



Australian Government
Productivity Commission

Assessing
Local Government
Revenue Raising Capacity

Productivity Commission
Research Report

April 2008

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The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by consideration for the wellbeing of the community as a whole.

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Terms of reference

ASSESSING LOCAL GOVERNMENT REVENUE RAISING CAPACITY

Productivity Commission Act 1998

The Productivity Commission is requested to undertake a research study assessing local government revenue.

In undertaking the study the Commission is to examine the capacity of local government to raise revenue including:

- the capacity of different types of councils (eg capital city, metropolitan, regional, rural, remote and indigenous) to raise revenue and the factors contributing to capacity and variability in capacity over time;
- the impacts on individuals, organisations and businesses of the various taxes, user charges and other revenue sources available to local government; and
- the impact of any State regulatory limits on the revenue raising capacity of councils.

In undertaking the study the Commission is not to investigate the scope for local governments to borrow.

The Commission is required to provide both a draft and a final report, with the final report due within twelve months of receipt of this reference.

The report is to be published.

PETER COSTELLO

Received 5 April 2007

Foreword

Local governments play an important role in Australian society through their delivery of goods and services, and their regulation and planning activities. There is considerable diversity among local governments in the services they deliver and in the revenue they raise, though rates are their only tax instrument. The revenue raised by local governments is clearly central to their financial sustainability and ability to serve their local communities.

In this study, the Commission has been asked by the Australian Government to examine the capacity of different types of councils to raise revenue and the factors contributing to that, as well as the impacts of any regulatory limits on their revenue-raising capacity.

In conducting its research, the Commission has drawn on information from submissions, consultations with all spheres of government and other relevant organisations and research groups, as well as an array of studies on the local government sector. The Commission is grateful to the many people who have taken the time to contribute to this study, including those who provided feedback on the draft report.

The study was overseen by Commissioner Judith Sloan and Associate Commissioner Cliff Walsh, with a research team led by John Salerian in the Melbourne office.

Gary Banks AO
Chairman
April 2008

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Abbreviations and explanations

Abbreviations

ACLG	Australian Classification of Local Government
ALGA	Australian Local Government Association
ARTI	Aggregate Real Taxable Income
ATO	Australian Tax Office
BTRE	Bureau of Transport and Regional Economics
CGC	Commonwealth Grants Commission
COAG	Council of Australian Governments
DOTARS	Department of Transport and Regional Economics
FOI	Freedom of Information
GDP	Gross domestic product
HES	Household Expenditure Survey
IAC	Industries Assistance Commission
IC	Industry Commission
LGANT	Local Government Association of the Northern Territory
LGAQ	Local Government Association of Queensland
LGGC	Local Government Grants Commission
LGMA	Local Government Managers Association
LGSANSW	Local Government and Shires Association of New South Wales
MAV	Municipal Association of Victoria
OECD	Organisation for Economic Cooperation Development
PC	Productivity Commission
ROCs	Regional Organisations of Councils

SFA	Stochastic frontier analysis
WALGA	Western Australian Local Government Association

OVERVIEW

Key points

- The ratio of local government own-source revenue to GDP is about 2 per cent.
 - The ratio of rates revenue (the only tax instrument of councils) to GDP decreased from 1.0 per cent to 0.9 per cent between 1990-91 and 2005-06.
- Local governments in urban areas are predominantly funded from their own sources of revenue, particularly rates, fees and charges. For most rural and remote councils, grants are also a substantial source of their revenue.
- The revenue-raising capacity of local governments depends partly on their fiscal capacity, which differs by class of local government.
 - The fiscal capacity of a council is best measured as the aggregate after-tax income of its community.
- Urban developed councils tend to draw lightly of their fiscal capacities. Remote and rural councils tend to draw more heavily on their fiscal capacities.
- Analysis of the relative potential of local governments to increase their own-source revenue indicates that councils are raising about 88 per cent of their hypothetical benchmarks, on average across Australia. This should not be taken to imply that local governments should increase the revenue they raise.
 - Whether councils can realise this hypothetical benchmark will depend on their individual circumstances and the willingness of their communities to pay.
- Most councils could do more to help themselves, but a small number will remain highly dependent on grants, despite high levels of revenue-raising effort.
- State governments impose legislative and regulatory constraints on the raising of revenue by local governments that affect the ways in which councils raise revenue, but the overall impact on revenue-raising capacity is unclear.
 - However, in New South Wales, rate pegging and only partial reimbursement of concessions appear to dampen revenue raised by councils in that State.
- The application of a set of principles to guide the revenue-raising and expenditure decisions of councils can assist them in improving the well-being of their communities.

Overview

The capacity of local governments to raise revenue is important to their financial sustainability and their ability to promote the well-being of their local communities.

This study arose from the Australian Government's response to the report of the House of Representatives Standing Committee on Economics, Finance and Public Administration titled, *Rates and Taxes: A Fair Share for Responsible Local Government*. The Australian Government asked the Productivity Commission to conduct a study into:

- the capacity of local governments to raise revenue
- the impact of any State and Territory regulatory limits on the revenue-raising capacity of councils
- the impacts of council revenue raising on the community.

There were about 700 local governing bodies in Australia in 2007, although this number will drop significantly with the amalgamations taking place in Queensland and the Northern Territory during 2008. The Australian constitution does not establish or recognise local government in Australia. The vast majority of local governments are councils established under State local government Acts. There are also a small number of bodies established under the *Local Government (Financial Assistance) Act 1995* (Cwlth), many of which are Indigenous community councils. Together, they directly employ about 168 000 people and are responsible for management of an estimated \$183 billion of assets.

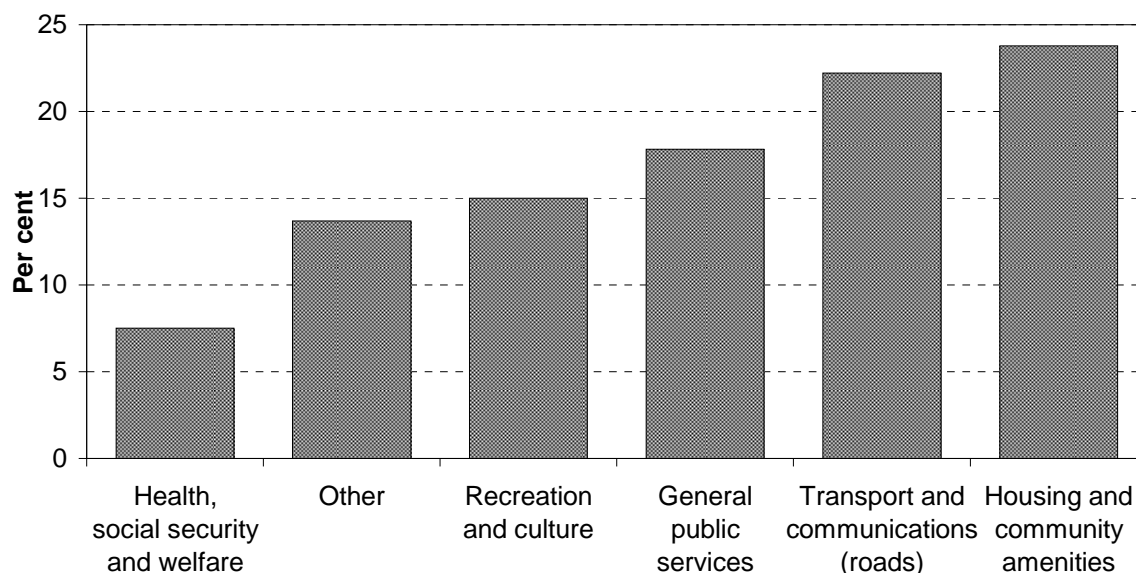
Local governments are not assigned a single set of functions. Instead, there is diversity of functions and services they deliver. They play an important role in Australian society through their provision of infrastructure, delivery of services, and planning and regulatory activities (table 1).

Local governments have increasingly been providing services beyond their traditional roles of the provision of local roads and other services to property. Many councils now have a substantial involvement in the delivery of human services, and in planning and regulatory functions. Local government spending, however, still is mainly on community amenities (including water and sewerage in some States) and local roads (figure 1).

Table 1 Local government services

<i>Service category</i>	<i>Service examples</i>
Engineering and infrastructure	Public works design, construction and maintenance of roads, bridges, footpaths, drainage, cleaning, waste collection and management.
Property-related	Domestic waste management including solid waste and recycling services, water and sewerage.
Administration, regulation and planning	Land use and town planning (including heritage), development approvals, building inspection, licensing, certification and enforcement, administrative functions related to aerodromes, quarries, cemeteries, parking stations and street parking.
Environmental and health	Catchments management, parks and gardens, tree removal, pest and weed control, water sampling, food sampling, immunisation, public toilets, noise control, meat inspection and animal control.
Community and social	Aged care and child care services, health clinics, youth centres, community housing refuges and facilities, counselling and welfare services.
Recreation, cultural and education	Swimming pools, recreation centres, community halls, sports facilities, lifeguards, camping grounds, community festivals, libraries, art galleries, theatres and museums.
Other	Bus services, abattoirs, livestock sale-yards, markets and group purchasing schemes.

Figure 1 Local government expenditure by function
Shares in 2005-06



Local governments are diverse

Local governments exhibit considerable diversity across a number of characteristics, including the:

- State legislative framework within which they operate
- aggregate community income per resident in their local area and grants per resident received from other spheres of government
- demographic and geographic attributes of their local area
- extent and nature of economic activity in their area and surrounding areas
- preferences and expectations of their local communities
- management capacity and skill base of their councillors and staff.

These, and other factors, impact on the level and composition of both their expenditure and revenue.

What are the sources of local government revenue?

Local government revenue consists of own-source revenue and grants from other spheres of government (figure 2). Generally, local governments set rates, fees and charges taking into account planned expenditure and forecasts of grants from other spheres of government.

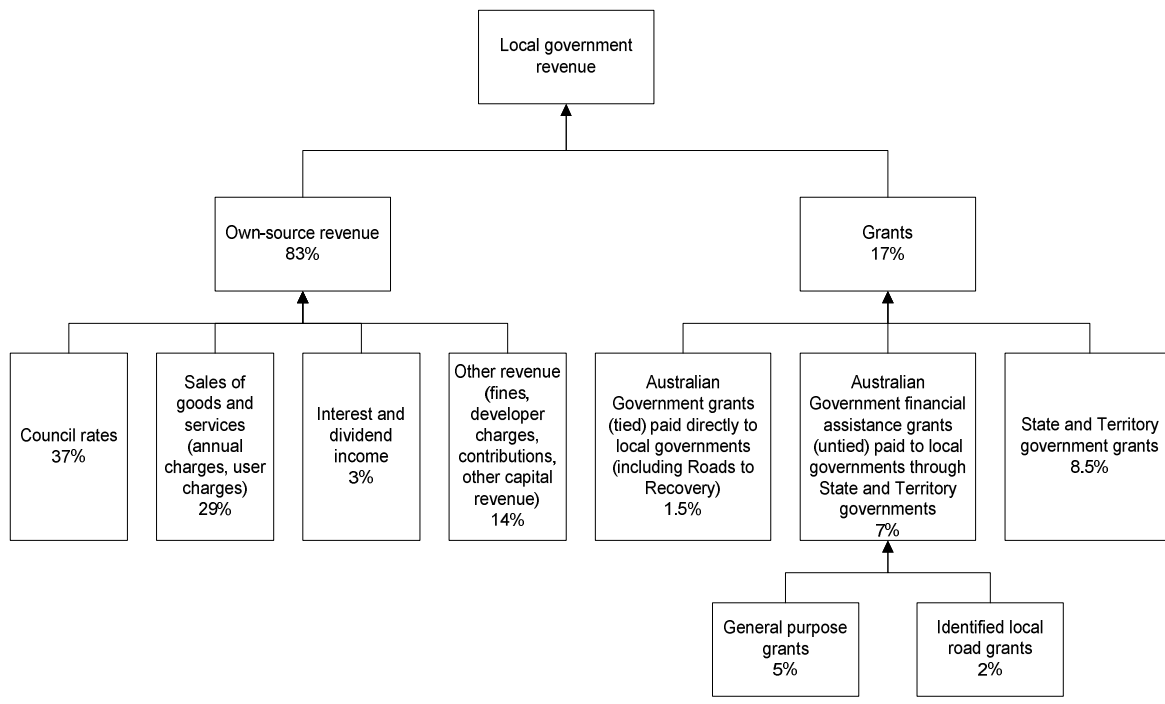
Own-source revenue represents about 83 per cent of total revenue, aggregated at the national level. Together, property rates and fees and charges account for most of own-source revenue. However, their combined share has decreased over time, reflecting growth in other revenue sources, such as developer charges and fines.

Variations in revenue raising

Variations in the level of revenue raised across local governments, including grants, are indicated in table 2. (The percentiles in each column are derived independently of those in the other columns, so the figures should not be summed across columns.) There is a large variation in the size of local governments, as indicated by the level of total revenue. The bottom 25 per cent raise less than \$7.3 million each and the top 25 per cent raise more than \$41 million each.

Figure 2 Sources of local government revenue

Shares at the national level in 2005-06



In terms of total revenue per person (which includes grants from other spheres of government), the spread is less pronounced, although there is still a wide variation. At the low end, 25 per cent of councils have total revenue less than \$1102 per person. At the top end, 25 per cent of councils have more than \$2847 per person. The median level of total revenue per person is \$1645.

Table 2 Revenue raised by local governing bodies
2005-06

Percentiles	Total revenue	Total revenue per person	Own-source revenue per person	Grants revenue per person	Own-source revenue as a share of total revenue
	\$m	\$	\$	\$	%
Lowest	0.4	479	238	30	8
25 per cent	7.3	1 102	831	169	56
50 per cent (median)	16.5	1 645	1 168	441	72
75 per cent	41.0	2 847	1 683	1 265	85
Highest	1 593.2	37 925	22 492	18 146	98
Mean	38.0	2 822	1 606	1 215	69

Variation across local governments is also evident for own-source revenue and grants revenue. The lowest 25 per cent of local governments raise own-source revenue of less than \$831 per person and the highest 25 per cent raise more than

\$1683. For 25 per cent of councils, own-source revenue accounts for more than 85 per cent of their total revenue. For 50 per cent of councils, own-source revenue accounts for at least 72 per cent of their total revenue.

Although grants represent about 17 per cent of local government revenue when aggregated nationally, the level of grants also differs significantly across councils. Twenty five per cent of councils receive 44 per cent or more of their revenue from grants. A small number of councils (10 per cent) are highly dependent on grants, with their grants revenue accounting for more than 58 per cent of their revenue. These councils represent about 0.4 per cent of the total population residing in local government areas.

What is revenue-raising capacity?

The Commission has been asked to assess the revenue-raising capacity of local governments and the factors contributing to capacity. Conceptually, there are two approaches that can be taken to defining and analysing the capacity of local governments to raise revenue.

The first is the fiscal capacity of a local government, measured as the aggregate after-tax income (broadly defined) of its local community. Aggregate income represents the ability of a community to purchase local government and private goods and services. The higher is the fiscal capacity of a local government, the higher is its potential to raise revenue.

The second approach is based on the willingness of the local community to pay for services provided by local governments. In practice, the amount of revenue that a local government can actually raise from its community depends on what the community wants its council to do.

