444,000	60 days after the e e year. At a time wh n dividends equal to e company not being 444,000	Addition of sooner than SWR Properties 12.5% of that profit prore than 60 days 444,000 репряяциения

Friday, October 15, 1993 FINANCIAL REVIEW

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Questions for yesterday's men on \$2bn Sydney project

LIKE bees around the honeypot, a who's who of business is swarming over \$2 billion worth of projects in the north-west of Sydney.

They include many men best known for roles in the 1980s – Nick Greiner, former NSW premier; Frank Conroy, former managing director of Westpac; Gerry van der Merwe, former deputy managing director of Citibank; Ian Stanwell, former managing director of the AMP Society; Barry Glover, former managing director of Hooker Corporation; and Peter Dransfield, former director of housing of the NSW Housing Department.

The projects are the \$500 million private M2 tollway and the \$1.5 billion million Rouse Hill residential development in the centre of Sydney's north-west sector.

The potential returns in these projects in which the NSW Government has a major role are difficult to gauge, particularly as the M2 is shrouded in confidentiality agreements.

Mr Bob Morris, the regional director of the NSW Roads and Traffic Authority which has just called for expressions of interest in the M2, did not want to discuss the tollway, due to open in 1997. Nor did Mr van der Merwe, Mr Frank Conroy, or NSW Minister for Transport, Mr Baird.

The winning tenderer will finance, build and operate the 21km tollway from North Ryde to west Baulkham Hills on land leased from the Government for an agreed period.

The Government has said

By VALERIE LAWSON

repeatedly that the M2 is needed to serve up to 250,000 people to be housed in the growing Rouse Hill area. Yet there are strong indications now that the NSW Department of Housing is slowing planned expansion in Rouse Hill.

Stage I, a 1,200ha area, for which infrastructure will be completed next year, will provide 15 years worth of land supply for only 80,000 people.

Mr Peter Olive, divisional manager in charge of Rouse Hill at the Department of Planning, said there were no plans to progress to stage 2 for 15 years. Therefore, the Government must now be looking at other ways to supply a captive market for the M2 operator.

Mr Gerry van der Merwe, now managing director of AIDC Ltd, is another player with his eye on the area. AIDC's just released 1993 annual report devotes a page to its purchase this year of 10 per cent in Statewide Roads Ltd which is involved in the M2 through an offshoot, Norwest Motorway Co.

Norwest is preparing a bid for the tollway. Mr van der Merwe said he could not discuss the price because of a confidentiality clause in the purchase agreement with the seller of the stake, consulting engineers and project managers, CMPS and F.

He would not comment on suggestions that this was \$7.7 million. Mr van der Merwe joined the board of Statewide Roads last April.

Norwest Motorway is a \$2 company established last





month with two directors, Alian Livingstone, managing director of Statewide Roads, and Grathame Campbell, chatman of Statewide Roads Campbell is also managing director of the majority share builder of the majority share. holder in Statewide, CMPS and F Pty Ltd

Imming them as directors of Not word Mictorway this month were chairman Frank Contoy, Gerry van der Merwe Ian Stanwell, John Rustamzadeh, managing director of Baulderstone Hornibrook Engineering, and Martin Albrecht, managing director of Thiess Contractory

If the bid is successful, the shatcholdings in Norwest will be Statewide 40 per cent. Baulderstone Hornibrook and -0 het cent cavit. 110 -

Allet 10 per cent and management, 10 per cent Nistewide Roals wi-formed in 1988 to taky ad-an formed in tests to take at an lage of the Greiner Govern-ment's Africe Dowards, providentian of inflammatic It won the M4 tender in Dava becoming one of the tiral operators of a major private tollway (in Sydney's weat) which former Premier Gremer said must be built a a privately owned operation ar not built at all. Mr Greiner hast

year joined the board of CMPS and F. The M4 contract is contri-dential, including details of the RIA's arrangement by hmit Statewide making when ster profits during its to or

Dr. 1992 accounts of La

wide Roads show a loss of \$8 million. However, the company is clearly sufficiently attractive long-term for AIDC to pay a substantial amount for its 10 per cent share. If the figure of \$7.7 million is correct, this would value the company at \$77 million. Its 1992 return shows the company has a paid up capital of just \$460,000.

Echoing Mr Greiner's words, Mr Baird said last month the M2 could not be fully financed from toll revenue or from government resources but that the government would provide some funding for the project.

