Chapter 6 Private sector involvement

Introduction

6.1 This chapter considers the fifth item in the terms of reference:

Assess the scope to supplement Government funding through innovative arrangements for private sector involvement in the provision and maintenance of roads infrastructure and the scope for pricing of road services to reflect full resource costs.

- **6.2** The provision of road infrastructure is a service that was traditionally provided by government. However, there has been an increasing trend to involve the private sector in the provision and maintenance of road infrastructure since the 1980s.
- **6.3** In Australia, private sector involvement has taken three broad forms.
- The first has been the provision of road infrastructure through *competitive tendering* for design and construct contracts where work is carried out by the private sector but financing and ownership remains in the public sector.
- The second has been the provision of road infrastructure through *build*, *own*, *operate* and transfer (BOOT) schemes where construction and investment is by the private sector which is granted a concession by the public sector during the term of the contract to operate (quasi ownership) the infrastructure. At the end of the contract period full responsibility for the infrastructure is returned to the public sector.
- The third has been the maintenance of road infrastructure through *tendering for maintenance contracts*. Private sector involvement in this case is for works only and is not associated with private sector investment or 'ownership'.
- 6.4 The general thrust of private sector involvement in the provision and maintenance of road infrastructure in Australia has been largely construction, and in a few cases, investment. Examples of the latter include the Harbour Tunnel, the M2, M4 and M5 motorways in Sydney; and City Link in Melbourne. At the Commonwealth level there has been considerable use of competitive tendering and contracting through its agents, the States/Territories, but there has been no direct private sector investment or 'ownership' arrangements for the Commonwealth's road infrastructure responsibilities.
- 6.5 The Commonwealth can be seen as indirectly supporting the opportunity for investment and ownership of road infrastructure in its tax incentive programs. These would include the Develop Australia Bonds which were introduced in 1992 and discontinued early in 1997. This infrastructure bond program was replaced in 1997 by the infrastructure borrowings tax rebate scheme which was capped at \$75 million per year.

6.6 This chapter considers the rationale for involving the private sector in the provision and maintenance of road infrastructure. The chapter identifies a range of arguments raised in the evidence on possible benefits and costs to the community of private sector involvement, and the types of private sector involvement that may be used in the provision and maintenance of road infrastructure. The chapter concludes by considering possible safeguards that may be required to protect the taxpayer.

Rationale

- **6.7** There were a number of reasons given to the committee to provide a broad rationale in support of the private sector involvement in the provision and maintenance of road infrastructure.
- **6.8** It was suggested in the evidence that the introduction of market pressures may increase the efficiency of road infrastructure provision and maintenance. Increased efficiency may be realised through: better road investment decisions; lower costs for the design, construction and maintenance of road infrastructure; or more efficient use of road infrastructure. The possibility of increased efficiency in the provision and maintenance of road infrastructure is discussed in detail later in this chapter.
- **6.9** Given constraints on government budgets, it was suggested in the evidence that private sector investment may permit some projects to proceed earlier than is possible with government funding. Therefore, the economic benefits of such projects may be secured at an earlier date although having some infrastructure earlier may not always provide a net benefit to the community. The potential benefits of private sector involvement are discussed in more detail later in this chapter.
- **6.10** In the evidence, it also was suggested that there may be costs associated with involving the private sector. These costs may include increased financing costs, transaction costs and road user charges, revenue foregone through government incentives, and network usage costs which would provide reasons not to support private sector financing and ownership of road infrastructure. The potential costs of private sector involvement are discussed in more detail later in this chapter.

Benefits

- **6.11** As noted above, private sector involvement may include a number of responsibilities, or combinations of activities, such as design, construction, maintenance, investment, ownership, or operation.
- **6.12** Based on the evidence placed before the committee the involvement of the private sector in road infrastructure investment may secure a number of benefits for the community.

Resource allocation

6.13 The involvement of the private sector in the provision and maintenance of road infrastructure through construction or investment offers scope for improved resource

allocation. The allocation of resources to the areas where they may be used most productively offers benefits in terms of improved economic efficiency.

- **6.14** There are a number of areas in which improved resource allocation may offer economic benefits.
- Resource allocation may be improved by ensuring that road projects with greater economic benefits are undertaken before projects with smaller economic benefits. This objective may be assisted through private sector investment, as private sector organisations have an incentive to identify and undertake projects with larger financial returns. However, private sector investment may fail to meet this objective to the extent that financial returns do not accurately represent economic returns. This may occur where a road project has external or social benefits that cannot be captured financially by a private sector operator.
- Resource allocation may be improved by ensuring that road projects are undertaken by the most efficient operator. Increasing the scope for private sector construction and maintenance in road projects may be part of a broader attempt to increase competition for the provision of road services. Increased competition may improve resource allocation by allowing the most efficient operator—private or public sector—to undertake road projects.
- Resource allocation may be improved by encouraging an efficient level of use of road infrastructure. Where private sector investment uses road tolls to provide an income stream for the private sector operator, such tolls may act as a road pricing mechanism to discourage inefficient use of the road. However, governments could also secure this benefit by using road pricing mechanisms on publicly operated roads.
- **6.15** The Australian Constructors Association argued that private sector involvement in road infrastructure may induce greater market based pressure for efficient spending (Sub 650, *Submissions* p. 1442). More efficient spending may be realised by introducing a greater number of pricing signals into the infrastructure market, thus signalling the cost of resources to the users.
- **6.16** The Department of Finance identified that the impact of pricing signals should be considered in the context of a multi-modal transport system. The distribution of freight and passengers between various modes of transport is distorted by inefficient pricing signals, and this may lead to inefficient investment decisions (Sub 443, Submissions p. 311).
- **6.17** The committee agrees that involving the private sector in road provision and maintenance under competitive tendering and contracting may lead to improved resource allocation. However, the committee notes that private sector investors will only look at financial benefits. Governments also have a role in ensuring that resource allocation is improved with respect to social benefits.

