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Local Government Forum

Local Government Asset Decisions and the Cost of Capital

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Summary

Concern about evidence of ongoing errors in local government justifications for asset decisions led the Local Government Forum (LGF) to commission this paper from Capital Economics Limited. The paper explains why local authorities should:

- understand that they are likely to *reduce* community welfare when they get involved in activities that others can readily provide independently (eg car parking buildings). People can generally spend their own money better than politicians and bureaucrats.

- rigorously inquire when making an asset and spending decision whether it is *necessary* for local government to be involved. The prime focus of such an inquiry should be on whether there is a sound public good justification, in the technical meaning of that term.

- recognise that the cost to the community of a proposed *use* for an asset is the forgone opportunity to use that asset or those resources elsewhere in the community. This is determined by the risk-return characteristics of the alternative use, not the cost of local authority borrowing. The forgone return will be higher – commonly much higher – than the local authority borrowing rate. Local authorities should use central government's public sector discount rate (currently 10 percent applied to constant price pre-tax costs and benefits) or – particularly in the case of independent trading entities – the Treasury's recommended alternative measures for SOEs based on the specific risk attributes of the activity.

- use this opportunity cost of capital, rather than the local authority borrowing rate, when considering who should *own* an asset that is to serve a valid local authority purpose. Local authorities should not own assets just because they can borrow more cheaply or pay less tax; and

- use the local authority borrowing rate when evaluating *borrowing alternatives*, such as financing leases, for funding assets that should be owned on public good grounds (other assets should be sold).

1 Introduction

Concern about ongoing errors in local government justifications for asset decisions led the Local Government Forum (LGF) to commission this paper from Capital Economics Limited.

Section 2 provides some background information that highlights the potential significance of local authority asset decisions for the welfare of their communities.

Section 3 explains why it is wrong to make decisions on the basis of their effects on a local authority's accounts, and the importance of a rigorous approach to determining what activities local authorities should undertake.

Section 4 explains why it is wrong to use the local government borrowing rate to evaluate asset *use* decisions.

Section 5 explains why it is wrong to use the local government borrowing rate to evaluate asset *ownership* decisions.

Section 6 explains why it is appropriate to use the local government borrowing rate to evaluate *borrowing alternatives*, such as financial leases.

These sections also briefly set out a recommended approach to the issues canvassed and provide, for those seeking a more detailed treatment, references to official guidelines and authoritative articles on these matters.

2 Background

Local authorities control a significant proportion of New Zealanders' real assets. At June 2004 their fixed assets were valued at $56.1 billion, approaching $40,000 per household (based on 1.5 million households). For comparison, "Total Crown" physical assets were $57.9 billion at 30 June 1994.

New Zealanders have a larger net equity investment in local authorities than in central government. This is because local authorities are close to being debt free whereas central government still has significant debts. Local authority net worth in June 2004 was $59.5 billion, whereas "Total Crown" net worth was $35.5 billion.

On the basis of these figures, the opportunity cost to the community of this level of investment is much greater than the cost of rates. Indeed, it probably exceeds the cost to the community of all local authorities' non-interest operating expenses of $4.6 billion in the year ended June 2005. For example, at Treasury's 10 percent discount rate, the *annual* opportunity cost to the community of local authority public equity would be $6 billion. The combined annual cost to the community of local authority spending and asset decisions is therefore of the order $10 billion a year. This is roughly $6,000 per household.

Local authorities are following orthodox accounting rules in not accounting for the cost of equity capital in their accounts. However, their equity is so large relative to the scale of their operations that the omission is material. There is a risk that asset use decisions do not get properly scrutinised because the opportunity cost is a hidden cost. The quality of local authorities' asset decisions might be as important for the welfare of their communities as the quality of all their other spending decisions combined. Local authorities should consider accounting for it explicitly.

3 Benefits to the community versus benefits to the local authority

Local authorities should not defend asset or spending decisions simply on the basis that they contribute positively to their reported accounts, and thereby reduce rates. There are many things a local authority could do that might contribute positively to its accounts yet reduce ratepayer welfare, even if they do reduce rates.

Of greatest relevance to this paper, a local authority could, and in reality many councils probably do, hold ratepayers' funds in superfluous investments that provide a positive cash return for the local authority that it uses to increase spending or reduce rates.

For example, in correspondence responding to Local Government Forum concerns about such matters, the Mayor of Wellington wrote that:

> … the city makes investment decisions based on the cost to the city …[The sentence proceeds to mention benefits (and risks) but does not mention whether these are benefits to the city or to the community.]