Where fees and charges are used to fund services and consumption is voluntary, consumption signals the preferences of the community. However, many local government services are funded out of rates, and decisions about services, service levels, expenditure and revenue raised are made through political processes. In these circumstances, it is not possible to estimate the revenue-raising capacity of local governments that directly reflects underlying willingness to pay.

Participants to this study expressed a range of views about the political environment and the willingness of communities to support revenue raising by local governments (box 1).

Box 1 **Participants' views**

Some selected views of participants about willingness to pay and revenue raising by councils are set out below.

Some councils have achieved remarkable success and acceptance of double-digit rate increases on the basis of being able to explain fully to the community the reasons for the increases and the resulting benefits that will flow. Communities are generally more willing to pay if they understand the basis of the costs and the benefit that will accrue as a result of increased funding. (Local Government Association Tasmania, sub. 42, p. 9)

There will always be a proportion of the resident population that will be unwilling to pay for goods and services, but if the reasons and purposes these funds are being raised are well known, and can be seen to be beneficial to the well-being and benefit of the community it is possible this resistance can be lessened. (Government of South Australia, sub. 64, p. 6)

Investment property owners are generally less inclined to pay for services provided by councils. Business property owners, who operate their own businesses in the area, are more inclined to pay for services where they see a direct benefit to their business. (North Sydney Council, sub. 13, p. 2)

As responsible residents of our local government communities we wish to pay our just and fair share i.e. on house and cartilage, not on farm land. (Victorian Farmers Federation – Rutherglen, sub. 35, p. 4)

Until local government is de-politicised and diligent well qualified people are attracted to the role of councillor, local government's existing revenue raising options should be critically assessed in terms of accountability and productivity, and not expanded. Alternatively local government should be overhauled and run as a branch of State government, or super councils formed with appropriate remuneration to attract the right candidates. (Spillane, sub. 4, p. 1)

Fiscal capacity and revenue-raising effort at the national level

At a national level, councils raise a relatively low level of own-source revenue on a per person basis. In 2005-06, the national average level of own-source revenue per person was \$977 and the average rates revenue per person was \$439.

The ratio of own-source revenue to gross domestic product (GDP) (an indicator of national income) is small, about 2 per cent. The ratio of rates revenue to GDP is less than 1 per cent. However, there is considerable variation in the revenue, as well as incomes, across councils, as pointed out below.

Between 1990-91 and 2005-06, the ratio of rates revenue to GDP decreased from about 1.0 per cent to about 0.9 per cent. In many States, the decrease in the share of rates revenue has been accompanied by an increase in other own-source revenue (such as developer charges and fines). However, rates on property are the only tax instrument available to local government.

Fiscal capacity and revenue-raising effort by class of local government

At the local government level, the income of each local government area has been estimated by the Commission using Australian Taxation Office personal income tax data and disaggregated gross operating surplus of incorporated businesses derived from ABS national accounts data. There is likely to be some underestimation of the incomes in some local government areas that have a significant proportion of their community receiving social security payments. These payments are largely omitted from the measure of income available from tax data.

Fiscal capacity, as indicated by aggregate after-tax community income per resident, differs by class of local government (figure 3, panel A).

Capital city (CBD) councils have the highest fiscal capacity, principally attributable to high business income, revenue from parking and fines, and comparatively small resident populations.

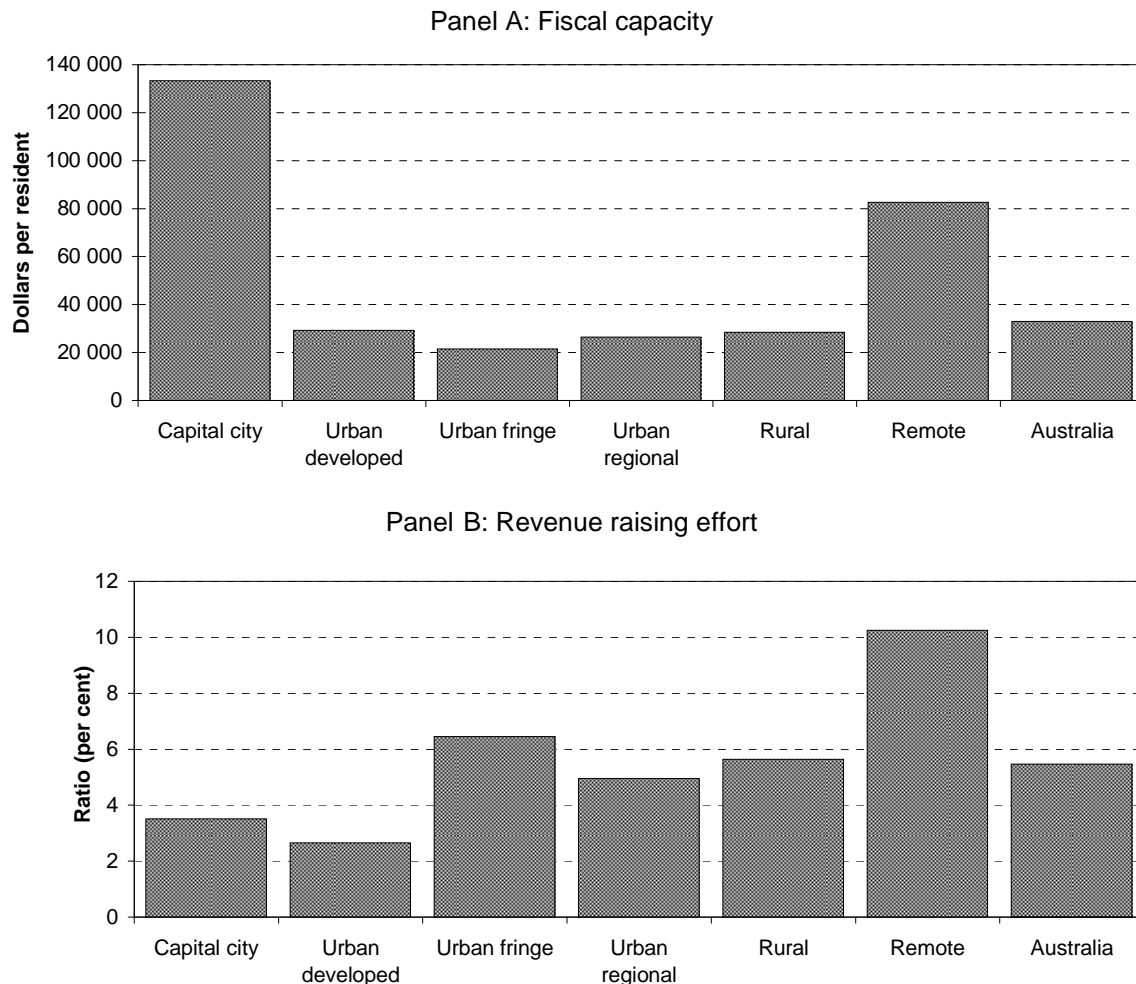
Some remote councils also have high levels of fiscal capacity because of substantial business income from mining and petroleum activity in their area, although the application of rates to those activities is sometimes constrained by State government policies. However, there are other remote councils that have particularly low fiscal capacities, such as Indigenous councils.

On average, urban developed, urban regional and rural councils have intermediate levels of fiscal capacity. Urban fringe councils have the lowest levels of fiscal capacity, on average.

There is a large range in the aggregate after-tax income per person of local government communities. Twenty five per cent of councils have communities where measured average income is less than \$17 044 per person. The top 25 per cent of councils have communities where average income is in excess of \$26 821 per person. Average community income for the median council is estimated to be about \$20 786 per person.

Revenue-raising effort — the ratio of own-source revenue to fiscal capacity — also differs by the class of local government (figure 3, panel B). Urban developed, and to a lesser extent, capital city councils, tend to draw lightly on their fiscal capacity. On the other hand, remote councils in particular, and urban fringe councils, tend to draw heavily on their fiscal capacity.

Figure 3 Estimated fiscal capacity and revenue-raising effort by class of council
2004-05



Factors affecting revenue raised by councils

The Commission has undertaken a statistical analysis to investigate the factors contributing to the differences in the level of revenue raised per person by councils. In order to undertake the analysis, the Commission has pooled the best available sources of data.

However, the data have limitations and where some indicators are not available, the Commission has derived its own estimates. Further, in applying the statistical methods, there are a number of assumptions made. As a consequence, the results should be interpreted as only indicative.

The limitations of the data and analysis tend to be more pronounced for some

remote councils, such as Indigenous bodies. Therefore, the conclusions drawn from the statistical analysis have limited applicability to these bodies. The Commission has undertaken three case studies of Indigenous councils to gain insights into the particular factors affecting the revenue-raising capacity of these councils.

The factors associated with own-source revenue raised per person by local governments are outlined in box 2.

Box 2 Factors affecting own-source revenue per person raised by councils

Personal income — revenue per person increases with the average after-tax personal income per person of a local government area. However, communities with higher levels of personal income spend a smaller proportion of that income on local government services than those with lower incomes.

Business income — revenue per person increases with the average after-tax business income per person of a local government area, although this effect is smaller than for personal income. Once again, communities with higher levels of business income spend a smaller proportion of that income on local government services than those with lower incomes.

Roads — revenue per person increases with the total length of the local road network per person, reflecting higher expenditure needs.

Properties — revenue per person increases with the number of properties serviced per person, also reflecting higher expenditure needs.

Population — revenue per person decreases as the size of the population increases, possibly reflecting economies of scale and population density.

Population growth — revenue per person increases with the rate of growth in the population of a local government area, reflecting the need to fund up-front, the capital expenditure on infrastructure.

Water and sewerage — some councils in New South Wales, Queensland and Tasmania are responsible for providing water and sewerage services, and these councils raise more revenue per person (and have higher expenditures per person).

States — there are differences in revenue raised per person across States, which reflect, in part, the relevant government policies in relation to local government, as well as preferences and social attitudes.

Class of council — there are differences in revenue raised per person across classes of councils, which reflect, in part, the preferences and needs of classes of local communities, as well as differences in the cost of services across geographic locations.

Comparisons of the relative potential to raise revenue

An examination of fiscal capacity and actual fiscal effort does not reveal the extent to which local governments might have the potential to raise *additional* revenue.

To shed light on whether local governments have the capacity to raise additional revenue, the Commission has undertaken a benchmarking analysis. Using a statistical technique known as stochastic frontier analysis, estimates are derived of the relative potential for each local government to raise additional revenue, after controlling for the following.

- The explicitly identified factors influencing revenue raised per person, as described in box 2.
- Random variations across councils reflecting:
 - measurement error in the variables
 - other random factors that affect observed revenue raised per person across councils (for example, droughts)
 - the combined effects of other omitted factors, many of which are not amenable to quantification. These might include local preferences and attitudes towards local governments.

The purpose of this analysis is *not* to imply that councils should raise additional revenue. Rather, it is to investigate whether there is some potential to raise additional revenue, if a council were allowed, and its community wished it to do so.

Compared with alternative methods, the approach used by the Commission yields more conservative estimates of the relative potential to raise additional revenue. If a council raises less revenue than its own hypothetical benchmark, this is taken to be an indication that it has the potential to raise additional revenue.

The index of the potential for an individual council is relative to a hypothetical benchmark of unity. Invariably, councils have an index less than unity. Even those councils which have high levels of revenue-raising effort are assessed to have some potential to raise additional revenue. The interpretation of the index is that the observed level of revenue raised by a council is less than its assessed hypothetical benchmark. For example, an index of 0.85 indicates that the actual level of revenue raised by a council represents 85 per cent of its assessed potential level, given its specific circumstances. An assumption of the technique is that there are no regulatory impediments to raising revenue, such as rate pegging in New South Wales.

The distribution of the estimated indices of the potential to raise revenue by class of

council is summarised in table 3. The mean and median indices vary across classes of councils. Capital city, urban developed and urban fringe councils are estimated to have the highest potential to raise additional revenue and remote and rural councils are estimated to have the lowest potential. Based on the methodology, all local governments would have some potential to raise additional revenue. On average, councils are assessed as raising about 88 per cent of their individual hypothetical benchmarks, as defined in this analysis.

Table 3 Distribution of the estimated indices of relative potential to raise revenue, by class of local government

Per cent, 2000-01 to 2004-05

<i>Statistics</i>	<i>Australia</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	56	75	56	67	60	67	84
Median	89	85	86	85	88	91	93
Mean	88	85	84	85	87	90	92
Highest	95	94	93	94	94	94	95

Financial impacts of increased revenue raising

To provide further insights, the Commission has undertaken a hypothetical simulation of the impact of raising additional revenue on the financial performance of local governments. The hypothetical increases in revenue for each council are based on the estimates of the assessed potential to raise additional revenue, described above.

The approach used is to consider the impact of the increase in revenue on the aggregate cost recovery *from own-source revenue* for each local government. The indicator of aggregate cost recovery for a local government is defined as the ratio of total own-source revenue to total expenditure. It is only own-source revenue that is increased in the simulation. For the purpose of the analysis, it is assumed that no changes to expenditure and grants arise from raising additional revenue.

No upward adjustment is made to the reported expenditure to reflect the claims made by the local government sector that there is an infrastructure backlog. If future costs turn out to be higher than currently reported costs, the aggregate cost recovery ratios would be correspondingly lower.

The impact of the hypothetical increase in revenue raised on the aggregate cost recovery of councils from own-source revenue is illustrated in table 4. The simulated increases in revenue raised would, on average, increase the aggregate cost recovery of capital city councils to well above unity. The average revenue-raising

effort for this class of council would increase from 4.2 per cent of fiscal capacity to 4.9 per cent.

For urban developed councils, the aggregate cost recovery ratio would increase, on average, from 0.94 to 1.11. However, some of these councils (27 per cent) would continue to have cost recovery ratios less than unity. The revenue-raising effort of these councils would increase, on average, from 3.1 per cent of fiscal capacity to 3.6 per cent.

At the other extreme, the aggregate cost recovery for remote councils would increase from about 0.52 to 0.56. On average, these councils would remain highly dependent on grants. Further, their average revenue-raising effort would increase from its already relatively high level of 8.7 per cent of fiscal capacity to 9.3 per cent.

Table 4 Impact of hypothetical increases in revenue raised on aggregate cost recovery (from own-source revenue) and revenue-raising effort, by class of council

2000-01 to 2004-05

<i>Class of local government</i>	<i>Actual revenue-raising effort</i>	<i>Projected revenue-raising effort</i>	<i>Actual cost recovery ratio</i>	<i>Projected cost recovery ratio</i>	<i>Councils with projected cost recovery ratio less than unity</i>
	%	%	Ratio	Ratio	%
Capital city	4.2	4.9	1.06	1.25	0
Urban developed	3.1	3.6	0.94	1.11	27
Urban fringe	4.4	5.1	0.96	1.12	26
Urban regional	5.4	6.2	0.87	0.99	50
Rural	6.4	7.0	0.68	0.75	87
Remote	8.7	9.3	0.52	0.56	95
All councils	5.8	6.4	0.76	0.87	67

As a generalisation, all councils have some potential to raise additional revenue. For many, but not all, urban councils, the increase in revenue-raising effort would lead to them being financially independent, based on current levels of expenditure.

For rural and remote councils, the situation is different. Notwithstanding the increase in revenue-raising effort, a significant number would remain substantially dependent on grants, at current levels of expenditure.