Critics are suggesting the government subsidy could be as high as 85 per cent. The RTA's Bob Morris has publicly acknowledged it could be 50 per cent. A spokesman for Mr Baird said yesterday he could not discuss the level of subsidy.

Contributing \$80 million towards the cost of the M2 (in return for re-zoning of its land by the government) is the Rouse Hill Infrastructure Consortium, another group with a big interest in privatisation of government infrastructure.

The consortium, formed in 1988 in partnership with the NSW Government's Land and Housing Corporation, includes Stockland Constructors, the land-holding subsidiary of Stockland Corp which last year appointed Nick Greiner as deputy chairman, and North Sydney Brick and Tile, (known as Norbrik, and 25 per cent owned by IEL) with 363ha incorporating the Bella Vista residential sub-division and the Norwest Business Park. Norbrik's chairman is Barry Glover and general manager, property, Alan Zammit, who was a former director of Australian Housing and Land, the re-named former Hooker land development division.

Other members are a company of Baulkham Hills real estate agent Bruce Lyon, and two joint venture companies of AHL and Esanda – Lauriston Developments and AHL Property Developments, whose chief executive is Brendan Crotty, another former senior executive of Hooker Corp.

Last year, SBC Dominguez Barry won a beauty parade to organise \$285 million worth of funding by four banks for the consortium's stage 1 water, drainage and sewage treatment. And echoing once again the private tollway story, the Water Board said it did not have the funds to finance the work.

The prime movers behind the consortium were the NSW Department of Housing and Hooker Corporation which held about 150ha in the area, according to consortium chairman, Peter Dransfield. From the end of 1988 until December 1990, Mr Dransfield was director of housing for the Department of Housing. He then rejoined his old company, Mr Lang Walker's property company Walker Corporation which has a sub-lease to the head contractor for the Rouse Hill water and sewage works, joint venture John Holland Bilfinger and Berger.

Mr Dransfield says he did not sit on the tender committee which last year chose John Holland with whom Walker Corp was already working.

Submission No. 165

Schroders

Attachment III

ROLLING CONCESSIONS

THE M5 EXTENSION CONTRACT



- 1. This attachment sets out some recent press describing the extension of the M5 toll road, both in time and in length.
- 2. Features of interest include the following:
 - the concession agreement with the government was renegotiated;
 - the term of the concession was extended from an original 22 years to 30 years;
 - the maximum toll escalation was reduced from 9% per annum to a rate linked to the consumer price index. (However, given the traffic levels on the existing road, it appeared unlikely that a 9% per annum toll escalation would have increased overall revenue for the concessionaire);
 - the concessionaire agreed to undertake additional works to help draw more traffic onto the existing toll road;
 - although the extension works did not go to tender, they were notionally costed at \$65 million;
 - the government assisted the new works by advancing a loan of \$50 million at commercial rates, but subordinated to the other debts of the concessionaire;
 - the concessionaire agreed to refund to the government 70% of any savings which brought construction costs below the notional \$65 million figure;
 - the concessionaire entered into a new superprofits agreement under which it would reimburse 95% of profits when, and if, it achieved an agreed cumulative rate of return. The new concession agreement indicates that the superprofit rate of return is 19% per annum after-tax, calculated on the construction cost of the original toll road plus the notional \$65 million cost of the extension; and
 - the superprofits cap cannot come into effect until repayment of loans. It is conceivable, therefore, that it may be extended before the cumulative rate of return is achieved.

dney Morning Herald Anursday 17 June 1993 Page 4



Transport Writer

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decision had been made about the link through Wolli Creek and that a separate Environmental Impact Statement was Sydney region, Mr Bob Morris, said no However, the director of the RTA's being prepared.

The secretary of the Berley Chamber of Commerce, Mrs Alison Edsall, said the Casula-Prestons link would create worse traffic problems around Bexley and Beverly Hills where the tollway finished. She called on the Government to complete the Wollf Creek link as soon as possible.

and Traffic Authority (RTA) may now

Wolli Creek area, who believe the Roads want to complete the other "missing link"

The announcement has concerned environmentalists and residents of the

attracting more traffic onto the M5.

"The continuation of the same road will easter for traffic to come from the south concern is to get the other end completed so it doesn't end in mid-air," she said. help people down that end and make it west through to Beverly Hills. But our main

M5.