The reference to "cost to the city" is either a loose use of words or an example of an incorrect focus on the financial costs to the council – rather than the economic costs to the community and whether it is an appropriate role for the council.

The following statement in a paper prepared for an Auckland City Council committee by a council officer defends ongoing ownership of a car parking building on the grounds of alleged benefits to the city's accounts:

> Providing the parking assets are efficiently managed, the city is better off financially retaining the parking assets and taking on more debt.[1]

There are at least three general reasons why local authority ownership of assets that are superfluous to their core functions is likely to be bad for the community. First, other investors are likely to be able to add more value as owners of those assets. Second, local authorities may not be aware that the assets are failing to provide a return commensurate with the opportunity cost of the ratepayers' capital. Third, they may spend the extra cash income less well than ratepayers could spend it for themselves.

In respect of the first point, the assumption that parking assets would be efficiently managed under local authority management is wrong as a general proposition. The incentives are sharper with a private operator whose own money and future is at stake and where competition is more of a threat. There is a great deal of empirical evidence that, on average and over time, privately-owned enterprises outperform public enterprises.[2]

In respect of the second point, as we noted in section 2, a local authority's accounts do not oblige it to record the annual cost to ratepayers' of equity capital. Further, the cost to the community of council borrowing is greater than the cost to the council. This is because lenders know that even if a project fails to produce enough revenue to service

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1 Auckland City Council, 'Capital Expenditure Funding for the 2006-2016 LTCCP', 3 November 2005. Section 5 finds that the claim of a financial benefit is based on a false argument. We understand that the officer accepts the point.

2 For a literature survey, see William L Megginson and Jeffrey M Netter, 'From State to Market: A Survey of Empirical Studies on Privatization', *Journal of Economic Literature*, June 2001, pp 321-389.

the debt they can still be repaid out of revenue from rates or levies. Ratepayers effectively underwrite the lender free of charge, but competition between lenders passes this benefit to the borrowing local authority. Council borrowing benefits from an implicit guarantee from ratepayers, the cost of which is borne by them.[3] As a result, local authorities are not directly confronted with the cost to ratepayers of the capital they employ.

It does not appear to be well understood that the overall cost to the community of the capital tied up in local authority assets is not represented by the local authority borrowing rate. It is represented instead by the forgone opportunity to use those resources elsewhere, perhaps in an investment in the private sector with similar risk characteristics. This forgone benefit does not depend fundamentally on the method of financing the assets or on who owns them (although it will depend on how the assets and activities are managed).[4] For example, the risk-return characteristics to the community of investments in a local airport do not depend on the local government borrowing rate or, governance quality issues aside, on who owns the airport.

Unfortunately, current arrangements may induce some decision makers in local authorities to think that such an investment is a good thing for the community as long as it is cash flow positive in the local authority's reported accounts. The scope for serious misapprehension and major errors in decision making should be obvious.

In respect of the third point, some local authorities may not understand that the cost to ratepayers of a dollar of local authority spending is greater than a dollar. This is because of the hidden costs of taxation that economists refer to as 'deadweight costs' or 'excess burdens'. Local authorities could seek guidance from the Treasury on this issue, but some central government control agencies consider that government

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3 Central government set up commercial trading operations as separate arms-length borrowing entities (SOEs) partly in order to force them to face more fully the cost to the community of their activities.

4 Tax considerations could affect the distribution of the costs and benefits.

agencies should count a dollar of government spending out of taxes as costing taxpayers $1.20 or $1.25.[5]

Instead of focusing on the effects of an asset decision on their accounts, local authorities should focus, in the first place, on why they should be involved at all.

Local authorities should only aim to retain assets or undertake spending when the particular circumstances of the case represent a clear departure from the general presumption in favour of letting ratepayers spend their own money for themselves. The grounds for such departures have been extensively analysed and they come down primarily to situations of public goods (as technically defined in economics).

A public good cannot be funded by direct user charges because it has the property that those who refuse to pay cannot be deprived of the opportunity to benefit. It also has the property of non-rivalry – that one person's benefit does not detract from another person's benefit.[6]

The fact that a good may have to be provided without charge does not justify local authority action in itself. Many goods are supplied privately without charge either on a for-profit basis (eg supermarket car parking for customers) or a not-for-profit basis. Similarly, many goods that are non-rivalrous are provided privately (eg seats in an uncrowded cinema). The case for local authority action on public good grounds is presumptive. It is not determinative. It needs to be examined critically rather than accepted at face value.