In relation to grants, a number of participants have raised concerns about the existing arrangements for distributing general purpose grants, pointing out that the existing arrangements fail to meet the objective of full equalisation. The issue of the appropriateness of the current level and distribution of financial assistance grants is

beyond the scope of this study. To the extent that full equalisation is still a policy objective of the Australian Government, there is a case for more work in this area, given the differences in the scope to raise additional revenue across different classes of councils.

Impacts of local government revenue raising

The Commission has been asked to examine the impacts on individuals, organisations and businesses of rates, user charges and other revenue sources available to local governments. Developing indicators that can be used to provide insights into the impacts of rates, and fees and charges on individuals, businesses and organisations has been difficult, given the limitations of the data sources available at the local government level.

It has not been possible to develop indicators of the impact of rates, and fees and charges for individuals, organisations, and business *within* councils, because of a lack of data. Such indicators are required to make inferences about how the burden of financing local government expenditure is shared between and among individuals, organisations and businesses.

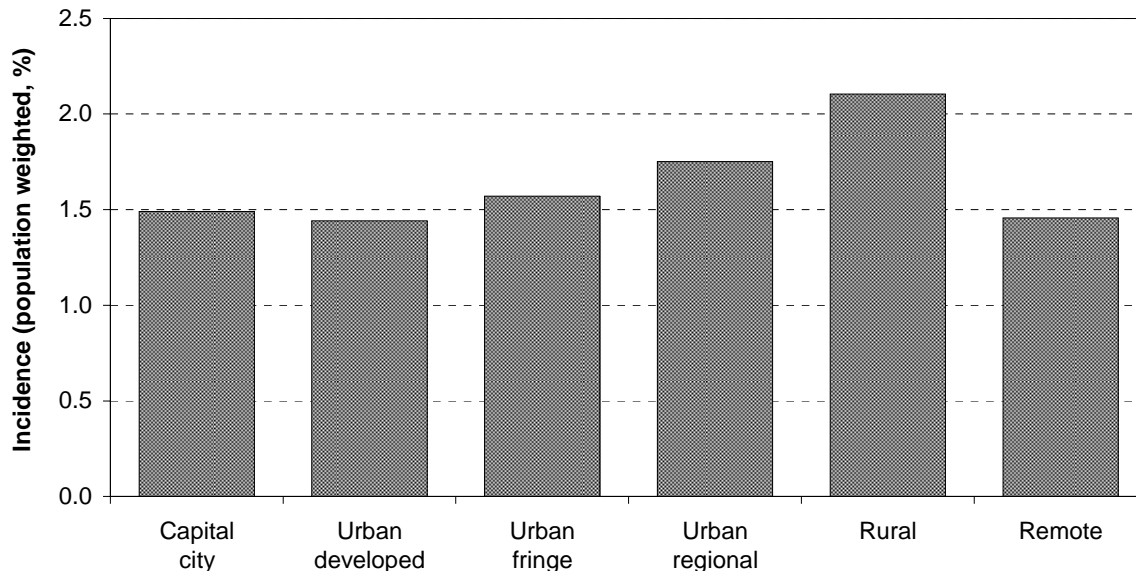
It also has not been possible to develop indicators *across* councils of the impacts of rates, and fees and charges on organisations other than businesses. Some organisations, such as government agencies, educational, sporting and religious bodies, are exempt from paying rates, which are funded by higher rates, fees and charges from others. This can be an issue for some councils, which have a relatively large share of rates exemptions.

Moreover, even setting aside data limitations, assessing the impacts of fees and charges is substantially more problematic than doing so for rates. Any estimates made could be highly misleading.

Total rates incidence by class of local government

The total incidence of rates (total rates paid by the community in a local government area divided by the aggregate income of the community in the local area) for broad classes of local governments is presented in figure 4.

Figure 4 Total rates incidence by class of council
Per cent, 2000-01 to 2004-05



This indicator cannot be used to infer the distributional impacts of rates *within* councils (across individuals with different incomes within a council). The incidence of rates is higher for rural councils relative to urban (developed, fringe and regional) councils. One explanation for this is the relatively higher expenditure on infrastructure services in rural councils, such as the provision of local roads.

Household incidence of residential rates

Evidence about the incidence of residential rates on households across local governments can be obtained from the Household Expenditure Survey in 2003-04. The indications are that for the highest 60 per cent of income households (excluding those who rent homes), expenditure on rates represents between 1 and 2 per cent of household disposable income. The figure rises to between 3 and 4.5 per cent for the lowest 20 per cent of income households.

Impact of State regulatory limits on revenue raised by councils

The Commission has been asked to examine the impact of any State regulatory limits on the revenue-raising capacity of councils.

What are the potential impediments to raising rates revenue?

State governments impose a variety of legislative and regulatory constraints on the

use by local governments of the revenue-raising instruments available to them. In particular:

- the land/property valuation methods allowed
- the scope to impose differential rates on different types of ratepayer and other elements of rating structures
- the exemptions required to be made for particular classes of property owners or users
- the concessions that must be applied to some categories of ratepayers, offset by reimbursements (in part or in full)
- rate pegging (currently imposed only in New South Wales, but to apply in parts of the Northern Territory for the next three years)
- the setting by State governments of fees, and charges for some of the services that local governments must, or choose to deliver.

Prescribed land valuation methods and rating structures do not generally constrain the ability of councils to raise rates revenue because of the inherent flexibility of rating regimes (for example, setting the rate in the dollar of valuation and differential rating). However, within some rating classes, such as residential, the requirement to apply a uniform rate structure across all residents can reduce the scope for councils to discriminate between ratepayers with different incomes and property values, thus lowering the overall potential to raise revenue from rates.

Rating exemptions also limit rates revenue collected from particular groups. These exemptions may be partially offset by higher rates for other ratepayers. Nonetheless, for some councils, substantial exemptions can reduce their capacity to raise revenue.

Generally, rates concessions applying to pensioners and some others do not limit rates revenue because State Governments reimburse them. However, over time, some governments appear to have chosen not to escalate fully the values of concessions in line with the increases in residential rates revenues. Councils, under pressure from their local communities, appear to maintain the value of the concession in line with residential rates revenues, which places downward pressure on the capacity of councils to raise revenue from residential ratepayers.

New South Wales appears to be an exception in a number of areas. The rate of growth in rates revenue in New South Wales has been among the lowest of all jurisdictions over the past seven years, for which reliable data are available. New South Wales also has rate revenue per person below that of most other jurisdictions. Rate pegging in New South Wales appears to be restricting revenue raised from rates, notwithstanding scope for councils to seek variations to mandated rate

increases. In addition, only partial reimbursement of concessions affects the revenue of local governments in New South Wales. The evidence suggests that the NSW Government has chosen to have a more significant constraining influence on the revenue raised by local governments than have other State governments.

Are there impediments to setting fees and charges?

There is evidence suggesting that State legislative and regulatory factors may limit the ability of councils to raise revenue from the sale of some specific goods and services, which might be significant in value terms.

Particularly relevant is the setting by State governments of fees for some of the services that local governments must, or choose to deliver. These fees are often set uniformly across all local governments within a State and might be set at levels below the cost of service by local governments. This situation can pressure local governments to subsidise these services from rates revenue. Even in circumstances where delivery of services by local governments is voluntary, local community pressure may lead the local government to continue to provide the service, even though the statutory fee is below the cost of service.

Is overall revenue-raising constrained?

There are some partial offsets to the constraints on raising revenue. For example, local governments are exempt from some State and Commonwealth taxes. In addition, States give local governments grants for the provision of some services subject to statutory limits on fees, which reduces the net claim on local government revenues.

The extent to which the constraints limit the overall revenue raising capacity of local government is unclear. Nonetheless, the constraints generally affect the ways in which local governments can raise revenue. They affect the distribution of the burden of revenue-raising within communities and can have adverse consequences for economic efficiency.

There is a case for State governments to undertake periodic reviews of the legislation and regulations they impose on local governments, to assess both their rationales and their benefits and costs.

Revenue raising and the well-being of the community

The effective operation of local government is important to achieving the goal of promoting the well-being of local communities. To this end, the Commission has set out a number of principles that can play a useful role in guiding the revenue-raising (and expenditure) decisions of local government. The principles relate to:

- sustainable financial management
- evaluation and priority setting
- core functions
- identifying costs of service delivery
- prudent borrowings
- rate setting and pricing of services
- responsibility and accountability
- openness and transparency
- providing services on behalf of other spheres of government.

Application of the principles

The application of the principles is likely to raise practical challenges for a number of local governments. One particular issue is whether smaller regional councils can actually implement the principles. In these councils, the elected councillors and non-elected administrators may not have the necessary skills and there may be insufficient resources available for the task. There would appear to be a need for State governments and/or local government associations to provide further assistance and guidance to some local governments.

Councils apply many of the principles already, although to varying degrees. State government legislation governing the operation of local governments and associated administrative policies, procedures and processes often includes, or implicitly have, some of these principles embedded within them.

However, the wider and more rigorous application of the principles offers councils a way to determine more effectively, those services that local communities really want and value and how much they are prepared to pay for them. In this way, local governments can enhance the well-being of their communities.

Findings

FINDING 2.1

At the national level, the ratio of local government rates revenue to GDP decreased over the period 1990-91 to 2005-06.

FINDING 2.2

At the state level, the ratio of own-source revenue to gross state product varies across jurisdictions due to a large number of factors, including differences in the functions of local governments, such as provision of water and sewerage services in some States but not others.

FINDING 3.1

There are numerous inconsistencies and inaccuracies in the government finance statistics and other statistical series relating to local governments. There is a need for the ABS and various grants commissions to improve the consistency and accuracy of the local government data collections.

FINDING 3.2

There is considerable variation, in per person terms, in both own-source revenue raised and grants received by local governments in Australia.

FINDING 3.3

For the majority of local governments, own-source revenue is the principal revenue source. However, for 20 per cent of councils, which represent only one per cent of the population, grants account for 48 per cent or more of total revenue.

FINDING 3.4

Rural and remote councils receive substantial grants on a per person basis. Fifty per cent of remote councils receive grants in excess of \$3816 per person, compared with \$441 per person for 50 per cent of all councils. Ten per cent of remote councils receive in excess of \$10 841 per person, compared with \$3059 per person for 10 per cent of all councils.

FINDING 3.5

Expenditure per person varies considerably across councils. Rural and remote councils have higher expenditure per person, on average, compared with urban councils. This is largely explained by the inability of rural and remote councils to capture scale economies, having to pay higher input costs, maintaining more kilometres of roads per person and undertaking a relatively more extensive service mix.

FINDING 5.1

Fiscal capacity, as measured by a community's total after-tax income per person, differs across classes of local governments. There is considerable variation both between classes of local governments and within classes of local governments. Capital city and some remote local governments have very high fiscal capacities because of the concentration of business income and their relatively small resident populations.

FINDING 5.2

Revenue-raising effort, a measure of how much own-source revenue a local government raises relative to its income base, varies significantly within and between classes of local governments. Capital city, urban regional, rural and remote local governments have the highest average revenue-raising efforts, when adjusted for population size.

FINDING 5.3

An empirical assessment indicates that local government own-source revenue raised per person:

- *increases with personal and business incomes per person of the community*
- *increases with the length of roads, the number of properties rated and served, and whether water and sewerage services are provided*
- *increases in communities experiencing population growth*
- *decreases with population size.*

There are also differences between jurisdictions and classes of local governments.

FINDING 5.4

A sophisticated benchmarking analysis of the relative potential of local governments to increase their own-source revenue suggests that, on average, councils are raising about 88 per cent of their hypothetical benchmarks. Whether a

council can realise its assessed potential to raise additional revenue will depend on its individual circumstances. (The scope for raising additional revenue should not be taken to imply that local governments should increase the revenue they raise.)

FINDING 5.5

A number of councils, particularly in capital city and urban developed areas, have the means to recover additional revenue from their communities sufficient to cover their expenditures without relying on grants. However, a significant number of councils, particularly in rural (87 per cent) and remote (95 per cent) areas would remain dependent on grants from other spheres of government to meet their current expenditure. Some councils would remain highly dependent on grants.

FINDING 5.6

Given the differences in the scope to raise additional revenue across different classes of councils, there is a case to review the provision of Australian Government general purpose grants to local governments.

FINDING 6.1

In principle, rates revenue is not constrained by limits on the range of land valuation methods available to councils or the specific type of land valuation method applied because councils can adjust the rate in the dollar to achieve their revenue requirements.

FINDING 6.2

Differential rating provisions generally increase the capacity of councils to raise revenue from property rates. They do so by enabling councils to structure better rates payable to the different capacities to pay of, and services received by, different categories of ratepayers.

FINDING 6.3

Rates exemptions reduce local governments' rates bases and do so differentially across local governments with different proportions of exempt land. Whether exemptions constrain the overall capacity of local governments to raise revenue from rates depends on the extent to which it is (politically) feasible for them to set rates higher than otherwise would be required on non-exempt land.

FINDING 6.4

Rate pegging has dampened the revenue raised from rates in New South Wales relative to other States and there seems to have been little offset from non-rates revenue sources in recent years.

FINDING 6.5

In most jurisdictions, only a small number of fees and charges are statutorily set by State Governments. Most are set by councils and the extent to which they recover costs will largely reflect the preferences of their communities.

FINDING 6.6

Where councils are required by another sphere of government to provide a service that has a statutorily set or capped fee or charge below full cost recovery, associated revenue-raising capacity from fees and charges is constrained.

FINDING 6.7

State government setting and/or capping of fees and charges applies to some services which councils are not legislatively required to provide. But where these services are provided (for example, because of community pressure), the impacts on councils are no different from the provision of mandated services at fees that do not cover costs.

FINDING 6.8

There is a case for periodic reviews of the restrictions and regulations imposed on local government by other spheres of government to assess both their rationales and their benefits and costs.

FINDING 6.9

Nationally, developer contributions per new dwelling commencement have increased substantially over the four years to 2005-06. However, the effect of developer contributions (either in cash or in-kind) on councils is generally likely to be revenue neutral over time.

FINDING 7.1

The available data and measurement limitations make it impossible to estimate the distributional impacts of revenue raising within councils.

FINDING 7.2

Few Australian studies have attempted to measure the distributional impact of rates across households, either nationally or within states or regions. The evidence from studies that have been undertaken, which only assess burdens across councils and not within councils, suggest that residential rates decrease as a share of income as income increases. This is consistent with similar international evidence.

FINDING 7.3

In general, as the average income per person (measured at the local government level) increases across councils, the average incidence of rates decreases. For a large proportion of councils, the average rates incidence is between 1.5 and 1.8 per cent of after-tax income.

FINDING 7.4

The evidence suggests that average rates incidence is higher for rural councils than for urban councils.

FINDING 7.5

Using household expenditure survey data across councils, rates decrease relative to disposable income as income increases. For 50 per cent of households, the rates incidence is about 1.7 per cent or less of after-tax income.

FINDING 8.1

The application of a set of principles to guide revenue-raising and expenditure decisions of councils can assist them in improving the well-being of their communities.

FINDING 8.2

There is scope to utilise further the existing institutional arrangements between Australian and State Governments, local government associations and local governments to promote best practice in all aspects of revenue and expenditure decisions by local governments.