Mr Morris said the link was being built in response to pressure from local councils in the Campbelltown area, which had been pushing for direct access to the

Mr Baird said the construction of the Casula-Prestons link was expected to be completed by September next year, and would create about 200 Jobs in the Liverpool area, which has an unemployment level of about 17 per cent.

"Sydney's south-west region is grow-ing rapidly and the proposed link is necessary to keep traffic out of local roads and provide for planned future

growth," he said.

He said the project would reduce the congestion on the Hume Highway from Liverpool to the Crossroads.

Creek, Mr Col Taylor, said the Govern-ment would be likely to press ahead with

the Wolll Creek link if the M5 ended

"Beverly Hulls.

The chairman of the Friends of Wolli

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passes through the environmentally sen-

sitive Wolll Creek reserve.

in the M5, which is planned to connect Beverly Hills to Alexandria, and which

Page No. 95

Mr Baird said the cost of building the

6.5 kilometre link was estimated at about

S65 million. Interlink had agreed not to increase the existing S2 toll on the M5, at least until 1996. Instead, it expected to recoup the cost of the new link by

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30-6-93

State lends \$50m to firm to extend M5

By KARIN BISHOP Transport Writer

The State Government has lent \$50 million at low interest to a private company to extend the M5 tollway.

It is understood that the interest rate on the loan is about 7 per cent a year for 17 years. The current average corporate loan rate is between 11 and 16 per cent.

The money has been lent to Interlink Roads Pty Ltd to build a \$65 million extension to the M5. from Casula to Prestons, to be completed by September next year.

A spokesman for the Minister for Roads and Transport, Mr Baird, said the Government had to give Interlink the loan "so they would build it". "This is one way of getting the project up and running," he said.

Earlier this month Mr Baird announced Interlink would begin building the MS extension by July. and promised that taxpayers' money would not be used

"The taxpayer will not have to pay a cent for this road – there will be no toll on the new section," Mr Baird said two weeks ago.

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A spokesman for Mr Baird defended the loan. "It is a good investment. It means they still get the road which is needed and 10 years quicker than would otherwise have been possible and then we get the money back." Mr Baird said Interlink had

Mr Baird said Interlink had agreed not to increase the \$2 toll on the M5 until at least March 1996.

However, it is understood the new agreement will allow Interlink to maintain the toll for 30 years, instead of 22 years, as was originally planned.

The Opposition transport spokesman, Mr Langton, said the \$50 million loan meant other urgent toadworks would be delayed

"This is money which has been taken from motorists and which should have been dedicated to



maintaining our existing roads and fixing the traffic black spots," he said.

Mr Langton questioned the legality of the deal between the Government and Interlink, saying that it should have been open to parliamentary scrutiny.

"I have never before seen a case where \$50 million or for that matter any amount has been lent to a private company without competitive tenders being called and without the minister or Treasurer making an announcement," he said. "I think it's a scandal the way it has been handled – they have deliberately tried to keep the details secret."

Interlink spent about \$250 million building the M5 tollway, from Beverly Hills to Casula, which opened last August. The company borrowed the money from the Commonwealth Bank.

However, according to a survey by Liverpool Council, on average only 22,250 cars and 750 trucks use the tollway each day, compared with a projected total of 33,000 vehicles.

The Mayor of Liverpool, Alderman Mark Latham, said the annual revenue would be just \$17.2 million, which would not service the \$250 million loan.

A spokesman for Interlink refused to comment.

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average of just 32,000 cars a day were using the tollway, compared with the anticipated 40,000. Cr But he did not reveal at the time needs General and the Federal Loans VEWL to refinance a \$230 million debt By KARIN BISHOP