Risk allocation

6.18 The question of risk allocation is one of concern to the parties involved in the provision and maintenance of road infrastructure. The Industry Commission argued that risk

should be allocated to the parties best able to bear the risk. The Commission also identified that risk allocation should be transparent (Sub 416, *Submissions* p. 106).

- **6.19** The Australian Constructors Association (ACA) argued that it is important to adequately identify and manage risk. The ACA further argued that the private sector may be better able to bear some of the risk that government has traditionally borne in road infrastructure projects. The ACA concluded that the risk associated with finance, construction and operation of road infrastructure is better borne by the private sector. The risk associated with changes in policy and regulation is better borne by government (Sub 650, *Submissions* pp. 1448–9).
- **6.20** The committee acknowledges that there were general principles on risk allocation, identified by the Industry Commission and the Australian Constructors Association. Allocating risk to the party best able to control the risk will allow total project risk to be minimised. An inappropriate allocation of risk may not take advantage of incentives to control risk.
- **6.21** What is of concern to the committee is that the principle of allocating risk to the party best able to control the risk has not always been the experience in Australia where the private sector has invested in public infrastructure including road projects. Experience of private sector investment and operation of road infrastructure suggest much of the commercial risk has remained with the public sector and not with the private sector.
- **6.22** The allocation of risk was of particular concern in the case of the Sydney Harbour Tunnel where the financial risk was primarily carried by the Roads and Traffic Authority (RTA) with partial responsibility shared with equity and bond investors, while traffic risk was totally the responsibility of the RTA (NSW Auditor-General, 1994, p. 269).
- **6.23** Similarly, the NSW Auditor-General identified that the financing risk for the M5 Motorway was primarily carried by the RTA, with other primary responsibility (but less than RTA) being carried by the Commonwealth Bank, and partial risk allocation to Interlink (NSW Auditor-General, 1994, p. 385).
- **6.24** Any proposals to involve the private sector in road infrastructure projects, in particular as investor and operator, should consider the allocation of risk amongst the parties with the aim of better managing total project risk. The committee agrees that such risk allocation should be transparent in order that the parties are aware of their respective responsibilities and that agreements with the private sector may be independently scrutinised.

Costs

- **6.25** Just as the committee heard evidence in support of the private sector in the provision and maintenance of roads, evidence was presented suggesting that private sector involvement, in particular investment, may be associated with a number of costs for the community, including:
- use of public resource costs,
- borrowing costs, and
- transaction costs.

Use of public resources

- **6.26** In proposals to involve the private sector in the provision and maintenance of road infrastructure, governments may choose to encourage such investment by making physical or financial resources available to the private sector organisation. Examples of such resources are the use of public land for a privately operated road or the provision of tax breaks or subsidies to private sector road infrastructure projects.
- **6.27** The provision of resources to encourage private sector involvement in road infrastructure may not be an additional cost to the community where the alternative would have been to use the resources for public sector road infrastructure. For example, the provision of a land corridor to a private sector road developer is not an additional cost to the community if the alternative use of the land would have been a public sector road. However, the provision of the land is still a resource that is used by the project, even though it is not a financial cost to the private sector developer.
- **6.28** The Department of Primary Industries and Energy argued that the use of some public resources may be justified as payment for the social benefits that accrue from the development of road infrastructure (Sub 717, Submissions p. 1784).
- **6.29** Another situation in which the provision of resources may be justified is where government is seeking to correct a distortion in the economy. For example, the Department of Transport and Regional Development suggested that tax losses from an infrastructure project cannot be used as a deduction until the project generates an income (Sub 482, *Submissions* p. 889). The discontinued Develop Australia Bonds program sought to correct this timing problem in order that a greater number of beneficial capital investment projects might be allowed to proceed.
- **6.30** Professor Gordon Mills argued that the Develop Australia Bonds program may have created an additional distortion in that they were not available to government infrastructure developers. Therefore, the bonds may have distorted the market for providing and maintaining road infrastructure in favour of the private sector (Sub 426, Submissions p. 195).
- **6.31** The committee considers that it is not possible to generalise over whether the use of public resources is justified in facilitating private sector involvement in road provision and maintenance. The use of public resources or financial incentives may be justified in

correcting market distortions or in compensating for the social benefits that flow from a private sector road project. However, such assessments would need to be made on a case by case basis.