1 About this study

1.1 What has the Commission been asked to do?

The origins of this study stem from the response of the Australian Government to a report in 2003 by the House of Representatives Standing Committee on Economics, Finance and Public Administration (SCEFPA), *Rates and Taxes: A Fair Share for Responsible Local Government* (commonly referred to as the Hawker Report). Recommendation 17 of that report was for the Council of Australian Governments to host a summit on inter-governmental relations. Two of the proposed purposes of the summit were:

To review the revenue raising capacity of councils with consideration of financial penalties for States and Territories which fail to adequately support or deliberately suppress that capacity.

To determine processes to develop a fully responsible financial role for local government free from policies that arbitrarily limit the revenue raising capacity from their normal sources. (SCEFPA 2003, p. 114)

The Australian Government's response was:

The Australian Government does not support the recommendation for a summit on inter-governmental relations at this time and believes that many of the issues identified in this recommendation will be considered by the Local Government and Planning Ministers' Council in the development of an inter-governmental agreement.

The Government does agree with the Committee on the importance of local government authorities having the capacity to raise revenue from their own sources and will ask the Productivity Commission to examine this issue. (Australian Government 2005, p. 15)

As a consequence, the Australian Government asked the Productivity Commission to conduct a study into the capacity of local governments to raise revenue and to examine the impacts of their revenue raising on the community. Specifically, the Commission has been asked to examine:

- the capacity of different types of councils (for example, capital city, metropolitan, regional, rural, remote and Indigenous) to raise revenue and the factors contributing to capacity and variability in capacity over time
- the impacts on individuals, organisations and businesses of the various taxes,

user charges and other revenue sources available to local government

- the impact of any State and Territory regulatory limits on the revenue-raising capacity of councils.

The full terms of reference for this study are reprinted at the beginning of this report.

1.2 How has the Commission approached its task?

Local governments are the focus of this study. There are a range of bodies that undertake the functions generally ascribed to local governments. In the majority of cases, local governments are statutory bodies constituted under State and Territory Local Government Acts (table B.3). They are governed by councillors who are elected by eligible voters.

There are also a smaller number of other entities recognised as local governing bodies. Some local governing bodies (such as trusts and boards) are established under separate State and Territory legislation. Some are declared to be local governing bodies by the Australian Government Minister for Local Government under the *Local Government (Financial Assistance) Act 1995* (Cwlth) (LGFA 1995) (such as Indigenous community councils).

For the purpose of this study, the Commission has treated as local governments all of those bodies that receive funding under the LGFA 1995. In 2005-06, there were 663 local governments and 37 declared bodies (DOTARS 2007). Recent amalgamations in Queensland, and proposed amalgamations in the Northern Territory, will significantly reduce the number of councils during 2008.

Some issues relating to the scope of the study

The terms of reference specify that the Commission is to ‘examine the capacity of local governments to raise revenue’. The Commission has interpreted this to mean an assessment limited to local governments’ *own-source revenue*. These are revenue sources which local governments have the power to collect on their own account. This interpretation was explicit in the Treasurer’s press release announcing the study.

The Commission considers own-source revenue to include revenue from property rates, sales of goods and services (such as user fees), interest income and other income (such as developer contributions and fines). It does not include ‘grants and subsidies’ from other spheres of government.

The *revenue-raising capacity* of local governments is also assessed by State and Territory grants commissions. They are required to distribute Australian government general purpose grants in accordance with a set of principles outlined in the LGFA 1995. The approach of the State and Territory grants commissions to measuring capacity differs from that taken in this study, reflecting differences in their objectives and those of this study.

The terms of reference specify that ‘In undertaking the study the Commission is not to investigate the scope for local governments to borrow’. The Commission has interpreted this to mean that it should not report on, or imply borrowing targets or rules of thumb about borrowing targets for local governments. However, borrowing could be a factor affecting revenue raising across councils, in terms of the structure and the level of rates, and fees and charges, over time. This is particularly relevant to infrastructure services. Consequently, a broad consideration of borrowing is considered relevant to this study.

The regulatory limits imposed by State and Territory Governments on revenue raising by local governments, referred to in the terms of reference, are taken to mean the limits imposed through local government legislation, regulation and ministerial direction. It is not taken to mean Australian or State constitutional restrictions on the powers of local governing bodies to raise taxes more generally, such as through income taxes and goods and services taxes.

Finally, a number of participants to this study have urged the Commission to consider the need for other spheres of government to grant local governments access to a *growth tax*, such as a specified share of income tax or the goods and services tax revenue. The Commission considers this important policy issue to be outside the terms of reference for this study.

Some matters of terminology

As described above, most local governments are established under State local government acts or other State legislation, in accordance with constitutional powers of the States. Although the Northern Territory does not have a constitutional act, a system of local government is provided for by the *Northern Territory Self-Government Act 1978* and the *Local Government Act 1993*. The Commonwealth Parliament also legislated self-government in the ACT, which is responsible for both Territory and local government functions.

Throughout this report, financial indicators for the ACT are omitted because it is not possible to separate data for its Territory functions from its local government functions. For the sake of brevity, the Commission uses the terms *States* and

jurisdictions to refer to the six States and the Northern Territory.

The terms *local governments* and *councils* are used interchangeably throughout this report to refer to all local governing bodies, as defined previously.

Prior to the Commission commencing this study, separate financial sustainability reports were undertaken at the request of the State local government associations in New South Wales, Victoria, South Australia, Western Australia and Tasmania.¹ In addition, PricewaterhouseCoopers (2006) published a report, commissioned by the Australian Local Government Association. In this study, these reports are collectively referred to as the *financial sustainability reports*.

Opportunities for public participation

The Commission encouraged broad public participation in this study. Soon after the terms of reference were received, advertisements were placed in national newspapers. The first circular was sent to over 400 individuals and organisations considered likely to have an interest in this study. Prior to releasing the issues paper, Commissioners and staff held informal discussions with relevant agencies in the Australian, State and Territory Governments. The Commission also had discussions with local government associations as well as with some industry associations. An issues paper was released in May 2007 to assist participants to prepare their initial submissions. Sixty five submissions were received in response to the issues paper.

Three roundtables were held prior to the release of the draft report. The first, held in Melbourne, provided a forum for the Commission to explore its approach to the study with academics and others with substantial experience and knowledge about local government. The second and third roundtables were held in Perth and Tamworth, respectively. These provided an opportunity for councillors, local government managers, business and ratepayer representatives to discuss the key issues relevant to the study.

Following the release of the draft report on 18 December 2007, further roundtable discussions were held in Melbourne on 27 and 28 February 2008. These roundtables provided local government associations from around Australia, and some individual councils and government departments, with an opportunity to provide feedback on the draft report. The Commission received 31 submissions in response to the draft

¹ Access Economics has prepared reports for the local government associations of Western Australia (2006), South Australia (2005) and Tasmania (2007). In New South Wales, the local government, and shires, associations commissioned the *Independent Inquiry into the Financial Sustainability of NSW Local Government* (2006). The Municipal Association of Victoria produced the *Trends in Local Government Finance* report (Harvey-Beavis 2007).

report.

Details of all individuals and organisations visited, roundtable attendees and submissions received are provided in appendix A. The Commission is grateful to those who participated in roundtables, hosted visits and discussions, and made submissions.

The Commission appointed two independent referees to review and report on the empirical analysis undertaken in this study. The referees were Professor Peter Abelson (Managing Director of Applied Economics) and Associate Professor Joe Hirschberg (Department of Economics, University of Melbourne). Their reports are presented in appendix H.

1.3 Guide to the report

This report consists of eight chapters, including this introductory chapter. In chapter 2, an overview of local government is presented, with reference to the institutional arrangements, revenue-raising powers, roles and functions, and the sources of revenue available to local governments. The overview focuses on information at the national and state levels. However, there is a great deal of diversity among local governments. In chapter 3, the extent of diversity among local governments in relation to revenue raising and expenditure is explored.

A key task for this study is to assess the revenue-raising capacity of local governments. The framework applied to achieve this task is set out in chapter 4. An empirical assessment of the revenue-raising capacity of the various types of councils, the factors that explain the own-source revenue raised by local governments and the scope for councils to raise additional own-source revenue is presented in chapter 5.

Another key task for this study is to assess the impacts of any State regulatory limits on the revenue raising of councils. This assessment is set out in chapter 6. An assessment of the impacts of local government revenue raising measures on individuals, organisations and businesses is reported in chapter 7.

The key focus in the terms of reference is the capacity of local governments to raise revenue. However, under its general policy guidelines and operating principles, set out in the *Productivity Commission Act 1998*, the Commission is required to have an overarching concern for the community as a whole. In the current context, this requires taking a broader perspective than just focussing on the capacity of local governments to raise revenue. The assessment of revenue-raising capacity does not provide insight into how much revenue *should* be raised by local governments.

Although the Commission has not sought to answer this question, it has set out a framework (chapter 8) that can guide local governments towards raising revenue in ways that maximises the net well-being of their communities, taking into account the benefits and costs of providing services.

The chapters are supplemented by a number of appendices. Appendix A lists the individuals and organisations that have participated in this study. Appendix B supplements chapters 2 and 6, providing additional details about the revenue-raising powers of local governments. Details about the data used and the modelling undertaken to assess the revenue-raising capacity of local governments are reported in appendix C. The Australian Classification of Local Governments' structure is outlined in appendix D. The impacts of local government rates are assessed using property values in appendix E. Three case studies of Indigenous councils are presented in appendix F. A short case study on the impacts of residential rates in the City of Charles Sturt is presented in appendix G. The referees' reports are presented in appendix H.

2 Local government in Australia

Key points

- The Australian local government sector is characterised by a high degree of diversity in terms of its functions, characteristics and revenue sources.
- Local governments are increasingly providing services beyond their traditional role of services to property, to include greater involvement in human services, planning and regulatory functions.
 - Local government spending is predominantly in the areas of property-related services, roads, recreation, health and welfare services.
- Property rates and revenue from fees and charges account for most of local government own-source revenue. The shares of these revenue components as a proportion of total revenue have decreased slightly in recent times.
- At a national level, rates revenue is a small share of total taxation revenue collected by all levels of government. The ratio of own-source revenue, including rates, to gross domestic product is also small.
- The evidence suggests that both the ratio of rates revenue to GDP and household disposable income, at a national level, decreased between 1990-91 and 2005-06.
- Between 1998-99 and 2005-06, the decline in the ratio of local government rates revenue to gross state product occurred exclusively in New South Wales, Queensland, Western Australia, Tasmania and the Northern Territory.
- The levels and shares of local government revenue sources vary considerably at the state level, reflecting a multitude of factors including differences in legislative frameworks, the functions of local government in different jurisdictions and patterns of demography and regional development.

Local governments play an important role in Australian society through their delivery of goods and services, and their regulation and planning activities. They exhibit considerable diversity in relation to their functions, inherent characteristics and revenue sources, both within and between the States. In this chapter, an overview is provided of local government in Australia, both at a national and state level. An introduction to the institutional arrangements under which local governments operate and a brief profile of local governments across Australia are provided in section 2.1. The roles and functions of local governments and trends in local government expenditure are examined in section 2.2, including how these

have changed over time. The sources of revenue collected by local governments are described in section 2.3. Recent trends in revenue raising by local governments are described to provide an indication of the aggregate level of revenue-raising effort in the sector.

2.1 An introduction to local government

An introduction to the local government sector in Australia is set out in this section, including institutional arrangements, local government powers to raise revenue from various sources and the diversity that exists within the sector.

Institutional arrangements

The Commonwealth Constitution does not establish or recognise local government in Australia. Most local governments in Australia are statutory bodies created under State legislation to provide good governance and a range of services to their communities. It is the Constitution Acts of the States that provide for systems of local government.¹ The Constitution Acts are statutes of the State Parliaments and permit the State Governments, by resolutions of varying forms, to create or abolish a system of local government, dismiss councillors and appoint administrators, change council boundaries and abolish individual municipalities (DOTARS 2006).

It is principally the Local Government Acts that provide the legal and regulatory frameworks within which local governments carry out their functions. In addition, there are many other pieces of legislation that affect them; for example, planning and development legislation. These frameworks determine the functions and revenue-raising powers of the local government sector. Local governments typically possess a governing board (council) elected from and by its constituents, which is headed by a chairperson (usually the mayor) and an executive arm (which might include the general manager or chief executive officer).

Although most local governments are established under State local government acts, these are not the only entities recognised as constituting local governing bodies. In particular, a number of other bodies established under other State legislation, or ‘declared’ to be local governing bodies by the Commonwealth Minister, are eligible

¹ Although the Northern Territory does not have a Constitution Act, a system of local government is provided for by the *Northern Territory (Self-Government) Act 1978* and the *Local Government Act 1993*. The Commonwealth Parliament also legislated self government in the Australian Capital Territory, which has responsibility for both state and local government functions.

to receive financial assistance from the Australian Government under the *Local Government (Financial Assistance) Act 1995*.² These include two village committees within the unincorporated areas of New South Wales, the Lord Howe Island Board, the Outback Areas Community Development Trust in South Australia, the Roads Trust in the Northern Territory and some Indigenous community councils.

Although not formally recognised in the Commonwealth Constitution, over the past decade the local government sector has become a regular participant in national forums. The Australian Local Government Association (ALGA), recognised as the peak national representative body for local governments in Australia, is a member of:

- the Council of Australian Governments (made up of the Commonwealth and State heads of Government and the president of ALGA)
- the Local Government and Planning Ministers' Council
- other ministerial councils including the Regional Development Council.

In 2006, an Intergovernmental Agreement on Establishing Principles Guiding Inter-Governmental Relations on Local Government Matters was signed by ALGA, the Australian and State Governments. The objective of the Agreement is to obtain greater consultation and financial transparency between the three spheres of government in relation to local government services and functions.

At the state level, there are a variety of arrangements and forums through which state-based local government associations (LGAs) interact with State Governments, both formally through partnership agreements and informally. The LGAs represent the interests of their member local governments by providing a leadership and service role. They seek to promote good practice in the sector by providing assistance in a wide range of areas including:

- financial management
- procurement services
- risk management (including workers compensation and professional and public liability insurance)
- industrial and workplace relations

² There were 663 local governments and 37 declared bodies in 2005-06 (DOTARS 2007). The number of local governing bodies has decreased over time due to amalgamations of some councils in some states, mostly recently in Queensland. Proposed amalgamations in the Northern Territory will significantly reduce the number of councils during 2008.

-
- occupational health and safety
 - education and training.

In addition, there are a number of professional bodies in which state or local government officials participate; for example, the Australian Chief Executive Officers Group and Local Government Managers Australia.

Local governments sometimes establish cooperative bodies, such as Regional Organisations of Councils (ROCs) and county councils to collaborate on functions, services and issues of common interest. ROCs are voluntary associations of councils with nominated representatives, an agreed constitution and a formal set of objectives. Their activities can include coordinated research, regional strategies, resource sharing, advocacy and implementation of programs of other levels of government. There are currently 64 ROCs in Australia (ALGA 2007).

Somewhat similar to ROCs, county councils comprise a number of constituent councils which are located within an operating area and have a governing body elected by the constituent councils. Most county councils are formed to facilitate joint responsibility for management and provision of particular services or infrastructure. An example is the Richmond River County Council, which comprises three councils, is responsible for management of flood control infrastructure. The Riverina Water County Council supplies water to a number of local government areas in southern New South Wales.