Mr Rick Turchini, general manager and director of Leigh-tons – which jointly owns Inter-link with the Commonwealth Bank – said that under the Bank - said that under the original agreement with the Govby 9 per cent a year on top of inflation. Under the new agreement, the toll will remain at \$2 for cars until nearly a year of operation, an March 1996 and thereafter will Mr Turchini said that after either the Government loan or the fact that the RTA had renegotiernment, it could increase the toll increase in line with inflation. Council to examine the loan. "This is a Government guarantee for a supposedly private enterprise operation," he said. Interlink will operate the M5 for 30 years and may not even begin repaying the \$50 million, plus 7 per cent per annum interest, until the end of that time. rate, saying: "Many people get loans at that rate; only short-term, high-risk loans have interest rates between 11 and 16 per cent." Three weeks ago, the Minister for Transport, Mr Baird, prom-ised that "the taxpayer would not pay a cent" for the 6.5-kilometre extension. Mr Fisk defended the 7 per cent any repayments from Interlink until after it had repaid the \$230 million and \$65 million loans. Interlink requiring it to begin The Opposition's spokesman on transport, Mr Brian Langton, called on the NSW Auditoron the construction of the M5. The extra \$65 million was needed to finance the actual construction of a 6.5-kilometre section connecting the M5 to the the terms of the \$50 million loan, the Government would not receive ment had no arrangement with Mr Fisk conceded that under He admitted that the Governrepayments by any given date. Southwest freeway at Prestons. est private tollway will be forced to borrow a further \$65 million in addition to its \$50 million State Government loan in order to keep the project viable, it was revealed yesterday. The chief executive of the Roads and Traffic Authority, Mr Bernard Fisk, revealed yesterday that the Government's \$50 million loan to Interlink was to enable it ted that the money was needed because of lower than expected traffic volumes on the M5 in the The operator of Sydney's new-Interlink Roads Pty Ltd admit-Transport Writer city's west - --41

Submission No. 165

Mr Langton said he would ask the Government's Public Accounts Committee to look into the deal as part of its inquiry into

the \$50 million loan to the RTA to

He said Interlink had proposed compensate for the lower traffic flow and to build the extension, which he hoped would generate Truck numbers were down far more than car traffic, with drivers avoiding the \$4.50 toll by taking

more traffic.

alternative routes along local

roads.

the private financing and man-agement of public infrastructure.

July 1, 1993 MS OCCTON ADMIX



Questions about M5 link:NRMA

NRMA has expressed concern at the number of unanswered questions surrounding the Roads and Traffic Authority's funding of the M5 missing link.

NRMA's Chief Traffic Engineer, Peter Steele said today the lack of information provided to the public about a \$50 million loan to the tollway operator, Interlink, placed the credibility of privately funded roads at risk.

"NRMA is on record as supporting construction of this essential link and the principle of private sector funded tollways if it means getting essential infrastructure built well ahead of when the Government could afford to build it.

"However, the apparent lack of public or parliamentary scrutiny of the new agreement struck between the RTA and Interlink is cause for concern for taxpayers generally and motorists in particular."

Mr Steele said NRMA had expressed concerns to the previous Roads Minister, Mr Murray, about the lack of public access to agreements between the State Government and private consortia. NRMA President. Don Mackay had suggested the organisation play a consumer watchdog role in future negotiations, but this had been rejected.

"We believe the public needs to be better informed about these issues and we have written today to the Roads Minister, Mr Baird, seeking clarification of a number of points about funding of the link," Mr Steele said.

These points included:

- the statement by Mr Baird in his June 16 media release that taxpayers would not pay any additional costs for the link, when it is not clear what effect the provision of \$50 million from the RTA's budget will have on other roadworks and what the relative cost-benefit of such a long term, low interest loan is.
- delays in construction of promised exit road ramps which had the effect of trapping motorists on the tollway.

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National Roads and Motorists: Association A.C.N. 000 010 506 151 Clarence Street Sydney NSW 2000

Media Enquiries

Rod Frail (02) 260 9617 (w) (02) 713 9599 (h)

Tony Hoban (02) 260 8175 (*) (02) 922 4611 (h)

(B) 97 8 98 37

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Questions about M5 link: NRMA

The original agreement allowed Interlink to increase the toll by 9% plus inflation every year. This has now been limited to inflation, but the toll period has been extended for another 8 years to enable the company to recover the costs associated with the construction of the new link.

"There is not enough information available to guage whether this is of any great advantage to all taxpayers or not," Mr Steele said.

ends



IN FEBRUARY 1991 the Common-wealth Bank's head of structured financing, Mr John Talbot, wrote an article in a magazine called *Directions* in Government. It was on the M4 tollway, which was the first of the Coalition Government's tollways, which provided the missing link between Mays Hill and Prospect.

Talbot wrote that of all the tollways contemplated around Australia, the "F4 [now called M4] possessed the most robust economics. The Commonwealth Bank believed the project economics were strong enough to stand alone. I also believe it is probably the only toll road project in Australia that could be undertaken on the basis on which it was finally negotiated.