6.32 The committee considers that any arrangements for the use of public resources to encourage private sector investment in road projects should be clearly specified and transparent in order that the full resource cost of projects may be identified and that governments may be accountable for the use of such resources.

Borrowing costs

- **6.33** Private sector investment in the provision of road infrastructure may involve increased costs where the cost of capital is greater for the private sector than for government. This argument is usually put forward on the basis that government generally faces a lower rate of interest on borrowing than the private sector due to government's higher credit rating.
- **6.34** The Department of Transport and Regional Development noted the cost of capital should be similar for government and the private sector. The reason for the observed difference in borrowing rates is that the cost of risk to the taxpayer is not reflected in the government's borrowing rate. The department observed that the argument that government should finance road infrastructure because of its lower borrowing rate is also an argument for government financing of all capital investment projects (Sub 482, Submissions p. 887).
- **6.35** The committee considers that the question of whether the private sector faces higher borrowing costs than the public sector cannot be resolved from the evidence presented. The committee notes that before rejecting private funding because of higher borrowing costs, all other factors associated with the proposed project would need to be examined.

Transaction costs

- **6.36** Private sector involvement in the provision and maintenance of road infrastructure may involve the parties incurring significant transaction costs. Transaction costs are the costs that are incurred in facilitating a transaction. For example, transaction costs may include the costs of drawing up and monitoring contractual agreements or the time taken to negotiate and complete a transaction.
- **6.37** Macquarie Corporate Finance Limited (Macquarie) argued that most transaction costs incurred through private sector involvement in a road project would also have been incurred if the project were undertaken by the public sector. However, Macquarie acknowledged that there may be additional negotiation and documentation costs associated with private sector involvement (Sub 436, *Submissions* p. 261).
- **6.38** Further, Macquarie argued that even where private sector involvement does lead to additional transaction costs, these costs may be offset by other long term benefits from private sector investment (Sub 436, Submissions p. 261).
- **6.39** Transaction costs may also result from imposing charges on roads, such as tolls. These costs include the development of toll plazas or electronic tolling devices and motorists incurring additional time costs in paying the toll.

- **6.40** The NSW Government identified that transaction costs from paying tolls may be offset by reduced congestion costs on the road (Sub 686, *Submissions* pp. 1690–1).
- **6.41** The committee accepts that private sector involvement in the provision and maintenance of road infrastructure may result in increased transaction costs. The committee believes that this is not a justification for automatically rejecting private sector involvement, and that consideration would have to be given to a project's net benefit and to the distribution of benefits and costs.
- **6.42** In summary, where it can be shown that the benefits of private sector investment are greater than the costs, and that the distribution of those benefits and costs is acceptable to the community, then private sector investment may be considered desirable. Where this cannot be shown, it may be preferable to retain the provision and maintenance of road infrastructure partly or wholly with the public sector.
- **6.43** If investment and ownership of infrastructure is maintained in the hands of the public sector this would not preclude involving the private sector through competitive tendering and contracting (discussed later in this chapter). The committee considers that road projects in which the Commonwealth has an interest should be structured to maximise the net benefits to the community and to ensure an acceptable distribution of benefits and costs across the community.

6.44 Recommendation 30

The committee recommends that the Commonwealth considers the following factors in assessing proposals for private sector investment for road projects in which the Commonwealth has an interest:

- the additional net benefits to the community, and
- the distribution of benefits and costs across the community.
- **6.45** The committee considers that State/Territory and local government could also use such criteria to assess proposals for private sector investment in State/Territory and local government road projects.

Forms of involvement

6.46 The benefits and costs accruing to the community from private sector involvement in the provision and maintenance of road infrastructure may differ depending on the form of private sector involvement. The committee considered evidence on the advantages and disadvantages of a variety of arrangements for involving the private sector. In particular, private sector involvement in competitive tendering, alternative financing, build—own—operate—transfer (BOOT) schemes, and industry contributions are discussed in detail below.

Competitive tendering

- **6.47** Under a system of competitive tendering, both government and private contractors may bid for road provision and maintenance services. Government retains responsibility for deciding which projects will be undertaken, for determining project parameters and for allocating funding.
- **6.48** Three broad types of road related services are generally put to tender: design, construction, and maintenance. These services may also be bundled in various combinations for tender. For example, the Department of Transport and Regional Development advised that some national highway system projects have used design and construction contracts (Sub 482, *Submissions* pp. 884–5).
- **6.49** The department advised that requirements to use competitive tendering for most construction work on the national highway system were introduced in 1982. Similar requirements for maintenance work were introduced in 1994. In 1994–95 about 82 per cent of construction work was put to tender, of which the private sector performed around 78 per cent of this work; while about 50 per cent of maintenance work was put to tender, of which the private sector performed around 19 per cent of the maintenance work (Sub 482, *Submissions* pp. 882, 884).
- **6.50** A system of competitive tendering enables the most efficient providers to undertake road provision and maintenance services. A successful tenderer would generally assume the risk of meeting the required outcomes of the project within budget and on time. As described earlier in this chapter, allocating risk to the party most able to control it provides incentives to minimise the resource cost of road infrastructure projects.
- **6.51** The committee received evidence from a variety of sources that competitive tendering is a desirable method of private sector involvement in the provision and maintenance of road infrastructure.
- The Industry Commission argued that 'competitive tendering should continue to be a key element of future construction and maintenance arrangements.' (Sub 416, Submissions p. 107)