The ACT is a self-governing territory under the *Australian Capital Territory (Self-Government) Act 1988* (Cwlth). The Act does not provide for a separate local government entity in the ACT (ACT Government, sub. 59). The ACT Government undertakes those functions that would otherwise be performed at the council level, including collection of property rates. It is not possible to separate its Territory functions from its local government functions. Therefore, the ACT Government is omitted from the analysis of local government functions and revenue sources reported in this chapter and elsewhere in this study.

Diversity in local government

In 2005-06, there were 701 local governing bodies (including the ACT) eligible to receive financial assistance grants from the Australian Government (DOTARS 2007). Of these, 37 were declared local governing bodies.³ Together, they directly employ around 168 000 people and are responsible for management of

³ See appendix B for an explanation of local governing bodies.

an estimated \$183 billion of non-financial assets and infrastructure (ALGA unpublished). The ratio of local government revenue (including grants) to GDP in 2005-06 was approximately 2.5 per cent.

Local governments differ in many ways, including the scope and scale of their functions, as well as their size, economic, geographic, environmental and social characteristics. Some dimensions of their diversity are illustrated in table 2.1.

Table 2.1 Selected characteristics of local governing bodies by jurisdiction
1 July 2006^a

<i>Jurisdiction</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>
Number of LGBs	155	80	157	74	142	29	64
Area (sq km)							
Minimum	–	3	–	–	2	80	–
Median	2 689	1 532	2 422	984	2 000	1 158	5
Average	4 568	2 841	11 153	2 102	17 515	2 379	1 453
Maximum	53 511	22 087	117 084	8 860	378 533	9 750	28 700
Total	708 067	227 316	1 751 096	155 581	2 487 130	68 982	92 989
Population (no)							
Minimum	57	3 191	57	67	150	877	–
Median	20 357	39 744	3 558	8 282	2 743	11 454	530
Average	41 339	62 774	25 234	20 838	14 156	16 733	3 016
Maximum	283 458	217 349	971 757	154 514	182 047	65 021	69 262
Total	6 773 615	5 021 886	3 961 698	1 542 033	2 010 113	485 263	193 035
Road length (km)							
Minimum	–	7	2	–	9	154	5
Median	881	1 293	834	941	738	437	145
Average	895	1 615	904	1 018	866	485	220
Maximum	3 245	5 168	5 562	3 882	4 147	980	2 145
Total	143 782	129 171	174 522	75 310	122 993	14 079	14 108

^a LGBs are local governing bodies. – Nil or zero. Some LGBs have no population, such as the Northern Territory Roads Trust. Similarly, some LGBs have no incorporated area and road lengths.

Source: DOTARS (2007).

The area of local governing bodies in 2006 ranged from 2 square kilometres for Peppermint Grove in Perth to 378 533 square kilometres for East Pilbara Shire in northern Western Australia. Some local governing bodies in New South Wales, Queensland, South Australia and the Northern Territory have no defined area. Either their boundaries are not legislatively defined (such as some Indigenous community councils) or they are not responsible for providing property-related services within a particular area of land (such as the Outback Areas Community Development Trust in South Australia and the village committees in New South Wales).

Median population per local governing body in 2006 ranged from 530 in the Northern Territory to 39 744 in Victoria. Brisbane City Council currently has a population of over 970 000 and Ugar Island (Queensland) has a population of only 57 people.

The length of roads for which local governing bodies were responsible in Australia in 2006 ranged from 2 kilometres for Ugar Island to 5562 kilometres for the Brisbane City Council. The median length of roads ranged from 145 kilometres in the Northern Territory to 1293 kilometres in Victoria. Some local governing bodies in New South Wales and South Australia do not have local road responsibilities (DOTARS 2007).⁴

Local governments are also diverse in terms of a number of other features, including:

- the State legislative framework within which they operate
- the extent and nature of economic activity in their areas
- functions
- per person incomes
- the demography of their populations
- the extent of population growth or decline
- the management capacity and skill base of their councillors and staff
- the attitudes and aspirations of their local communities
- the significance of grants as a source of revenue.

The Commonwealth Grants Commission (CGC) (2001), in its review of the operation of the *Local Government (Financial Assistance Act) 1995* (Cwlth), noted that there are major differences in form, governance and responsibilities between States. These include differences in the methods for calculating rates, the extent of local government involvement in providing water and sewerage services, and the proportion of State land that is governed by local governments (incorporated land).

⁴ This includes the Lord Howe Island Board and the Silverton and Tibooburra village committees in NSW.

2.2 Roles and functions of local governments

Local governments across Australia have a variety of roles and functions and deliver a wide range of services. Under State legislation, they have the authority to provide for ‘good governance’ through powers of general competence conferred on them. That is, they are able to take on roles not precluded by other legislation (DOTARS 2007). In addition, local governments are designated as responsible authorities for the purpose of undertaking functions and providing services on behalf of other levels of government. The main roles of local governments include:

- governance and advocacy
- planning and community development
- regulation
- provision of infrastructure
- service delivery.

Local governments have legislative and regulatory functions defined in statutes that enable them to make and enforce local laws within their jurisdiction. They are also responsible for undertaking land-use and environmental planning decisions and for approving development applications.

Major functions of local governments involve providing goods and services that are *public* goods or have natural monopoly or externality characteristics. This includes certain physical infrastructure such as local roads, bridges, water drainage and some health services. If left to private sector markets alone, it is likely that there would be under-provision of these goods and services (box 2.1). As a result, it is likely to be necessary and desirable for local government to provide such services. It is generally not feasible to impose user charges to finance provision of infrastructure services such as local roads. Therefore, local governments use rates, grants, or forms of indirect charging to provide these types of infrastructure services.

Box 2.1 Roles of local government

Some reasons for local governments to provide services include:

- *Public goods* — services that, over a defined geographic area, are non-rival (consumption by one person will not diminish the consumption by another) and non-excludible (once provided, no one can be excluded from consumption of them whether or not they offer to pay). Such goods would be under-provided by private markets. Public good characteristics can be found in goods and services such as local roads, environmental management (such as catchments management, parklands and gardens), and planning and development approval processes.
- *Externalities* — services for which production or consumption decisions by one party have *spillover* effects (positive or negative) for those not party to the decision and for which the decision-maker has no incentive to take into account. If left to unregulated private markets, such services would be under- or over-provided. In the case of local governments, spillover benefits are *internalised* through, for example, subsidies (paid from rates) that ideally reflect the nature and size of the spillovers. Such services include public health programs, such as immunisation services at community health centres, libraries and waste collection services.
- *Natural monopolies* — infrastructure with substantial economies of scale (decreasing average costs as the scale of provision increases) which, as a result, can be provided at least-cost by a single provider. These include local roads, bridges, footpaths, freshwater and sewerage networks, stormwater drainage and waste collection services.

Source: Based on Productivity Commission (2001).

Generally, local governments have the legal ability to provide a range of services within their local government areas, charge for their services and enter into contractual arrangements. Local governments determine the services they provide according to local needs and the requirements of legislation. In practice, the range of services provided by local government varies widely across Australia, reflecting differences in legislation, population and geography, as well as history, community preferences, and the willingness of communities to pay for the services. A broad set of examples of services provided by local governments is given in table 2.2. Some functions and services are undertaken jointly by local governments and other spheres of government, notably health and social services.

Table 2.2 Local government functions and services

<i>Function/service category</i>	<i>Service examples</i>
Engineering and infrastructure	Public works design, construction and maintenance of roads, bridges, footpaths, drainage, cleaning, waste collection and management.
Property-related	Domestic waste management including solid waste and recycling services, water and sewerage. ^a
Administration, regulation and planning	Land use and town planning (including heritage), development approvals, building inspection, ^b licensing, certification and enforcement, administrative functions related to aerodromes, quarries, cemeteries, parking stations and street parking.
Environmental and health	Catchments management, parks and gardens, tree removal, pest and weed control, water sampling, food sampling, immunisation, toilets, noise control, meat inspection and animal control.
Community and social	Aged care and child care services, health clinics, youth centres, community housing refuges and facilities, counselling and welfare services.
Recreation, cultural and education	Swimming pools, recreation centres, community halls, sports facilities, lifeguards, camping grounds, community festivals, libraries, art galleries, theatres and museums.
Other	Bus services, abattoirs, sale-yards, markets and group purchasing schemes.

^a Provided by some local governments in New South Wales, Queensland and Tasmania only. Some local governments in South Australia are involved in the operation of effluent drainage schemes. ^b Local governments in the Northern Territory do not have development planning and building regulation functions.

Source: DOTARS (2007; sub. 38); PwC (2006); IIFS (2006).

International comparisons with Australian local government

The roles and functions of local governments, and correspondingly their significance as a sphere of government, differ significantly across countries. Most local governments in Australia have a relatively small role compared with other developed countries. Comparisons with countries with *unitary* systems of government, such as the United Kingdom, are less relevant. This is because local governments in such countries are often used as administrative arms of the central government to deliver services (such as health and education) which, in federations would reside with autonomous intermediate (State, Provincial or Lander) governments. However, even when compared with other federal countries (such as the United States, Canada and Germany), local governments in Australia have very limited functions, lower expenditure shares, and lower tax sources available to them. Local government revenue constituted less than 3 per cent of total taxation revenue in Australia in 2004 compared with almost 15 per cent in the United States and about 8 per cent in Canada and Germany (OECD 2006).

The Canadian federal system consists of multiple levels of government like Australia. These include a federal government, provincial governments and local governments. Canadian local governments consists of municipal governments and smaller specific-purpose local authorities, which are mostly school boards (Shah 2006). The authority of Canadian local governments is derived from provincial governments. Municipal services include transportation (roads), emergency services, property-related services, land-use planning and social and health services. Local government's share of total government spending in Canada has decreased largely because expenditure by provincial governments has increased, mainly in social service areas, particularly health (Shah 2006).

Germany's federation consists of the central government, 16 States (Lander) and almost 14 000 municipalities which form part of 323 rural districts. Municipalities are responsible for expenditure on education, fire departments and sporting and cultural facilities. Most municipalities own and operate special-purpose associations for waste management, electricity and water supply. Accountability for some areas of expenditure is not clearly defined between spheres of government in Germany; for example, the distribution of social welfare grants (Shah 2006).

New Zealand has a unitary system within which the local government sector consists of both regional and territorial councils (which include district and city councils). The main functions of territorial councils are similar to those of Australian councils. However, regional councils undertake a number of functions that are outside the scope of Australian local governments, such as civil defence preparedness, harbour navigation and safety, marine pollution and some water management (PwC 2006). Similar to Australia, New Zealand local government has undertaken a number of reforms, including amalgamations, and has moved beyond delivery of traditional core services.

How have the roles of local governments been changing?

The scope of local government functions and service provision has changed significantly over time. Local government in Australia developed largely during the late nineteenth and early twentieth centuries. Local governments evolved as local governing authorities which initially provided basic municipal services and local roads within communities. Local government roles, responsibilities and service provision have evolved in response to demographic changes, local preferences and settlement trends. This has included increased urbanisation, growth of major regional centres, declining rural populations and the ageing population (ALGA unpublished). Development of individual local governments has varied between and

within states, depending on historical events and enthusiasm for local government (Dollery, Crase and Johnson 2006).

At the time of federation, Australian local governments were largely responsible for delivering physical services to property (*roads* and *rubbish*). After World War II, local governments extended their services beyond traditional services to include town planning, building and health standards and, later, welfare and recreation services. Local government also intensified its role in road provision, particularly in rural areas. Over time, some local governments have ceased control of a number of services due to their inability to achieve scale efficiencies and coordinate service delivery across council boundaries. This includes electricity, gas, public transport and, in some areas, water and sewerage (Dollery, Crase and Johnson 2006).

There has been a particularly notable transition of local government roles, from being essentially providers of property-related services to increasing involvement in the provision of social services, including health and welfare services, community housing and recreation and sporting facilities. Provision of a broader range of services and increased service standards have occurred in many council areas. Local governments have also been actively promoting economic development in their areas (SCEFPA 2003).

The CGC (2001, pp. 52–3) identified the main reasons for increases in local government service provision and expenditure to include:

- (i) *Devolution* — where another sphere of government gives local government responsibility for new functions.
- (ii) *Raising the bar* — where another sphere of government, through legislative or other changes, increases the complexity or standard at which a local government service must be provided, which increases its cost of service.
- (iii) *Cost shifting* — where there were two types of behaviour. The first is where local government agrees to provide a service on behalf of another sphere of government but funding is subsequently reduced or stopped, and local government is unable to withdraw because of community demand for the service. The second is where another sphere of government ceases to provide a service and local governments voluntarily decide to provide the service.
- (iv) *Increased community expectations* — where the community demands improvements in existing local government services.
- (v) *Policy choice* — where individual LGBs [local governing bodies] choose to expand their service provision. (CGC 2001, pp. 52–3)

A number of cost shifting issues raised by the CGC were examined in a report by the Hawker Committee (House of Representatives SCEFPA 2003), *Rates and Taxes: A Fair Share for Responsible Local Government*. One of the key recommendations of the report was the development of an inter-governmental

agreement to identify local government roles and address cost shifting. Subsequently, the Intergovernmental Agreement on Establishing Principles Guiding Inter-Governmental Relations on Local Government Matters was signed in 2006. The agreement provides a framework for the delivery and funding of services and functions to the community at the local level on behalf of other levels of government. It will be reviewed, and compliance with it assessed, within five years. Disputes can be considered by the Local Government and Planning Ministers' Council.

Local government expenditure

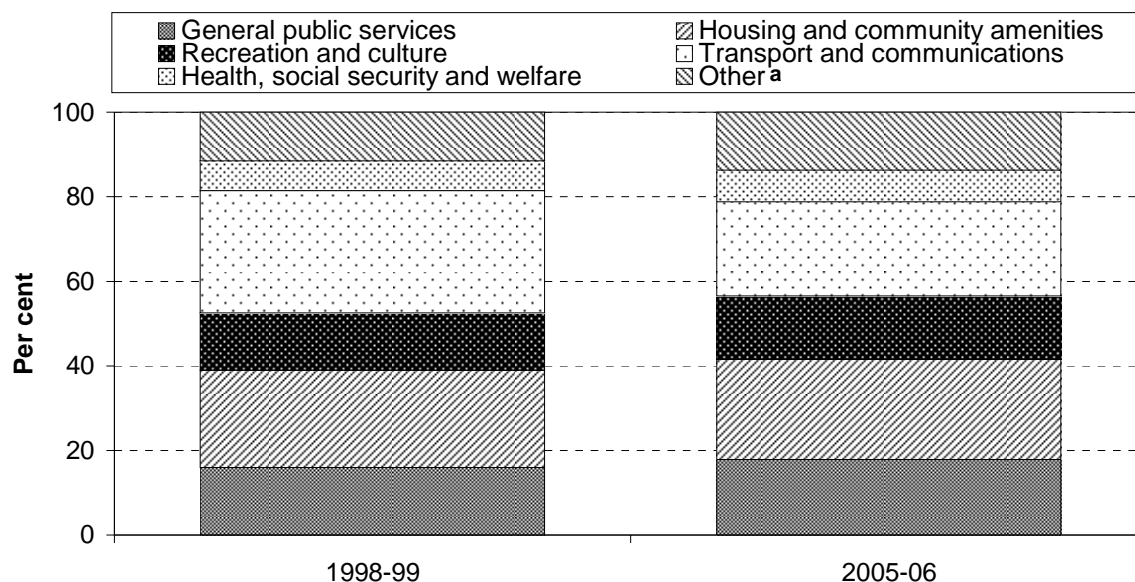
A national picture of local government expenditure by function and service is presented in figure 2.1.