The Organisation for Economic Cooperation and Development has proposed the questions in the box on the next page for assisting governments to determine whether they should get involved in an activity. Perhaps the most concerning feature of the

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5 For a discussion, see 'The Excess Burden of Taxation and Why It (Approximately) Quadruples When the Tax Rate Doubles', John Creedy, The Treasury, Working Paper 03/29, 2003 at http://www.treasury.govt.nz/workingpapers/2003/03-29.asp. In the United States, the Office of Management and Budget's Circular A-94 requires a factor of 1.25 to be applied to public spending. The same factor is suggested in the Commonwealth of Australia's *Handbook of Cost-Benefit Analysis*, January 2006, pp 37-38.

6 See Jo Cribb and Tom Berthold, 'Roles of Central and Local Government in Joint Problems', State Services Commission, Working Paper No 1, July 1999, at http://www.ssc.govt.nz/upload/downloadable_files/WkPap1.pdf.

two statements by councils cited earlier is that they indicate a failure to focus on asking whether an activity is an appropriate role for the local authority.

The director of fiscal affairs at the International Monetary Fund, Vito Tanzi, has summarised expert opinion on the proper role of government as follows:

> *First,* there is now broad agreement among economists that the state should not be engaged in the production of goods and services that can be produced by the private sector or can be imported. Thus, the state should be completely out of such activities …[7]

Reflecting such criteria, local authorities should focus on core activities, such as flood control, effluent disposal (a public health issue) and (currently) public roads. They should resist pressures to get involved in private goods where it is more likely they will reduce community welfare and be diverted from their core tasks. Income redistribution should be left to central government given its much more effective income support mechanisms and better information about household income.

Basic questions to ask in assessing whether a programme is justified

- Does the programme still serve a clearly defined public purpose that matters?
- Is this an appropriate role for government?
- Would we establish the programme today if it did not already exist?
- Is it desirable to maintain it at its current level?
- Can it be delivered more effectively or efficiently? Have there been changes (in the service environment, infrastructure, technology, etc.) since the programme's inception that would now permit an alternative means of achieving its objective with greater economy, efficiency, or effectiveness?

Sources: Canadian Office of the Auditor General and Finance Canada and the Organisation for Economic Cooperation and Development (OECD)

4 The cost of capital for asset use decisions

It is critical to understand that the cost to the community of putting scarce resources to one use is the forgone opportunity to put them to another use. If private individuals could have achieved a greater return with those funds from a different project with the same risk class then the cost to the community from the local authority project is the

[7] Vito Tanzi, 'A Lower Tax Future: The Economic Role of the State in the 21st Century', Politeia, London, 2004.

forgone greater return. Economists refer to this cost as an opportunity cost. It is largely a hidden cost. This is because what is forgone cannot be observed.

In public sector project analysis, the opportunity cost of the forgone alternative is represented by the discount rate or cost of capital that is to be used in a project analysis. In central government, the recommended general rate is 10 percent per annum (applied to pre-tax cash flows expressed in constant value dollars). However, state agencies may use instead a cost of capital that reflects the specific risk-class of the investment under consideration.[8]

Illustration of the Concept of Opportunity Losses

Case	**Cost of Project** $m	**End Value of Project** $m	**Community Gain/Loss** $m	%	**Opportunity Loss (-)** **$m**	%
1. Private investor	$100	$110	$10	10%	**Nil**	**Nil**
2. Local authority -- 100% debt	$100	$106	$6	6%	**-$4**	**-40%**
3. Local authority -- 50% debt (Assets marked to market.)	$100	$103	$3	3%	**-$7**	**-70%**
4 Local authority -- 50% debt (Assets not marked to market.)	$100	$53	-$47	-47%	**-$57**	**-570%**

The illustrative calculations in the table above help explain the opportunity cost concept. For simplicity, they assume a project life of one year and no taxation. In the table, the 'Cost of Project' is the present value of the project's costs, calculated at the start of the year and 'End Value of Project' is the present value of its net benefits, calculated at the end of the year. The opportunity losses in the last two columns of the table measure, in dollars and as a percentage respectively, the difference between the community gain in the case under consideration and the $10 community gain in case 1.

[8] For details, refer to Treasury's handbook: 'Estimating the Cost of Capital for Crown Entities and State-Owned Enterprises', October 1997, at http://www.treasury.govt.nz/publicsector/costcapital/costcap.pdf. Appendix 1 of this handbook briefly canvasses the worldwide controversy over the best discount rate to use for government projects.