- Professor John Quiggin argued that it is best to use competitive tendering designed to ensure that the contractor bears project specific risk and receives the benefits from cost and time savings (Sub 682, *Submissions* p. 1610).
- The Department of Transport and Regional Development argued that 'contracting out to the private sector has already produced significant benefits for Federally funded projects.' (Sub 482, *Submissions* p. 878)
- The NSW Government argued that there are cost and efficiency benefits arising from competitive tendering (Sub 686, *Submissions* p. 1688).
- **6.52** The committee finds that the evidence in favour of competitive tendering is compelling. The committee also notes that the guidelines for competitive tendering on national highway projects do not preclude State/Territory road authorities and local government from participating. The use of competitive tendering ensures that the most efficient service provider—from the private or public sector—is allowed to undertake road provision and maintenance projects.
- 6.53 The Department of Transport and Regional Development presented evidence that the private sector has successfully tendered for a greater proportion of road construction work than road maintenance work. At the Commonwealth level this may be accounted for by the requirement for construction on the national highway being put to tender in 1982 while this requirement was not introduced until 1994 for maintenance. In addition, many states have retained considerable in-house roadworks capability. The department also noted that some State/Territory road authorities have argued that road maintenance contracts are more difficult to manage than road construction contracts. The department anticipated that there will be a number of initiatives implemented which will increase the amount of maintenance undertaken by the private sector for the States/Territories. The Northern Territory already contracts out all road maintenance work (Sub 482, Submissions pp. 881–2).
- **6.54** The department presented evidence of a movement by the States/Territories to increased use of competitive tendering for maintenance work:
- NSW awarded a 10 year, \$160 million contract for road maintenance in the northern Sydney region;
- Western Australia is testing several 3 year maintenance contracts;
- South Australia is negotiating maintenance contracts for all main roads;
- Tasmania is planning to move to regional contracts to cover maintenance on the national highway system and State roads; and
- the Northern Territory has put all construction and maintenance on the national highway system to tender (Sub 482, *Submissions* pp. 882, 885–6).

- **6.55** The committee received evidence from a number of organisations that the introduction of contract maintenance may have an adverse affect on the economies of rural communities (Subs 462, 686, *Submissions* pp. 537, 1689). This problem will be of particular relevance where State/Territory road authorities have traditionally undertaken road provision and maintenance services through regionally based, in-house work crews or by contracting such work to local government.
- **6.56** The committee believes that competitive tendering may offer benefits for road projects in cost and time savings. The committee supports the use of compulsory competitive tendering for national highway projects. The committee also encourages State/Territory and local governments to use competitive tendering for road projects, while accepting that this choice may be affected by regional development considerations. Where governments decide not to use competitive tendering and contracting, the committee considers that techniques such as bench marking should be instituted to ensure efficient delivery of services.

Increasing the scope for innovation in competitive tendering

- **6.57** Increasing the scope for innovation in road provision and maintenance services is one of the major reasons for encouraging the use of competitive tendering. Contractors have an incentive to innovate as they receive the benefits of any resulting savings in cost and time. The committee considers that any contracts put to competitive tender should be structured to maximise the incentives for innovation.
- **6.58** Putting contracts for larger projects to competitive tender may allow contractors to achieve increased economies of scale (savings from undertaking larger tasks). The incentive to innovate is greater as the benefits of innovation may be spread across a larger project. The Department of Transport and Regional Development also noted that putting larger contracts to competitive tender may reduce the field of potential contractors (Sub 482, *Submissions* p. 884).
- **6.59** The department also argued that it is possible to achieve economies of scope (savings from undertaking related tasks) by combining road services for competitive tender that the successful tenderer will have a greater stake in the quality of the work. In particular, the department identified possible economies of scope in the packaging of design and construction services or construction and maintenance services (Sub 482, *Submissions* pp. 884–5).
- **6.60** The use of competitive tendering and the increased incidence of packaging related works into single contracts has given rise to a greater performance focus in road contracts with contractors focusing more on the achievement of outcomes for the overall project rather than the individual components of the project.
- **6.61** The packaging of different functions provides incentives for the contractor to minimise costs across the whole project rather than across discrete parts of the project. For example, the packaging of construction and maintenance services will force the contractor to consider ongoing maintenance costs as a variable in the choice of construction technique. This is because the construction contractor has a financial interest in the maintenance service.
- **6.62** The Department of Transport and Regional Development advised that there is wide use of design and construction contracts for national highway projects. There have been no

construction and maintenance or, design, construction and maintenance contracts used for national highway projects. The department noted that contracts linking construction and maintenance to date have only been considered suitable for large, long term projects (Sub 482, *Submissions* p. 885). If the contractor must consider a larger maintenance task or longer maintenance time frame then there is a greater financial incentive to choose a construction technique that minimises maintenance costs.