The four largest shares of local government expenditure are in the following areas:

- transport and communication (including road construction and maintenance, parking, rail and air transport, community transport and communication technology)
- housing and community amenities (including housing and community development, water supply, household garbage and sanitation, sewerage and street lighting)
- general public services (including administrative functions such as executive, legislative and financial affairs and expenditure not classified elsewhere)
- recreation and culture (including public halls, swimming pools, national parks and wildlife, libraries, museums and art galleries).

The share of total expenditure on housing and community amenities and general public services has remained fairly constant in recent years. The share of transport (roads) and communications spending decreased from 29 per cent of total expenditure in 1998-99 to 22 per cent in 2005-06. The shares of other categories have increased slightly, including general public services, recreation and culture, and other expenditure.

Figure 2.1 **Local government expenditure by function**
Shares, selected years



^a Other includes public order and safety; education; fuel and energy; agriculture, forestry and fishing; mining, manufacturing and construction; other economic affairs; and other purposes.

Source: ABS (2007g); Productivity Commission calculations.

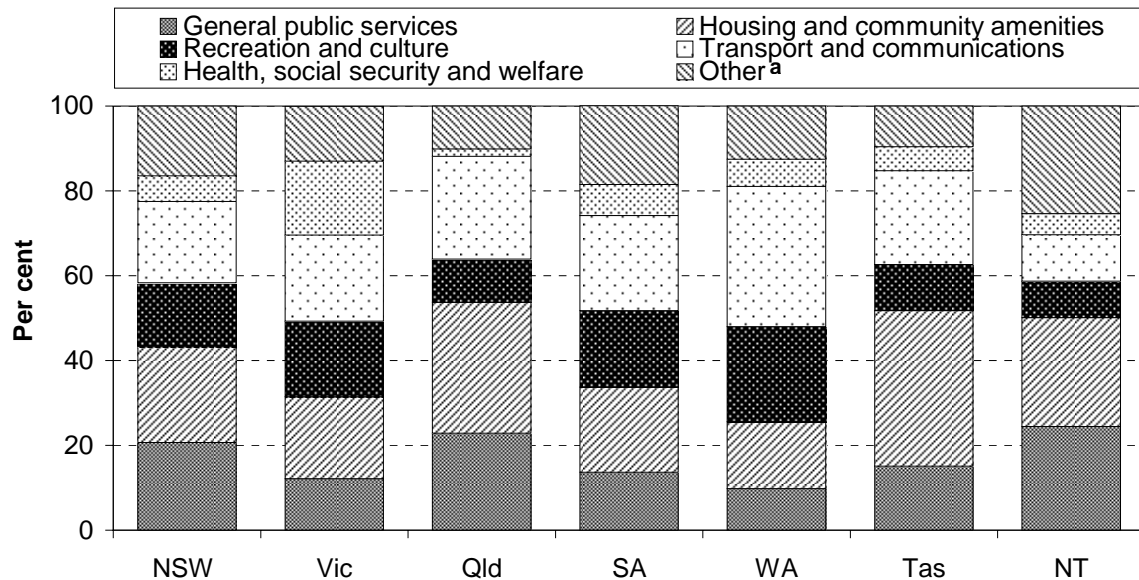
The shares of local government expenditure by State are illustrated in figure 2.2. There is considerable variability between jurisdictions, reflecting a range of factors, some of which include:

- Queensland, Tasmanian and some New South Wales councils provide sewerage and water supply services
- a large proportion of councils in Victoria provide some health and community services on behalf of the Australian and the Victorian Governments⁵
- councils in Western Australia and Queensland are required to maintain a larger network of local roads
- the Brisbane City Council provides urban public transport services.

⁵ Victorian local governments deliver 80 per cent of Home and Community Care (HACC) services in the State. Comparatively, the local government sectors in other states are 'minor' providers of the HACC program (MAV 2007).

Figure 2.2 **Local government expenditure by State**

Shares, 2005-06



^a Other includes public order and safety; education; fuel and energy; agriculture, forestry and fishing; mining, manufacturing and construction; other economic affairs; and other purposes.

Source: ABS (2007g); Productivity Commission calculations.

2.3 Revenue sources of local government

The revenue-raising powers and the sources of local government revenue are discussed in this section.

Local government revenue-raising powers

Australian local governments are empowered through State legislation to raise revenue through:⁶

- council rates and charges on property
- user fees and charges
- interest

⁶ Local governments are local governing bodies established under State legislation. Local governing bodies also includes *declared bodies*, which are provided with financial assistance grants and treated as councils for the purposes of grant allocations (DOTARS 2007). However, they may have different legislative requirements than councils, as explained in appendix B.

-
- fines and other penalties
 - developer charges and contributions.

Rates levied on property are the only source of tax revenue available to local governments. Within limits, local governments can alter the level and composition of rates revenue by altering the percentage rate in the dollar applied to the rateable value of property, the structure of rates, the categorisation of land and the valuation method applied to each land category (in some jurisdictions). Local governments are generally permitted to differentiate the rates levied according to the nature and use of property (for example, residential or commercial use). The ability of local governments to raise rates revenue can be subject to regulatory limits, such as rate pegging, provisions relating to the method for land valuation assessments, and rate exemptions and concessions. In some States, categorisation of land is explicitly specified in legislation, while in others, more flexible rating regimes are allowed. Rates levied on property owners often include a minimum amount or a fixed charge in addition to an *ad valorem* amount of a rate levied on the value of land.

The legislative and regulatory frameworks in each jurisdiction generally permit local governments to collect a wide range of fees and charges, including service and utility charges, regulatory fees and other fees for service. The levels of some charges are statutorily set, however, most are discretionary. Generally, legislation provides for local governments to impose charges in addition to, or in combination with, rates. This includes the application of service and special charges to recover the costs of providing a particular service (for example, rubbish collection, water and sewerage) or funding an activity that benefits land holders in a specific area (for example, environmental programs). Local governments are generally empowered, through planning and development legislation, to raise revenue from developer charges and contributions for economic and social infrastructure.

In addition to State legislative frameworks, the requirements of National Competition Policy (NCP) can impact on the revenue-raising powers of local governments. This may occur where fees and charges for significant business activities are required to be set on the basis of recovering full cost (competitive neutrality) or where prices are subject to prices monitoring (NCC 2000).

Local governments also earn interest income from cash investments, securities and other financial assets. Local governments are typically permitted to invest in Commonwealth or State government securities, or a financial institution that is approved or guaranteed by the State.

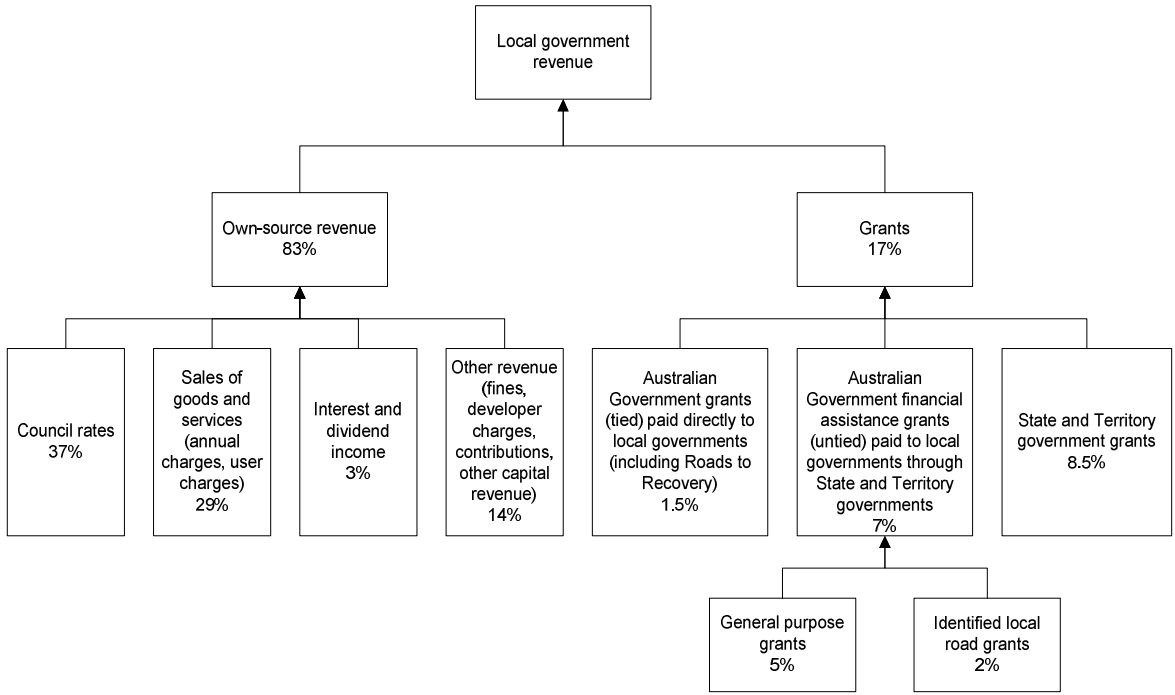
In addition to their revenue-raising powers, local governments may source finance through borrowings. State governments, depending on the jurisdiction, impose

restrictions on the level of borrowings or the purpose or the source of borrowings. Local governments in most States are required to seek ministerial approval prior to entering into contractual arrangements to borrow. Borrowing by local governments is often arranged through State government treasury corporations or departments.

The powers of local governments in each jurisdiction to raise various sources of revenue, as prescribed in State legislation and regulations, are discussed in detail in chapter 6 and appendix B.

Local government revenue sources can be defined as own-source revenue and grants and subsidies from other levels of government (figure 2.3). Own-source revenue consists of council rates, revenue from the sale of goods and services, interest income and other revenue. The remaining revenue source available to local governments is grants and subsidies distributed by the Australian and State Governments.

Figure 2.3 Sources of local government revenue in Australia
2005-06



Source: ABS unpublished; Australian Government (2006); Productivity Commission calculations.

Council rates are taxes collected from land owners on the basis of property value. They often include a minimum charge or fixed charge, above which an *ad valorem* component may be applied. Rates may consist of general rates, separate or special rates.

Sales of goods and services includes any revenue derived from the direct provision of goods and services. This category includes user fees and charges (for example, for parking or using sporting and recreational facilities), water and sewerage charges, fees for regulatory services, rental income, and revenue for acting as an agent on behalf of other levels of government.

Interest and dividend income includes revenue derived from owning financial assets, such as interest on bank account balances and government securities.

Other income includes all revenue which is not in the other three categories. This includes fines, contributions and donations (including developer contributions and non-financial assets acquired free or at a price below fair value).

Grants and subsidies revenue includes current and capital grants from the Australian and State Governments. The Australian Government provides funding to local government in the form of annual untied financial assistance grants (which are paid in quarterly instalments through the States) and (tied) specific purpose payments direct to local governments. The financial assistance grants consist of two components:

- general purpose grants, distributed among the States on an equal per person basis
- identified local road grants, distributed among the States on the basis of historical shares (although identified as road grants, they are untied).

The State governments allocate both components of the financial assistance grants to local governments in their respective jurisdictions according to the recommendations of the State grants commissions in each State and the Northern Territory. In determining grant allocations, the State grants commissions are required to make their recommendations in line with National Principles under the *Local Government (Financial Assistance) Act 1995* (box 2.2).

The application of the horizontal equalisation principles leads to larger general purpose grants per person for councils with relatively smaller rates bases and those that are disadvantaged in terms of the relative cost of delivering services. However, the total general purpose grants pool in each State is not sufficient to achieve full fiscal equalisation.⁷

The Australian Government also makes specific purpose payments direct to local governments to fund local roads and infrastructure (for example, *Roads to Recovery*

⁷ The balance of the general purpose grants pool (after allocating minimum grants) is distributed to each local governing body in proportion to its relative need as assessed by the State grants commissions. However, the grants pool is insufficient to meet the full amount of the assessed need.

grants), child care programs, and disability and other services administered by local governments.

Box 2.2 National principles for allocation of financial assistance grants

The State grants commissions are required to observe the National Principles relating to grants allocation under the *Local Government (Financial Assistance) Act 1995* (Cwth):

- *Horizontal equalisation* — this principle requires that each local governing body in a jurisdiction is able to function, by reasonable effort, at a standard not lower than the average standard of other local governing bodies in that State. Further, it takes account of differences in the expenditure requirement and revenue-raising capacity of local governing bodies.
- *Effort neutrality* — the revenue and expenditure policies of individual local governing bodies shall not, as far as practicable, affect grant determination through the assessment of revenue-raising capacity and expenditure requirements.
- *Minimum grant* — the minimum general purpose grant allocation for a local governing body is to be no less than 30 per cent of its per person share of the total amount of general purpose grants available for allocation among local governing bodies in the States or Territory.
- *Other grant support* — this principle requires recognition of other relevant grant support to local governing bodies to meet any expenditure needs.
- *Aboriginal peoples and Torres Strait Islanders* — financial assistance shall be allocated to councils in a way which recognises the needs of Aboriginal peoples and Torres Strait Islanders within their boundaries.
- *Council amalgamation* — where two or more local governing bodies are amalgamated into a single body, the general purpose grant provided to the new body for each of the four years following amalgamation should be the total of the amounts that would have been provided to the former bodies in each of those years if they had remained separate entities.
- *Identified road component* — the identified road component of the financial assistance grant should be allocated on the basis of the relative needs of local governing bodies for road expenditure. Relative needs should be determined based on length, type, and usage of roads in each local governing area.

Source: DOTARS (2007); CGC (2001).

The State governments provide grants to local governments for specific purposes or services. A component of State government grants are reimbursements for rate concessions provided by local governments on behalf of State governments. State government grants are distinguished from total grants paid to local government in

table 2.3. State governments also provide contract payments to councils to carry out some State functions.

Table 2.3 Grants to local government by function
2004-05, (\$) millions^a

<i>Function/grant</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>Total</i>
Grants from Australian and State Governments								
General public services	15	17	69	1	8	1	38	149
Health, social security and welfare	122	316	31	24	50	15	15	573
Housing and community amenity	86	40	118	13	9	8	71	345
Recreation and culture	52	72	48	17	27	13	7	236
Transport and communications	281	230	232	54	204	36	13	1 050
Other	500	311	221	96	125	28	10	1 291
Total	1 056	986	719	205	423	101	154	3 644
Australian Government financial assistance grants								
General purpose grants	358	263	205	82	105	26	11	1 050
Identified local road grants ^b	137	98	89	26	72	25	11	458
SPP direct grants	90	78	54	22	43	10	7	305
Australian Government grants (\$)/person	87	87	87	84	109	126	142	90
State government grants	471	547	371	75	203	40	125	1 831
State grants (\$)/person	70	108	93	48	101	81	604	91

^a Estimates may differ from other sources. Includes current and capital grants. ^b Local roads grants for South Australia include supplementary local road funding of \$4 million.

Source: DOTARS (sub. 38); Australian Government (2005); ABS (2007h); Productivity Commission calculations.