He then went on to discuss how government could help privately funded infrastructure like tollways by sharing the risk. "Underwriting a disaster scenario would still leave management and control in the hands. of the private sector and could be structured to leave significant financial risk in the private sector. It will be fascinating to watch what shape the F5 toll-road transaction - planned for Sydney's South West - finally takes should it be successfully negotiated."

Fascinating indeed. The contract for the M5 was eventually negotiated with a company called Interlink, a consortium made up of Leightons and Mr Talbot's employer, the Commonwealth Bank. The contract remains a secret, so we don't know if the Commonwealth Bank listened to Mr Talbot's warning that the

listened to Mr 1 albot swarning that the M5, unlike the M4, probably couldn't stand on its own finances. This week it emerged that Interlink was being given a S50 million loan from the State Government as part of a deal to build another missing link in the road network - a 6 5-kilometre section of road which will be an effective extension of the motorway from extension of the motorway, from Casula to the start of the south-western freeway at The Crossroads.

The Roads and Traffic Authority says the loan is commercial, but if that was the case, why doesn't the company borrow it on the market and not bother the poor old RTA, which has lots of other things it could do with \$50 million?

There appears to be an apparent reluctance for commercial investors to wait 17 years to get a return on their money, so the Government is lending money to a company which is partowned by a bank. Fascinating indeed.

When Bruce Baird announced that Interlink would build a \$65 million extension of the M5 from Casula to the south-western freeway at the Cross-roads, he said "The taxpayers will not have to pay a cent for this new road – there will be no toll on the new section." Baird's office maintains that it did not include the loan in the press release because it was too complicated, and in any case, no-one asked.

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reluctance for commercial investors to wait 17 years to get a return on their money, so the Government is lending money to a company which is part-owned by a bank. Fascinating indeed. When Bruce Baird announced that Interlink would build a \$65 million extension of the MS from Casula to the south-western freeway at 'the Cross-roads, he said: "The taxpayers will not have to pay a cent for this new road have to pay a cent for this new road there will be no toll on the new section." Baird's office maintains that it did not include the loan in the press release because it was too complicated, and in any case, no-one asked. The other part of Baird's statement

did not quite tell the whole story about access to the new road. His statement said: "Mr Baird said provision would be made for motorists to leave the Motorway at Camden Valley Way, Hume Highway, Moorebank Avenue and Heathcote Road."

What it didn't say was that the exits to the Hume Highway and Heathcote Road for city-bound traffic will not be built for some time after the road is finished – two years in the case of Hume Highway exit. In other words, the new road will act as a funnel for the tollway. Once you get on it, there are limited options to exit before paying the toll. This week Interlink admitted for the

first time that fewer than the expected number of vehicles were using its motorway. A back of the envelope calculation suggests that Interlink needs around 6,000 extra cars a day to justify spending another \$65 million for the new road

Given that, it was hardly likely that Interlink would voluntarily provide exits which would allow motorists to avoid their toll. But it makes the road significantly less useful than a publicly funded one

The RTA argues that it has struck a good deal. First, it is getting a road that wouldn't otherwise be built for many years. Second, it has renegotiated the clause which governs the increase in the clause which governs the increase in the toll. The old contract said Interlink could raise the toll by CPI or by 9 per cent a year – whichever is the greater. The new deal fixes the toll for three years, and after it can rise only by inflation.

While removing the 9 per cent increase may be to the long-term While removing the 9 advantage for motorists, the three years of \$2 toll is a very small concession. Given the current level of inflation and the resistance being shown to the present \$2 each-way toll, it is unlikely that the company would have raised it to \$2.50 in the next three years in any case.

Privately-funded tollways are a perfectly sound concept, as long as certain rules are followed. For example, there should be a viable, free alternative to a toll road. This isn't the case, for example, with the Sydney Harbour Tunnel and Bridge.

There should also be an open tendering process, which happened with the M5 but which hasn't happened with this extension. But one of the most important rules is that if it is privately funded, then the private company bas to carry the majority of the risk. Risk is the crucial element if the private sector is to provide value for money to taxpayers. Without the element of risk, private enterprise is likely to be just as inefficient as the public sector

The ultimate risk for the private sector is going broke. Although it might seem like a political defeat to allow one of the private tollways to fail, in fact it would be a resounding affirmation of the privatisation process. 9

Page No. 100



By KARIN BISHOP Transport Writer

The NSW Public Accounts Committee may investigate the terms of a \$50 million low-interest Government loan to a private company to help it build a new link in the M5 tollway.