- **6.63** As described earlier in this chapter, the committee received evidence that a number of States/Territories are moving to increased private sector involvement in maintenance services. The committee also received evidence supporting the use of competitive tendering for long term maintenance contracts specifying performance outcomes (Subs 664, 686, Submissions pp. 1518, 1688).
- **6.64** The advantages of such contracts are that they provide the possibility for innovation by specifying the required outcomes rather than processes and by allowing the benefits of innovation to accrue to the contractor over a number of years.
- **6.65** The Department of Transport and Regional Development argued that the full benefits of design, construction and maintenance contracts cannot be realised until the Commonwealth is able to provide certainty of funding over a number of years. The current method of annual budget allocations with forward estimates for 3 years does not provide the necessary degree of certainty for the Commonwealth to engage in long term agreements (Sub 482, *Submissions* p. 886). Chapter 4 discusses in detail the need for certainty of funding.

6.66 Recommendation 31

The committee recommends that the Commonwealth seek to achieve economies of scale and scope in the structuring of Commonwealth funded road projects by using contracts that:

- combine small related projects into a larger project;
- combine design, construction and maintenance services (where appropriate); and
- use long term maintenance periods.

Alternative financing

- **6.67** Ultimately the community pays for roads, whether they are sourced on the one hand by the public sector allocating funds from its revenue or, on the other hand, by direct private sector investment in road infrastructure. In funding for roads, the roles of the public and private sector are not limited to these two positions only.
- **6.68** Alternative financing approaches could include public sector borrowing from the private sectors and, as suggested by the Commonwealth Bank, the use of non recourse financing.
- **6.69** For years public utilities (such as water and electricity) went to the capital market to raise finance enabling the public sector to develop its infrastructure. These public utilities

had a readily identified customer who could be charged for the use of the public utility. This established a future revenue stream to pay back the loan.

- **6.70** Providing the public sector establishes a revenue stream which the capital market can have confidence in, the public sector could borrow from the private sector for the provision of road infrastructure. The public sector would retain ownership of the asset and could include competition through a process of calling for tenders for the road work.
- **6.71** State/Territory governments would need to ensure such public sector borrowing stayed within their borrowing limits under Loan Council provisions.
- **6.72** Public sector borrowing from the private sector is possible and, according to the Department of Transport and Regional Development, finance should be readily available given the expanding market for infrastructure finance (Sub 482, *Submissions* pp. 887, 889).
- **6.73** Budget allocations have remained the main source of public sector funding of road infrastructure. Nevertheless, some States have borrowed from the capital market for specific road projects. For example, the Queensland Treasury Corporation borrowed funds on behalf of Queensland Motorways Ltd, a government owned enterprise, for road infrastructure. This public borrowing from the private sector for public sector investment in publicly owned infrastructure included financing the Gateway Bridge, the Logan Motorway and the Gateway extension. Tolls, where collected, are paid to the government owned Queensland Motorways Ltd.
- **6.74** The public sector would need to structure the loan scheme to ensure the private sector's confidence in the future income or revenue stream to cover the loan. The establishment of a statutory corporation, a specific trust fund and revenue certainty from a special fee, tax or budget allocation could assist public sector borrowing on the capital market.
- **6.75** One difficulty facing the public sector in borrowing from the private sector on the capital market could be government policy. As the Industry Commission noted:

In addition, States' ability to borrow remains bound by perceptions that public borrowing is less desirable than private sector borrowing — despite private or public sector debt having similar economic effects. (Exhibit 76, p. x)

- **6.76** Governments continue to place a high priority on achieving a high credit rating and reducing government debt. A fall in a government's credit rating will raise the interest rate on all government borrowing and impact negatively on a State's capacity to attract investment.
- **6.77** Nevertheless, providing governments are prudent and recognise financing roads as an investment in an asset with net community benefits, then some governments may find it desirable to pursue public borrowing on the capital market for the provision of roads. One financing approach suggested in the evidence by the Commonwealth Bank was the use of non recourse finance. The Bank stated 'that a significant portion of the public assets of the US is funded on this basis.' (*Transcripts*, p. 97)
- **6.78** The Commonwealth Bank, which has played a prominent role in a number of build, own, operate and transfer (BOOT) financed projects, questioned whether private ownership of toll roads is necessary. It proposed a possible government owned toll road corporation financed by non recourse debt in place of a build, own, operate and transfer (BOOT) model

which, amongst other problems, may compromise a government's ability to develop other more efficient, competing forms of transport (Sub 688, *Submissions* p. 1718). Further, the Bank suggested that the BOOT scheme was a necessary evolutionary step but that 'it is no longer the right model for future development of arterial urban tollroads.' (Sub 688, *Submissions* p. 1719)