Local government revenue in Australia

The total revenue received by all Australian local governments has been steadily increasing, in real terms, in recent years (table 2.4). Between 1998-99 and 2005-06, total revenue in real terms increased from over \$18 billion to nearly \$24 billion, representing an average annual growth of 3.4 per cent. Real per person revenue has similarly increased during this period, growing from \$985 to \$1174 per person, representing average annual growth of 2.2 per cent. Rates revenue as a share of total revenue has declined over time. The shares of sales of goods and services revenue and grants revenue fluctuated during the same period, but was largely unchanged in 2005-06 from the 1998-99 share. The share of other revenue increased from 12 to 14 per cent of total revenue.

Table 2.4 National trends in real local government revenue

Shares, 1998-99 to 2005-06^a

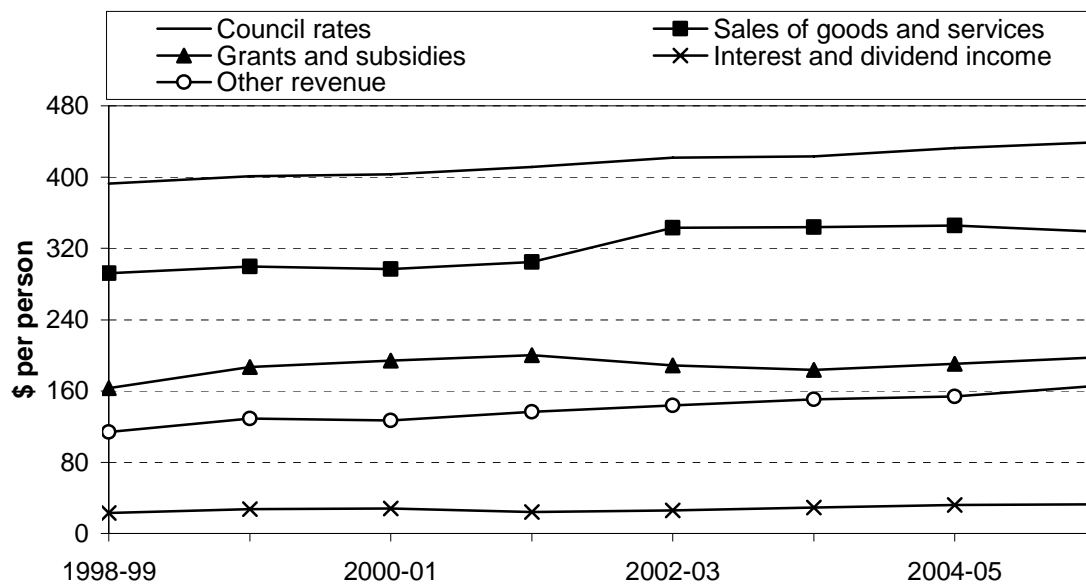
Year	Council rates	Sales of goods and services	Grants and subsidies ^b	Interest and dividend income	Other revenue ^c	Real total revenue ^d	Per person real total revenue
	%	%	%	%	%	\$m	\$/person
1998-99	40	30	17	2	12	18 331	985
1999-2000	38	29	18	3	12	19 661	1 044
2000-01	38	28	19	3	12	20 018	1 049
2001-02	38	28	19	2	13	20 814	1 077
2002-03	38	31	17	2	13	21 980	1 123
2003-04	37	30	16	3	13	22 395	1 131
2004-05	37	30	17	3	13	23 177	1 155
2005-06	37	29	17	3	14	23 915	1 174

^a Estimates may differ from other ABS sources. ^b Grants and subsidies includes both capital and current grants from Australian and State Governments, and reimbursements of rate concessions. ^c Other revenue includes fines, developer charges and contributions and other current and capital revenue. ^d Data are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator.

Source: ABS unpublished; Australian Government various; Productivity Commission calculations.

Figure 2.4 National trends in real local government revenue

Real revenue per person, 1998-99 to 2005-06^a



^a Data are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator.

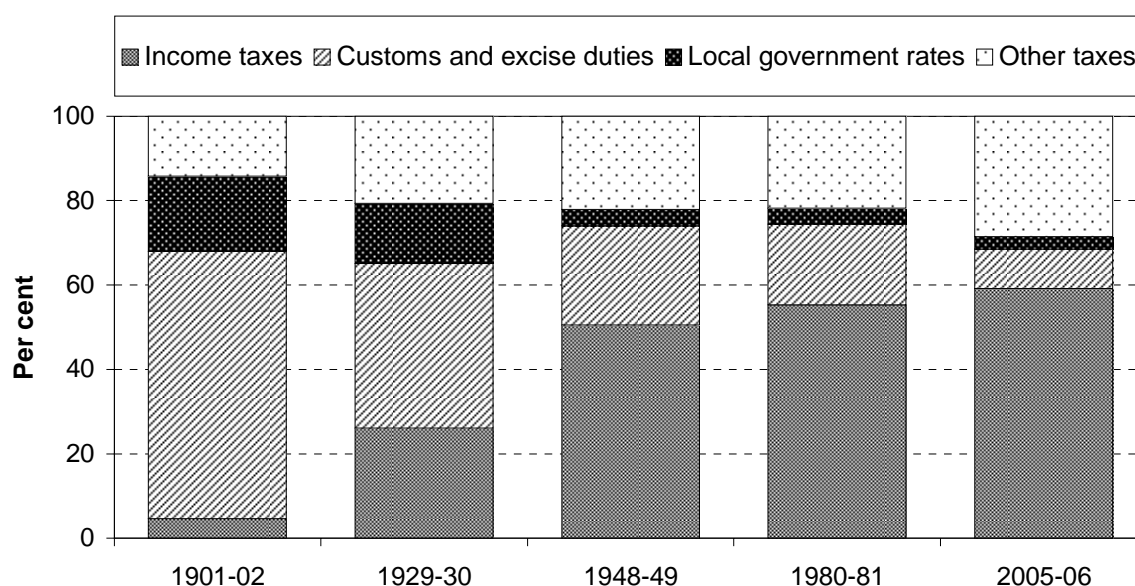
Source: ABS unpublished; Australian Government various; Productivity Commission calculations.

In real terms, there was an increase in all components of revenue per person at the national level over the same period, with the exception of interest and dividend income which remained relatively constant (figure 2.4).

Although local government rates revenue has increased steadily in recent years, its share of the total taxation revenue collected by all levels of government in Australia has decreased significantly over the long term. As illustrated in figure 2.5, local government rates decreased from 18 per cent of total taxation revenue in 1901-02 to 3 per cent in 2005-06. This is largely due to substantial increases in the level of income tax revenue collected by other levels of government. More recently, the share of *other taxes* has risen significantly with the introduction of the goods and services tax.

Local government rates increased from about 1.2 per cent of GDP in 1901-02 to about 2 per cent in 1929-30. They decreased to 1.2 per cent of GDP in 1980-81 and had fallen further to about 0.9 per cent by 2005-06 (Groenewegen 1990, ABS 2007d and 2007i).

Figure 2.5 Australian taxation revenue, all levels of government
Shares of total taxation revenue, selected years^a



^a Income taxes includes taxes on persons and companies. Customs and excise duties in 2005-06 includes excises and levies and taxes on international trade. Other tax revenue in 2005-06 includes goods and services tax.

Source: Groenewegen (1990); ABS (2007i); Productivity Commission calculations.

Between 1990-91 and 2005-06, the ratio of local government taxation (rates) revenue to GDP decreased from 1.03 to 0.92 per cent (table 2.5). Over the same

period, combined Australian and State government taxation revenue as a ratio to GDP increased.

The rates revenue collected by local governments, at a national level, is a small proportion of the income of all residents, largely because local governments raise a relatively small amount of revenue on a per person basis. This can be illustrated by expressing local government revenue as a ratio of household disposable income (table 2.5).

Table 2.5 Revenue, GDP and personal income, all levels of government
Shares and ratios, selected years, per cent^a

<i>Year</i>	<i>All local governments</i>	<i>All State Governments</i>	<i>Australian Government</i>
Share of total taxation revenue^b			
1990-91	3.54	17.79	78.67
1997-98	3.35	19.26	77.39
2005-06	2.99	14.70	82.30
Ratio of taxation revenue to GDP			
1990-91	1.03	5.17	22.85
1997-98	0.98	5.60	22.51
2005-06	0.92	4.53	25.35
Ratio of taxation revenue to HDI^c			
1990-91	1.50	7.54	33.35
1997-98	1.48	8.47	34.05
2005-06	1.48	7.28	40.74

^a Ratios have been multiplied by 100 to express them in percentage terms. ^b Tax revenue refers to the ABS taxation revenue measure. Goods and services tax is reported as Australian Government taxation revenue. ^c Household disposable income (HDI) refers to gross household income plus imputed rent to owner-occupiers less income tax payable, other current taxes on income and wealth, interest on dwellings and consumer debt, interest payable by unincorporated enterprises, health insurance premiums and other current transfers payable by households.

Source: ABS (2007a, 2007i); Productivity Commission calculations.

FINDING 2.1

At the national level, the ratio of local government rates revenue to GDP decreased over the period 1990-91 to 2005-06.

Local government revenue across jurisdictions

Analysis at the aggregate Australian level masks differences in the level and proportion of revenue components across jurisdictions. The jurisdictional variation is due to, among other things, legislative differences (for example, rate pegging in

New South Wales) and variation in the functions of local governments (for example, water and sewerage services provided by local governments in New South Wales, Queensland and Tasmania).

The majority of local government revenue is derived from its own sources, that is, all revenue other than grants received from other levels of government (table 2.6). In 2005-06, own-source revenue was lowest in the Northern Territory at 48 per cent of total revenue and highest in Queensland, where it accounted for 88 per cent. The component shares of own-source revenue, as well as the grants and subsidies revenue shares, similarly exhibit variation across jurisdictions.

Table 2.6 Trends in own-source revenue

Own-source revenue as a share of total revenue, 1998-99 to 2005-06^a

Year	NSW	Vic ^b	Qld	SA	WA	Tas	NT	Australia
1998-99	85	81	85	84	78	83	na	83
1999-2000	87	81	79	84	78	82	51	82
2000-01	87	78	80	83	76	82	45	81
2001-02	86	76	83	82	78	82	48	81
2002-03	88	77	86	83	79	81	46	83
2003-04	87	79	88	83	78	83	48	84
2004-05	85	80	88	84	80	83	51	83
2005-06	84	80	88	82	80	82	48	83

^a Own-source revenue is total revenue less revenue from grants and subsidies ^b Grants data for Victoria were sourced from the Victorian Grants Commission to overcome data limitations. **na** Not available.

Source: ABS unpublished; Victorian Grants Commission unpublished; Australian Government various; Productivity Commission calculations.

Component shares of total revenue

There are significant differences in the level of local government revenue, when compared across States. In 2005-06, total revenue ranged from \$361 million in the Northern Territory to \$7388 million in New South Wales, largely reflecting differences in population size. On a per person basis, total revenue was highest in the Northern Territory at \$1712 per person and lowest in South Australia at \$846 per person (table 2.7).

Just as the aggregate and per person levels of total revenue across jurisdictions are quite varied, so is the composition of total revenue. In 2005-06:

- the revenue per person from council rates ranged from \$294 in the Northern Territory to \$501 in South Australia⁸

⁸ Some local governments in the Northern Territory collect 'poll tax' for services in relation to land. This is classified by the ABS as part of sales of goods and services.

- the revenue per person from sales of goods and services ranged from \$138 in South Australia to \$629 in Queensland⁹
- grants and subsidies revenue per person ranged from \$149 in South Australia to \$883 in the Northern Territory
- interest and dividend income per person ranged from \$10 in South Australia to \$51 in Tasmania
- other revenue per person ranged from \$48 in South Australia to \$311 in Queensland.

Table 2.7 Local government revenue sources by State
2005-06

	<i>Council rates</i>	<i>Sales of goods and services</i>	<i>Grants and subsidies</i>	<i>Interest and dividend income</i>	<i>Other revenue</i>	<i>Total revenue</i>	<i>Total revenue</i>
	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$m
NSW	387	347	173	47	130	1 084	7 388
Vic	491	184	208	13	133	1 029	5 279
Qld	442	629	192	38	311	1 612	6 594
SA	501	138	149	10	48	846	1 326
WA	451	232	226	36	176	1 121	2 308
Tas	422	524	237	51	112	1 345	659
NT	294	283	883	32	220	1 712	361
Australia	439	339	198	33	166	1 174	23 915

Source: ABS unpublished; Australian Government (2006); Productivity Commission calculations.

Local government ratios of own-source and rates revenue to gross state product and household disposable income for each State are presented in table 2.8. The highest ratios were in Queensland and Tasmania, in part, reflecting high own-source revenues from the provision of water and sewerage services (table 2.7).

⁹ Sales of goods and services revenue raised by Queensland local governments includes charges for water and sewerage services.

Table 2.8 Local government revenue, state output, and personal income
Ratios at the state level, selected years, per cent^a

<i>Year</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>
Ratio of own-source revenue to GSP^b							
1998-99	2.13	1.48	2.93	1.62	1.74	2.82	0.92
2001-02	2.13	1.58	2.84	1.60	1.58	2.89	1.48
2003-04	2.03	1.66	3.31	1.63	1.60	2.76	1.39
2005-06	1.97	1.78	3.25	1.68	1.53	2.88	1.38
Ratio of rates revenue to GSP							
1998-99	0.95	0.85	1.13	1.11	0.91	1.19	0.63
2001-02	0.89	0.89	1.11	1.12	0.87	1.20	0.53
2003-04	0.85	0.93	1.06	1.15	0.86	1.12	0.52
2005-06	0.84	1.07	1.01	1.20	0.77	1.10	0.49
Ratio of own-source revenue to HDI^c							
1998-99	3.10	2.33	4.44	2.38	3.00	4.57	1.60
2001-02	3.08	2.49	4.41	2.33	2.85	4.42	2.96
2003-04	3.12	2.68	5.33	2.53	2.83	4.40	2.82
2005-06	3.02	2.76	5.40	2.55	3.09	4.46	2.79
Ratio of rates revenue to HDI							
1998-99	1.39	1.33	1.71	1.63	1.57	1.93	1.09
2001-02	1.30	1.39	1.73	1.62	1.57	1.84	1.05
2003-04	1.31	1.50	1.71	1.79	1.52	1.78	1.05
2005-06	1.28	1.65	1.68	1.83	1.56	1.70	0.99

^a Ratios have been multiplied by 100 to express them in percentage terms. ^b Own-source revenue is equal to total revenue less grants revenue. ^c Household disposable income (HDI) refers to gross household income plus imputed rent to owner-occupiers less income tax payable, other current taxes on income and wealth, interest on dwellings and consumer debt, interest payable by unincorporated enterprises, health insurance premiums and other current transfers payable by households.

Source: ABS unpublished; ABS (2007a, 2007d); Australian Government various; Productivity Commission calculations.

FINDING 2.2

At the state level, the ratio of own-source revenue to gross state product varies across jurisdictions due to a large number of factors, including differences in the functions of local governments, such as provision of water and sewerage services in some States but not others.

The trends in local government revenue at the state level are influenced by the underlying diversity of individual local governments within jurisdictions. The characteristics of different types of councils and the factors driving their revenue requirements and capacity to raise revenue are discussed in chapters 3 and 5.