In case 1, the project is expected to produce a (required) 10 percent return during the year. To illustrate how this return might be expected to be shared between suppliers of debt and equity, consider the case where private lenders charge a private borrower 8 percent interest for a project and require the private borrower to provide half the funding as equity. Suppose that the equity investors would require a return of 12 percent on that share of that project. Under these assumptions a project costing $100 million will proceed if investors expect it to return at least $110 million (ie 10 percent overall). Equity investors would expect to get at least $56 million (at least a 12 percent return on their $50 million) and the lenders would get $54 million (a relatively safe 8 percent return on their $50 million).

Now suppose in case 2 that private lenders would charge a local authority borrower only 6 percent interest on the same project and allow it to borrow 100 percent of the cost of the project. A local authority that focused only on its own reported accounts might calculate that it was doing the community a service if it invested that $100 million for a pre-interest return of fractionally over $106 million. Its own accounts would show a small surplus from the project. However, the community would be worse off by up to $4 million compared to the forgone option of earning $110 million.[9] This loss is also shown in the table as an opportunity loss of 40 percent on the achievable gain of $10.

Case 3 supposes that the local authority borrowed only $50 million at 6 percent and funded the remainder from internally generated funds but did not account for the cost of the internally supplied capital when evaluating the project.[10] Now it could report an accounting profit if the $100 million project returned just over $103 million, even if the community has lost up to $7 million in forgone output.

In case 4, the local authority borrows as in case 3 but does not have to write its investment to market value, perhaps because this would be too hard to ascertain. This would allow it to report a profit from the project even if the $100 million investment benefited the community by only $53 million. However, the community would be

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9 The example assumes that the forgone $4 million is lost output rather than excess payments for inputs or outputs sold at below cost.

10 Hence the motivation for capital charge regimes.

worse off by up to $57 million in opportunity cost terms ($110 million minus $53 million).

These examples illustrate the following points:

- the cost of a project to the community is not measured by the cost of borrowing to the local authority;

- a local authority is likely to harm its community though poor quality asset use decisions if it uses only its cost of borrowing to evaluate the options; and

- a local authority harms its community if it fails to achieve as good a return as a private investor would have achieved from a project of the same risk class.

In addition, a local authority is likely to impose losses on the community if its assets are not marked to market in its books and if decisions are based on such book values.

5 The 'in-house' or contract out/sale decision

Assuming that a local authority has properly determined (for public good reasons) that it should ensure the provision of an activity, it should then consider whether to: (1) provide the activity in-house; (2) use a separate, council-owned entity (a council-controlled trading organisation or a council-controlled organisation); or (3) use a private provider. In considering these options, councils should use the full opportunity cost of capital to the community. The reasons are the same as those in section 4.

When considering a case that ownership and internal provision is best for a public good activity, local authorities should endeavour to make sure that the costs of the in-house option are determined on as competitively neutral a basis as can be achieved. In the absence of a level playing field, a more efficient private option might be ruled out.

Because local authorities do not have to account rigorously for the cost to the community of the capital they own, they are vulnerable to erroneous arguments and loose thinking that favours 'in-house' ownership.

An error that is particularly important to avoid is the belief that local government has a comparative advantage from a low cost of capital. The following is an example of a statement that could lead to misleading conclusions:

> Leased assets are more expensive than purchased assets because the Council has a low cost of borrowing.[11]

One interpretation of this statement is that local authorities should *purchase* assets because their low cost of borrowing makes them cheaper.[12] However, a local authority must pay the seller's price, like any other buyer, and, as explained in sections 3 and 4, its cost of borrowing is not the right rate to use in making ownership decisions.

A seductive but ultimately welfare-reducing argument is that local governments should own assets in order to help taxpaying ratepayers avoid central government personal or company tax on the income from those assets. Here is an example of the argument:

> Council's car parking revenue is non-taxable under current ownership, but operating profits would be taxable if the assets were sold to a private operator. Because of this 'tax wedge', selling these assets would be difficult to justify on a purely economic basis.[13]

This argument would suggest that local authorities should own every taxable activity in the country, as long as they could pass the tax savings back to ratepayers in a tax-free manner – in which case central government would collect no income tax. In reality, ratepayers would be likely to be worse off overall because: (1) local authorities would probably not manage such assets as well as private owners; (2) local authorities would be likely to spend some of the extra revenue poorly; (3) to the extent that local authorities used the net investment income to reduce rates, the benefits would not necessarily accrue to taxpaying ratepayers;[14] and (4) central government would not

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11 Wellington City Council, *Rates News*, August 2004.