- **6.79** Non recourse funding from the private sector (that is, the lenders only recourse is to the assets and cash flow from the project) is off balance sheet funding for government. The Commonwealth Bank noted that non recourse financing must be structured and marketed to lenders on the clear understanding that there is no implied or explicit government guarantee (*Transcripts*, p. 97).
- **6.80** In the government owned toll road model proposed by the Commonwealth Bank the government retains ownership but the private sector could operate the toll road.
- **6.81** The Queensland Government argued that involving the private sector may not be the best option for financing road provision and maintenance services. Queensland identified the main financing objective as providing road infrastructure when it is required. Queensland argued that this objective could be achieved by the Commonwealth adopting a more flexible approach to State borrowing (Sub 643, *Submissions* p. 1284).
- **6.82** The Australian Local Government Association argued that the Commonwealth should not use private sector financing for national highway projects as the Commonwealth collects sufficient revenue from fuel excise (Sub 447, *Submissions* p. 409).
- **6.83** The committee received a considerable amount of evidence arguing that as the Commonwealth collects significant fuel excise revenue, then motorists were already paying for roads and should not be asked to pay more through tolls or other means. In this report, the committee has supported breaking the nexus between fuel excise and road funding at the Commonwealth level.
- **6.84** The Commonwealth collects its fuel excise as general revenue and not as a road user charge. Therefore, the Commonwealth's component of fuel excise is similar to that collected on tobacco and alcohol, all of which are imposed to raise general revenue for the Commonwealth and not for funding the respective industries.

6.85 The committee considers that, based on the evidence before it, the benefits of private sector financing are inconclusive. The committee accepts the argument of the Queensland Government that the objective is to undertake road provision and maintenance services to benefit the community. The method by which such services are provided should seek to maximise net benefits and be mindful of the distribution of benefits and costs across the community. The committee has recommended that any proposals for private sector investment should be considered on a case by case basis.

6.86 The committee also received evidence that some legal and administrative provisions may be impediments to choosing the source of financing for road services.

- The Department of Transport and Regional Development argued that the Commonwealth may be constrained by legal requirements from using private sector financing (Sub 482, *Submissions* p. 888).
- The NSW Government argued that Loan Council restrictions have placed some road projects 'beyond the resources of NSW.' (Sub 686, *Submissions* p. 1689)
- Professor Gordon Mills argued that the provision of tax concessions to private owners of infrastructure, and not to government owners, may bias the financing choice (Sub 426, *Submissions* p. 195).

6.87 The committee considers that, although there maybe other valid reasons for their existence, such impediments may limit the ability of governments to maximise the net benefits of road projects by choosing the best financing method.

6.88 Recommendation 32

The committee recommends that the Commonwealth identify and remove any unwarranted legal or administrative impediments to private or public sector financing for road provision and maintenance by the Commonwealth or the States/Territories.

6.89 The committee suggest that the States/Territories could undertake parallel action.

Build, own, operate and transfer schemes

6.90 Build, own, operate and transfer (BOOT) schemes involve the private sector in the investment decision, financing, design, construction, maintenance and operation of infrastructure such as roads. At the end of a specified period of private sector operation, the full responsibility for a road is returned to the government. For road infrastructure in Australia, BOOT schemes have been adopted where private sector operation of infrastructure has been involved. The alternative build, own and operate (BOO) has not been an approach adopted in Australia for road infrastructure.

- **6.91** Private sector projects could conceivably be undertaken without any government involvement (except through adherence to legal requirements such as environmental standards). That is, the private sector could identify a desirable road investment project, acquire the necessary land, design and construct the road; and maintain and operate the road on a commercial basis. However, in practice, governments in Australia have generally played a significant role in BOOT projects.
- **6.92** The operation stage of BOOT projects may require some form of charging so that the private sector operator may realise a revenue stream from the asset. Charges may be in the form of tolls, paid directly by the road user to the road operator; or shadow tolls, paid by government to the road operator on the basis of the number of road users. Depending on the structure of the BOOT agreement, government may also undertake to provide the road operator with other forms of assistance, such as tax breaks, the use of public resources, or minimum revenue guarantees.
- **6.93** As BOOT schemes generally require a revenue stream to be realised from user charging, there are limited opportunities to introduce this form of private sector involvement. BOOT schemes are most likely to be successful in densely populated areas where they offer a more efficient alternative to heavily congested roads. When the private sector invests on its own behalf in a section of road it benefits from the network effects of the public sector's provision of a much larger system of roads. This is not a benefit for which the private sector is required to pay the public sector.
- **6.94** According to the evidence presented to the committee the benefits of BOOT projects include that they may:
- encourage more efficient allocation of resources through pricing signals;
- lead to an earlier completion date;
- encourage innovation by combining a number of stages of the road management lifecycle; and
- encourage a more appropriate allocation of risks between the parties to a road infrastructure project.
- **6.95** The disadvantages of BOOT schemes, in common with other methods of private sector investment, include that they may be associated with the use of public resources and higher borrowing and transaction costs than public sector projects. Also, there may be disadvantages in using road tolls on BOOT projects in a network of otherwise untolled roads. Such tolls may encourage motorists to use older, more congested roads rather than the newer BOOT road. As discussed earlier in this chapter, each of these disadvantages needs to be considered against the advantages of the project. Decisions on BOOT projects should be made on a case by case basis.