The chairman of the committee, Mr Andrew Tink, said the loan made to Interlink Pty Ltd, which the Government had not disclosed to the public, fell within the terms of reference of the panel's present inquiry into private funding and management of public infrastructure.

"At the moment we are looking at issues which are relevant to the Interlink loan," Mr Tink said. These issues included confidentiality of infrastructure contracts, and keeping a balance between the public's right to know and the confidentiality granted to private enterprise.

The Government and the Roads and Traffic Authority (RTA) negotiated a deal with Interlink to build a \$65 million extension to the M5 tollway, without increasing the toll charge until 1996.

In return, the RTA lent Interlink \$50 million at a fixed annual interest rate of 7 per cent to help the company refinance a \$230 million loan with the Commonwealth Bank. This earlier loan was taken out to finance the existing stretch of the M5, which runs from Beverly Hills to Casula.

Under the agreement, Interlink will not begin to repay the RTA loan until after it has paid back its entire loan from the Commonwealth Bank, including the outstanding \$230 million and an

additional \$65 million for the cost of the new link, which is also being financed by the bank through infrastructure bonds.

The NRMA has called on the Government to explain the reasons behind the loan, saying that the lack of information provided to the public had put the credibility of privately funded roads at risk.

The NRMA's chief traffic engineer, Mr Peter Steele, said the association had been concerned for some time about the lack of public access to agreements between the State Government and private consortia.

He said the NRMA had written to the Minister for Roads, Mr Baird, asking him to clarify why. he had originally told the public that "not one cent of taxpayers' money" would be spent on the new link, and why the RTA had agreed to allow Interlink to delay building exit ramps at Heathcote Road and Hume Highway, effectively trapping motorists on the road as far as the tollgates.

A spokesman for Mr Baird said yesterday that the Government had not tried to hide the loan agreement from the public. The spokesman blamed the media forfailing to ask about the funding arrangements when the Government announced the new link would be built two weeks ago.

Yesterday, the Premier, Mr Fahey, said that both the proposal and the agreement for the tollway's "missing link" was "run past ICAC [Independent Commission Against Corruption] and run past the Auditor-General before the contract was signed".

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rivate	the \$50 million RTA loan, revealed a week ago which	formed part of the renegotiated contract to build a 6.5 kilometre	extension of the tollway from Casula to Prestons.	The amounts of the two origi- nal loans, and the interest rates,	obtained under the FoI act by Liverpool Council.
The p	By KARIN BISHOP Transport Writer	The company Interlink Roads has received three loans from the	State Government to help finance the construction of the M5 toll.	way, a road that was originally meant to be privately funded and operated.	Documents obtained under the Freedom of Information Act

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show that the original contract for the construction of the first stretch of the M5 from Beverly Hills to Casula provided for two RTA loans - one to cover construction costs, and the other to cover the and acquisition costs.

These loans are separate from

However, in July last year the then Minister for Roads, Mr had received a \$10 million Gov-Murray, revealed that Interlink ernment loan at commercial interest rates.

The contract specifies that "the RTA must lend the construction



loan to the company and pay the construction payments to the company ... provided that the RTA is reasonably satisfied with

construction of the tollroad ... it the progress of the design and being understood that the company does not have to establish

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that any particular amount has been expended in respect of such design and construction".

that the M5 was being used by an

average of 32,000 cars a day.

The Herald was unable to

contact the RTA for comment

yesterday.

The RTA reported last week

loans are subordinate to debts incurred by Interlink with the Like the \$50 million, the earlier to the RTA would not begin until Commonwealth Bank. Repayments after the bank had been repaid.

Interlink is jointly owned by the Commonwealth Bank and the construction company Leighton

1990, Interlink expected average daily car traffic of 33,000 on the at the time of the agreement, in The documents also show that Contractors. ... it ek." and

Baird, referring to the documents, said he was "unaware of the A spokesman for the Minister for Roads and Transport, Mr The Mayor of Liverpool, material at the moment".

debt in the project and the likelihood of taxpayers' funds immediately the full extent of its being used again to bale out Councillor Mark Latham, called on the Government to reveal nterlink.

the

tollway and fully accepted

project's commercial risks.

thish COT-

said. "The RTA loans are like a mismanagement at its worst," he dog chasing its own tail, with more "This is government waste and loans committed to prop up the Government's original outlay."