12 In the next section we explain that this is not the Wellington City Council's intended interpretation and provide a suggested alternative wording that would reduce the risk of confusion.

13 See footnote 1.

14 Note that rates are a tax deductible expense for a major category of ratepayers – businesses – and that not all ratepayers are taxpayers.

accept this outcome and so would find other, probably less efficient, ways of taxing them.[15]

Local authorities, as a group, need to be clear that they are not in the business of income tax avoidance. Nor should they be in the business of owning assets that private owners could manage more efficiently. Local authority project decisions should not therefore attribute a benefit, explicitly or implicitly, to tax avoidance effects.[16]

Another possible error in this statement is the notion that a local authority should not sell an asset because the price it would get would be lower if sold to a private taxpaying operator than if sold to a private operator who does not pay tax. This notion would be wrong because the market value of an asset does not in general depend on the tax status of the purchaser. For example, taxpayers and non-taxpayers pay the same price for government stock or shares on the open market. A taxpayer who cannot shelter the investment from income tax is willing to pay as much as a non-taxpayer because the taxpayer will discount post-tax cash flows at a post-tax discount rate whereas the non-taxpayer purchaser will discount the larger (tax-free) cash flows at a higher (zero-tax) discount rate.

Consider the case of a car park building which would produce net annual income (before any tax is calculated) of $100,000 (assumed without loss of generality to be in perpetuity). Suppose that the alternative investment for a tax-exempt buyer would be 10 percent per annum (tax-free) and 10 percent per annum (taxable) for the taxpayer. Each investor would be prepared to pay $1 million for the car park building because the tax-exempt buyer would value the $100,000 pa perpetuity at 10 percent whereas the tax-paying buyer would value the post-tax $67,000 pa perpetuity at 6.7 percent.[17]

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[15] Economists use the terms 'time inconsistent' and 'fallacy of composition' to describe decisions that fail to take into account adverse future effects or adverse 'herd' effects.

[16] For example, they could adopt the same project evaluation rule that Treasury recommends is used by central government tax-exempt authorities. See formulae (3) and (4) in the Treasury's 1997 Handbook on the Cost of Capital for Crown Entities and State-Owned Enterprises at http://www.treasury.govt.nz/publicsector/costcapital/costcap.pdf

[17] This analysis was provided by Greg Dwyer of Dwyer G Limited. Of course the taxpayer would be prepared to pay much more if this particular investment were tax exempt.

A car parking building is not a public good, technically defined. Private investors have proven that it is economic to exclude non-payers. Local authorities should not use income tax arguments to justify owning such assets.

6 The asset funding decision

Local authorities may fund new assets out of operating surpluses, asset sales, or debt. All forms of debt funding by local authorities will be cheaper than their opportunity cost to the community because lenders enjoy the implicit ratepayer guarantee described in section 3. Because this bias is common to the alternatives, it is appropriate to use the local authority's borrowing rate to evaluate other debt-funding options. We stress that this argument only applies to a choice to be made between borrowing options. It does not apply to asset use or ownership decisions. Not does it apply to a decision as to whether to borrow or to fund from other cash flows.

In analysing funding options, local authorities should borrow at the lowest achievable rate consistent with risk considerations and other objectives. Even so, local authorities should not aim to minimise the cost of borrowing in the near term without regard to risk or the longer-term costs. There are many types of risk that need to be considered in managing local authority debt.[18]

In particular, having divested themselves of assets that do not justify ownership on public good grounds, local authorities should use the local authority borrowing rate if they wish to evaluate a financing lease (ie one in which the local authority will own the asset at the end of the lease). The borrowing rate should be for a term that reflects the term of the proposed lease. Since a private lessor will commonly have a higher cost of borrowing (not having the benefit of an implicit taxpayer or ratepayer guarantee), it is unlikely that local authorities will find it optimal to use a financial lease.[19]

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[18] For a detailed discussion of debt management issues see Graham Wheeler, 'Sound Practice in Government Debt Management', World Bank, 2004.

[19] For a discussion of leasing issues in a government context, see the US Office of Management and Budget's 'Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programmes' (undated).

The Wellington City Council newsletter statement cited in section 5 is therefore correct if interpreted as a statement that it should generally fund public good-related assets by borrowing rather than through a financing lease. However, a less confusing statement would be:

> Council assets should usually be funded by borrowing rather than by financial leases as the Council's cost of borrowing would normally be lower.

Of course council assets that are not justified on public good grounds should be sold rather than financed.