- **6.96** The committee received evidence that BOOT schemes may be associated with significant costs.
- Professor Gordon Mills argued that many of the decisions in BOOT arrangements are taken by government rather than by the private sector. For example, the decisions about which road to build, how to acquire land, and which tolling method to use may be decided by government. Professor Mills also argued that the decision about whether to proceed with a road project becomes more the concern of government to the extent that public financial assistance is provided to the project. Professor Mills concluded that 'this high price buys market-steering of decisions in only two areas—construction, and operation and maintenance.' (Sub 426, Submissions pp. 191–3)
- The Commonwealth Bank of Australia argued that BOOT schemes may compromise government's ability to manage the transport network (Sub 688, Submissions p. 1718). This may occur where the conditions of a BOOT agreement prevent government from undertaking transport initiatives that may adversely affect the private road infrastructure, or require government to compensate the BOOT contractor in such circumstances. For example, a BOOT agreement for a road project may prevent the government from developing public transport services that would compete with the road or require the government to compensate the road operator in such circumstances.
- Professor John Quiggin argued that if private ownership of a road is preferable to government ownership, then it is undesirable to return the road to government ownership as required by BOOT arrangements. Professor Quiggin also supported the argument that it may be inefficient to use toll financing when a road is new and uncongested and to remove the tolls when the road is older and more congested (*Transcripts*, pp. 191–2).
- **6.97** The committee acknowledges the arguments regarding the potential advantages and disadvantages of BOOT schemes. The committee also notes the point raised by the Industry Commission that the primary impetus for the use of BOOT schemes has been constraints on government budgets (Sub 416, *Submissions* p. 104). BOOT financing may enable socially valuable roads to be delivered more quickly than they would be through public sector financing. This allows the benefits of road projects to be realised at an earlier date.
- **6.98** On the issue of bringing forward the completion of infrastructure the Industry Commission said:

However, the claimed benefit of earlier investment is predicated on whether the decision to delay the project or to construct it in stages is appropriate. At issue is whether the fiscal constraints applied by governments are justified or whether private investment has inherent advantages over public investment. (Exhibit 76, p. xi)

- **6.99** The committee argues that the benefits of BOOT arrangements may be delivered through public sector road ownership.
- Efficiency in road design, construction and maintenance may be realised through a system of competitive tendering.
- The costs of using direct tolls may be avoided by financing projects through government expenditure. Government is able to apply direct tolls to roads where tolls are desirable, such as for congestion pricing.
- It is unclear whether private sector ownership has significantly reduced government exposure to the risks associated with investment in road infrastructure.

6.100 Similarly, the Industry Commission found that competitive tendering and contracting out under public ownership can offer the same benefits as BOOT schemes (Exhibit 76, pp 35–7).

6.101 The committee considers that BOOT schemes are unlikely to be the best method of delivering Commonwealth road projects. Should such schemes be considered for Commonwealth road projects, then they should be assessed on a case by case basis.

6.102 The committee also considers that BOOT schemes are unlikely to be the best method of delivering State/Territory and local road projects. However, the committee recognises that the existence of government budget constraints means that BOOT financing offers a tempting means for States/Territories to undertake high cost road projects.

Industry contributions

6.103 The committee received evidence from a number of sources that private sector road users should contribute to the provision and maintenance of those public roads from which they receive a significant private benefit.

- The Department of Transport and Regional Development argued that, in some cases, industry may be prepared to invest in a road simply because of its own need to use the road. For example, industry may want a road upgraded to accommodate heavier vehicles in order to achieve operating efficiencies (Sub 482, *Submissions* p. 895).
- The Queensland Government argued that private development projects should contribute to the upgrading of public infrastructure to meet the needs of the development (Sub 643, *Submissions* p. 1284).
- The South Australian Department of Transport argued that developer contributions should be sought for roads servicing specific developments (Sub 423, *Submissions* p. 165).

- **6.104** The committee received evidence of mining companies which had made contributions for road infrastructure. For example, BHP Minerals Pty Ltd, in developing its Cannington project (central north Queensland), had contributed \$13 million for a 84 km road from Cannington to McKinlay for construction and upgrading to an all weather, dual lane road and, further, will contribute to the maintenance of the road for the life of the Cannington project (Sub 681, *Submissions* p. 1583). Ernest Henry Mining Pty Ltd (MIM Holdings Ltd) also contributed some \$15 million towards road works in central north Queensland (*Transcripts*, p. 271).
- **6.105** The committee also received evidence opposing such contributions for the national highway system. Ernest Henry Mining Pty Ltd argued that companies already make a contribution for roads through taxes and royalties such as 'fuel taxes, payroll taxes, customs duty, indirect taxes.' (*Transcripts*, p. 255) This point of view was addressed earlier in this chapter.
- **6.106** The Department of Transport and Regional Development noted that an argument in support of seeking industry contributions for road infrastructure is that the use of the national highway system cannot be restricted. Where heavier vehicles are used on a section of road without an explicit contribution from the major user, the increased maintenance costs would be borne by the community as a whole (Sub 482, *Submissions* p. 896).
- **6.107** The department identified that there have been cases where industry, in cooperation with a State Government, has initiated road upgrading proposals and considered making a direct financial contribution. At the Commonwealth level, proposals for private financial contributions have not moved beyond a preliminary stage because of a lack of an agreed mechanism to deal with such proposals (Sub 482, Submissions p. 896).
- **6.108** The department suggested that one way of facilitating industry contributions may be where industry borrows to finance a road infrastructure project and meets the interest costs on the loan. Government would repay the loan principal in the year that project would have been funded without the industry contribution. The department noted that the State/Territory governments would need to act as financial conduits in cases where the Commonwealth was involved in such a principal repayment scheme, as current legislation requires that Commonwealth road funding payments be directed to State/Territory governments (Sub 482, *Submissions* pp. 896–7).
- **6.109** The advantages of a system of industry contributions are that it brings forward the economic benefits of road infrastructure improvements and increases the extent to which road pricing reflects resource costs. The economic benefits are realised more quickly by allowing beneficial road projects to be funded earlier than they might be through normal budgetary processes. The improved resource pricing is realised by the fact that industry directly bears all or part of the infrastructure costs of increased use of road transport.
- **6.110** The committee considers that the advantages of a system of industry contributions make it a desirable arrangement by which the private sector might be involved in the provision and maintenance of road infrastructure. However, the committee recognises that existing legislation may present some impediments to implementing such arrangements.
- **6.111** The Department of Primary Industries and Energy outlined problems under the *Income Tax Assessment Act 1936* for private investment in roads by mining companies noting that:

... the provisions of Division 10A and 10AAA of the Income Tax Assessment Act (ITAA), in particular circumstances, create difficulties for mining companies in having capital outlays on roads deductible as allowable capital expenditure.

... Division 10AAA penalises some mining operations relative to others and, at the margin, will preclude some mining operations/developments — and, of course, associated roads provision. (Sub 717, Submissions p. 1784)

6.112 BHP Minerals Pty Ltd noted that a mineral company could not receive tax deductibility for its investment in roads owing to the 'primary and principally' test but that it was able to depreciate the value of the road asset over some years. The company suggested that a purpose based test should be introduced (Sub 681, *Submissions* pp. 1589–90; *Transcripts*, p. 282).

6.113 The Department of Primary Industries and Energy concluded that:

It is ironic that, the greater the social benefit associated with investment in a road by a mining company, the more likely it is that a company will lose its right to full deductions for its expenditure under Division 10AAA. (Sub 717, *Submissions* p. 1785)

6.114 Recommendation 33

The committee recommends that the Commonwealth examine methods by which industry may contribute to Commonwealth road projects and a report to Parliament be provided by 1 June 1998.

Other forms of involvement

6.115 The committee received evidence regarding other innovative arrangements for private sector involvement in the provision and maintenance of road infrastructure. For example, Main Roads Western Australia identified that other innovative arrangements could include the use of value capture mechanisms and insurer contributions (Sub 468, *Submissions* pp. 656–7).

6.116 The committee considers that the limited evidence received on other innovative arrangements for private sector involvement does not allow the committee to reach general conclusions on the possible benefits of such arrangements. However, the committee encourages road agencies to continue to investigate possible benefits that may flow from such arrangements.

Safeguards

6.117 As discussed at various points in this chapter, the committee considers that it is essential that agreements for private sector involvement be transparent. Transparency will make government more accountable for such agreements. In particular, the committee is concerned that it is difficult to determine the risks and guarantees that are being undertaken by government and the resources that are being provided by government to ensure the success of private sector road projects. This prevents an examination of the benefits and costs of private sector involvement (in particular private sector investment and operation of road infrastructure) and comparisons with public sector alternatives.

6.118 On risk, security and accountability for private investment on urban roads, the Industry Commission said:

Risk, and particularly uncertainty, has been ameliorated by governments through the inclusion of *material adverse effect* clauses in BOOT contracts. This notionally transfers some of the cost of risk to the public in the form of a loss of flexibility — a loss of *option value* that potentially increases the cost of transport infrastructure in the future. (Exhibit 76, p. xii)

Currently governments do not make available the assessments that form the basis for the decision to use a BOOT scheme in preference to other forms of finance and contracting. ...

[NSW and Victoria] do not provide the information required to allow independent scrutiny of the government's decision — thereby weakening accountability. (Exhibit 76, p. xiv)

6.119 The committee considers that the need for transparency is greatest for BOOT agreements. Therefore, the need to introduce more transparency is particularly important at the State/Territory level.

6.120 Recommendation 34

The committee recommends that the Commonwealth ensures that agreements involving the private sector in Commonwealth road projects are transparent and open to public scrutiny.

6.121 The committee considers that State/Territory and local government should also develop procedures to ensure government accountability for, and public scrutiny of, agreements to involve the private sector in road projects.

Conclusion

6.122 The committee considers that private sector investment in road projects should offer net benefits to the community over public sector delivery of the project. The distribution of the benefits and costs of private sector investment should also be acceptable to the community.

6.123 The committee supports the use of competitive tendering for design, construction and maintenance services on road projects. The committee considers that the benefits of competitive tendering may be increased by tendering larger contracts and by combining related tasks into single contracts.

6.124 Based on the evidence, the committee believes that proposals for private sector investment in road projects should be considered on a case by case basis. On the evidence received the committee considers that build, own, operate and transfer schemes are unlikely to be the best method of delivering Commonwealth road projects.

6.125 The committee argues that there is a need for greater transparency in agreements for private sector involvement in road projects. Greater transparency in such agreements should act to make government more accountable for the risks assumed by government and the resources provided by government.

Paul Neville MP Chair

October 1997