The Opposition spokesman on transport, Mr Langton, said the Government now had no choice but to reveal the details of the M5 contract.

- I his is developing into a first-rate financial scandal - this will be Mr Fahey's Eastern "This is developing into Creek," he said.

The Government was hiding behind the excuse of commercial confidentiality to disguise its inancial mismanagement.



Cost of getting stuck on the M5

The Sydney Morning Herald

PRIVATISED public facilities provide the means to release scarce public resources for alternative public works. A tollway is a good example. It can be attractive to private investors when it offers the promise of a secure return based on a steady cash flow even if over a long term. For government the advantage is that with one fewer item of infrastructure calling on public funds there is that much more money for other purposes.

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What is the point of privatisation, though, if the project is to a significant extent, funded by government loans to the private contractor? Not only is the basic purpose of the exercise – freeing public money for other purposes – negated. Also, the relationship between the government and the private contractor changes. The private contractor no longer bears so much of the risk that the project will return a profit; the government, having committed its own funds and anxious to see them returned, is susceptible to requests for more, especially when such requests are based on the argument that without more funds the project will fail.

The acting Minister for Roads, Mrs Cohen, says there is no mystery about the financial arrangements for the M5 tollway, since these were spelt out by the Roads and Traffic Authority in a media release in February 1991. That may be so, though that media release appears to have passed largely unnoticed at the time. What is plain is that there has been a series of loans by the State Government to Interlink Roads – a private contractor jointly owned by the Commonwealth Bank and the construction company Leighton Contractors – which built the M5. Two are mentioned in the RTA's February, 1991, media release – a "construction loan of \$13 million as a contribution to the project costs" and "a notional loan of \$22 million based on land acquisition costs". Both are repayable at commercial interest rates of 12 per cent following the contractors' repayment of its bank debt from toll revenue. Now, a third loan of \$50 million – at the favourable rate of 7 per cent interest – has been confirmed by the Government to enable the contractors to complete a \$65 million extension to the M5.

Mrs Cohen says the M4 and M5 tollways are "model private/public infrastructure projects" and says their associated contracts compare favourably with that made by the previous Labor Government for the Sydney Harbour Tunnel Project. This project "saw the Sydney Harbour Tunnel Company given a \$223-million interestfree loan for 30 years", she said. "By comparison, the Government outlay to Interlink for the M5 is a total of \$85m over 17-22 years at current long-term commercial rates." Mrs Cohen also says, rather simplistically, that the risk on traffic volumes for the Harbour Tunnel is borne by the Government while that for the M5 is borne by Interlink.

The Harbour Tunnel, of course, is a very bad example of a private/public infrastructure project, in terms of financial arrangements. The Greiner Government confirmed a contract which was altogether too favourable to the contractors. The question remains whether the Government has indeed got the best deal on the M5. The latest S50-million loan raises a very real concern that the Government has allowed itself to be drawn into a process of repeated injections of loan funds to prop up the project and in the hope of seeing the contractors pay off their \$230-million bank debt as quickly as possible, since only then can taxpayers' funds be recouped. If that is so, it is not such a perfect model at all.

Submission No. 165

Schroders 3

Attachment IV

ASSUMPTIONS USED IN FINANCIAL MODEL



С	apacity.
•	traffic growth of 3% per annum linear;
•	inflation of 3% per annum compound;
•	toll increases in line with inflation;
÷	2 year original construction period and 20 year tolling concession;
•	tax depreciation:
	- 80% civil works at 5% straight line
	- 20% equipment at 30% declining balance
•	tax rate of 33%;
·	interest rate of 8.35% per annum;
•	pre-opening minimum acceptable cover ratios:
	- Loan Life Cover: 2.0 times
	- Concession Life Cover: 2.5 times
	Loan repaid on 2 times cash cover;
·	post-opening minimum acceptable cover ratios:
	- Loan Life Cover: 1.4 times
	- Concession Life Cover: 1.75 times
	Loan repaid on 1.4 times cash cover;
	new loans spent on new construction.