3 Revenue and expenditure across local governments

Key points

- There is considerable variation across local governments in the amount of revenue raised, both in absolute and per person terms.
- The majority of local governments are primarily dependent on their own sources of revenue.
 - For 20 per cent of councils, own-source revenue accounts for more than 86 per cent of their total revenue. For 50 per cent of councils, own-source revenue accounts for at least 72 per cent of their total revenue.
- However, grants are a particularly important source of revenue for a number of councils.
 - Twenty per cent of councils (accounting for about 1 per cent of all residents) are significantly dependent on grants, which account for at least 48 per cent of their total revenue.
- Capital city councils raise the highest level of rates revenue, with a median value of \$1089 per person. This reflects, in part, the capacity of capital city councils to raise revenue from their relatively large number of business ratepayers. It also reflects small resident populations in some capital city councils.
 - Urban fringe councils raise the lowest rates revenue per person, with a median value of \$389.
- Rural and remote councils raise more own-source revenue per person than urban councils. This might be due to the higher costs of service provision in rural and remote areas, diseconomies of scale and differences in the range of services offered.
- Rural and remote area councils also receive substantial grants on a per person basis.
 - Over 50 per cent of remote councils receive grants in excess of \$3816 per person, with 10 per cent receiving more than \$10 841 per person.
- Expenditure per person varies considerably across councils. Generally, rural and remote councils have higher expenditure per person compared with urban councils.
 - For all functional categories, expenditure per person is very much higher for remote councils than for urban and rural councils.

In the previous chapter, it was discussed that there are significant differences in the average level of revenue raised by local governments across the States. Even so, these State averages mask the full extent of variation in the revenue raised by councils, both within and across jurisdictions. It is important to appreciate the differences between councils, to understand their revenue-raising capacities and the factors that might explain the differences in their revenue-raising effort.

In general terms, revenue is raised to cover the expenditures required to deliver the desired level and mix of local government services, after taking into account grants from other spheres of government. An examination of expenditure and factors that might contribute to the observed differences in expenditure might provide insights into the variation of revenue raised by councils.¹

The sources of local government data and their limitations are briefly discussed in section 3.1. In section 3.2, the distribution of total revenue, own-source revenue and grants received across local governments are considered. The categories of own-source revenue are discussed in section 3.3. This analysis provides insights into the variation in the different sources of revenue raised by local government. Also explored in this section is the distribution of each revenue source across broadly-defined classes of councils. The level and variation of local government expenditure across different classes of local governments and functional categories are considered in section 3.4.

3.1 Sources of local government data and their limitations

The analysis presented in this chapter, and in the following chapters, is dependent upon the availability of suitable data.² It is important to understand the sources of the data used and their limitations.

Two principal sources of revenue and expenditure data were used for each local government:

- data collected by the State grants commission (SGC) in each jurisdiction, and
- data collected by the ABS (via local governments and the SGCs) as part of its Government Finance Statistics collection.

¹ A detailed analysis of the factors affecting the revenue-raising capacity of councils is reported in chapter 5.

² In appendix C, there is a comprehensive discussion of the sources of data used in this study and their limitations.

At a jurisdictional level, the various SGCs, local government departments and the ABS have developed annual information returns. The SGCs use the data as part of their processes to apportion financial assistance grants to each local government. The ABS uses the data in a range of collections, including the Government Finance Statistics.

The information collected includes:

- financial data that are derived from the council's audited financial statements
- functional data, reflecting the attribution of council revenue and expenditure to various functional areas by councils
- asset values and other data that the SGCs use to develop relativity factors (for example, operational characteristics such as full-time equivalent staff or the number of water and sewerage connections).

The Commission was given access to these data sources and combined them for the purposes of this study. Although these sources of data were the best available, they do have some limitations. Some observations were not used due to detected errors. The number of observations used varied depending on the analysis undertaken in the study. There were a number of difficulties encountered when pooling the data across all councils in Australia.

- A lack of uniformity in the definitions of the revenue and expenditure categories collected across jurisdictions. These arise because of the different functions undertaken by local governments and differences in the legislative frameworks applied across jurisdictions. The provisions in State legislation for rating methods, for example, lead to differences in the reported rating categories and methods of land valuation.
- Inconsistencies in the reporting of similar indicators by local governments, the SGCs and the ABS.
- Inconsistencies between councils in the way they complete their information returns. This might occur due to different interpretations of the definitions of categories or functions.

FINDING 3.1

There are numerous inconsistencies and inaccuracies in the government finance statistics and other statistical series relating to local governments. There is a need for the ABS and various grants commissions to improve the consistency and accuracy of the local government data collections.

Although the data limitations are unlikely to invalidate the broad findings of this study, care needs to be taken in terms of focussing on any individual local government. Consequently, the Commission has reported revenue raising at a more aggregated level. The distributions of revenue categories are presented at the decile level and councils are grouped into broadly-defined classes. Any attempts to define groups at a more disaggregated level would result in small numbers of observations, making inferences about differences across groups less robust, particularly given the inherent measurement errors and other limitations of the data.

3.2 Revenue raised across local governments

A key focus of this study is the revenue-raising capacity of local governments. In this section, the level of revenue currently being collected by local governments across Australia is explored. This provides a basis against which the framework and empirical analysis of revenue-raising capacity (which are presented in chapters 4 and 5) may be assessed.

The level of own-source revenue raised and grants received varies considerably across local governments, as indicated in table 3.1. The lowest level of total revenue collected by a local government was \$0.4 million (Cox Peninsula) and the highest was \$1.6 billion (Brisbane City Council).

Even between the bottom and top 30 per cent of local governments, there is a wide spread in the amount of revenue being raised, the bottom third raised less than \$8.5 million and the top third raised more than \$32.7 million. It should be noted that the deciles presented in each column in table 3.1 (and later tables) are derived independently of those in other columns. The figures should not be summed or compared across columns. For example, the local government whose minimum is reported in column 'Total revenue per person' might not be the same local government whose minimum appears for the other column variables.

The most obvious explanation for the variation in revenue raised is that local governments are of different sizes with different numbers of people living within their boundaries. Populations within local government areas ranged from 127 people in Murchison Shire to 992 176 people in Brisbane City Council in 2005-06. Statistically, there is a strong relationship between the number of people in a local government area and the revenue its council raises. Hence, a large part of the variation in total revenue observed is attributable to different population sizes. In order to explore differences between local governments that are due to factors other than population size, revenue is also presented in per person terms.

Table 3.1 Revenue by councils
2005-06^{a, b}

<i>Deciles and mean</i>	<i>Total revenue</i>	<i>Total revenue per person</i>	<i>Own-source revenue per person</i>	<i>Grants revenue per person</i>	<i>Own-source revenue as a share of total revenue</i>
	\$m	\$	\$	\$	%
Lowest	0.4	479	238	30	8
10 per cent	3.6	751	621	89	42
20 per cent	5.9	992	754	137	52
30 per cent	8.5	1 239	900	211	60
40 per cent	11.8	1 451	1 023	299	65
50 per cent (median)	16.5	1 645	1 168	441	72
60 per cent	22.1	1 946	1 336	653	78
70 per cent	32.7	2 460	1 526	947	82
80 per cent	53.3	3 595	1 812	1 597	86
90 per cent	97.1	5 788	2 579	3 059	91
Highest	1 593.2	37 925	22 492	18 146	98
Mean	38.0	2 822	1 606	1 215	69

^a The deciles presented in each column in this table are derived independently of those in other columns. The figures should not be summed or compared across columns. For example, the local government whose minimum is reported in 'total revenue' might not be the same local government whose minimum appears for the other column variables. ^b Data are based on 627 observations.

Source: ABS unpublished; Productivity Commission calculations.

Although the spread in total revenue is less pronounced in per person terms, there is still a wide variation in the revenue collected across local governments. The local government with the smallest revenue per person is Campbelltown (South Australia), at \$479, and the largest is Diamantina, at \$37 925. Thirty per cent of councils raise less than \$1239 per person and another 30 per cent of councils are raising more than \$2460 per person. The median level of revenue raised is \$1645 per person.

The variation across local governments is further evident when total revenue is divided into own-source revenue and grants revenue. As noted in chapter 2, own-source revenue is that revenue which is within a local government's direct control and includes items such as rates, user fees and charges, fines, reimbursements, developer contributions and interest and dividend income. Once again, there is large variability in the per person own-source revenue raised across local governments. The lowest 30 per cent of local governments raised less than \$900 per person and the highest 30 per cent collected more than \$1526 per person.

This variability is also apparent across the grants revenue that local governments receive from other spheres of government. The lowest 30 per cent of local

governments receive less than \$211 per person in grants funding compared with the upper 30 per cent which receive in excess of \$947 per person.

FINDING 3.2

There is considerable variation, in per person terms, in both own-source revenue raised and grants received by local governments in Australia.

Insights into the significance of own-source revenue can be obtained by examining the ratio of own-source revenue to total revenue from all sources (including grants). For 20 per cent of councils, own-source revenue accounts for more than 86 per cent of their total revenue. For 50 per cent of councils, own-source revenue accounts for at least 72 per cent of their total revenue (table 3.1).

On the other hand, 20 per cent of councils are significantly dependent on grants, which account for at least 48 per cent of their total revenue. A small number of councils (10 per cent) are highly dependent on grants, with grants accounting for more than 58 per cent of their total revenue (table 3.1). However, these councils, represent only about 0.4 per cent of the total resident population of all councils.

FINDING 3.3

For the majority of local governments, own-source revenue is the principal revenue source. However, for 20 per cent of councils, which represent only one per cent of the population, grants account for 48 per cent or more of total revenue.

3.3 Composition of own-source revenue

To gain further insights into why own-source revenue differs across councils, it is useful to examine the variation in the composition of own-source revenue across councils and the variation in the own-source revenue raised by class of council.

The levels of rates, sales of goods and services, interest and other revenue can have important implications for the revenue-raising capacity of councils. The distributions of these revenue-raising sources are shown in table 3.2. The variability between the different components of own-source revenue is evident. In general, rates are the largest source of revenue, followed by sales of goods and services and other revenue. There are also significant differences within the categories.

Some of the factors that might explain these variations, both within and between the categories of revenue, are:

- the size and composition of the rate base (agricultural, commercial, industrial, mining, and residential)

- the composition of services provided and whether the cost of these services are recovered through rates, user fees, fines and developer charges
- the financial position of the council in terms of its accumulated surplus.

Table 3.2 Own-source revenue by councils

2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Rates revenue</i>	<i>Sales of goods and services revenue</i>	<i>Interest revenue</i>	<i>Other revenue</i>
Lowest	–	–	–	–
10 per cent	305	105	12	16
20 per cent	360	157	18	40
30 per cent	398	218	23	64
40 per cent	444	292	31	84
50 per cent (median)	490	375	39	117
60 per cent	538	483	50	150
70 per cent	635	601	64	196
80 per cent	746	790	87	294
90 per cent	1 067	1 213	124	507
Highest	6 453	19 557	846	4 706
Mean	598	717	63	228

^a The deciles presented in each column in this table are derived independently of those in other columns. The figures should not be summed or compared across columns. For example, the local government whose minimum is reported in 'rates revenue' might not be the same local government whose minimum appears for the other column variables. Data are based on 627 observations. ^b Estimates might differ from ABS or other published sources.

Source: ABS unpublished; Productivity Commission calculations.

A way of appreciating how these factors might interplay is to classify local governments in a way that might explain these differences. Not surprisingly, there is no simple way to classify local governments which fully accounts for the variation in the amount of revenue they raise. However, one of the major drivers of differences between local governments appears to be the number of people and the density of people within a local government area. This classification of local governments with respect to the components of own-source revenue is explored below.

A classification system which assists in analysing the differences across local governments with different population sizes and densities is the Australian Classification of Local Government (ACLG) (appendix D). This classification system was used by the Commission to form six groups — capital city, urban developed, urban fringe, urban regional, rural and remote — to analyse the differences in the revenue collected within and across these classes of councils.

Variation in own-source revenue by council class

From table 3.3, it is evident that of all the classes, capital city and remote local governments are raising the most own-source revenue per person, with a median of \$2329 and \$2135, respectively. Urban developed councils raise the least own-source revenue per person, with a median of \$655.

Table 3.3 Own-source revenue of councils by ACLG class
2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	651	423	393	238	400	298
10 per cent	651	533	526	680	827	822
20 per cent	1 504	568	558	790	978	1 119
30 per cent	1 629	606	640	878	1 055	1 388
40 per cent	1 629	634	731	963	1 207	1 750
50 per cent (median)	2 329	655	821	1 044	1 353	2 135
60 per cent	4 123	703	884	1 162	1 501	2 949
70 per cent	4 123	857	1 058	1 287	1 719	3 549
80 per cent	6 065	909	1 193	1 376	1 939	5 369
90 per cent	8 526	1 073	1 476	1 569	2 437	8 256
Highest	8 526	1 720	7 830	3 109	7 332	22 492
Mean	3 547	746	1 088	1 110	1 533	3 764

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 108 observations for urban regional, 301 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources.

Source: ABS unpublished; Productivity Commission calculations.

For 30 per cent of urban fringe councils, own-source revenue per person is \$1058 or more. For 30 per cent of urban regional councils, own-source revenue per person is \$878 or less.

As discussed below, remote councils derive more of their own-source revenue from the sales of goods and services than from rates revenue. Remote councils differ in this respect from the other council classes, for which on average, rates revenue comprises the largest share of own-source revenue. Some of the factors driving these differences are discussed below.

Variation in rates revenue by council class

Capital city local governments are collecting the highest median rates revenue per person (\$1089) (table 3.4). In part, this is because of the larger number of business ratepayers relative to resident ratepayers. This leads to a relatively high

rates revenue per resident in capital cities compared with other local governments. Rural local governments are also collecting notably more than the other classes, with a median rates revenue per person of \$586. This might be attributable to the higher per person expenditure required in these areas, resulting from higher kilometres of road per resident person.

The lowest level of rates per person are being raised by urban fringe and urban developed councils, with median amounts of \$389 and \$429, respectively. There is, however, a significant variation within each class.

Table 3.4 Rates revenue of councils by ACLG class
2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	470	281	262	110	–	–
10 per cent	470	310	290	311	372	–
20 per cent	473	349	311	359	414	–
30 per cent	654	367	332	378	472	20
40 per cent	654	398	358	412	523	206
50 per cent (median)	1 089	429	389	434	586	451
60 per cent	1 666	456	404	473	656	587
70 per cent	1 666	499	442	506	748	944
80 per cent	3 025	515	454	534	927	1 191
90 per cent	3 579	623	473	628	1 133	1 628
Highest	3 579	767	671	1 134	2 212	6 453
Mean	1 565	445	390	454	678	704

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 108 observations for urban regional, 301 observations for rural and 75 observations for remote councils. Of the 75 remote observations, 23 are Indigenous councils that collect no rates revenue. ^b Estimates might differ from ABS or other published sources.

Source: ABS unpublished; Productivity Commission calculations.

Variation in sales of goods and services revenue by council class

Remote local governments collect the highest amount of sales of goods and services revenue per person, with a median of \$1073 (table 3.5). One explanation for this is that remote councils are often the major supplier, sometimes the sole provider, of services in these communities, including services that elsewhere are provided by the private sector or other spheres of government. The remote councils might run the shop, provide employment services and undertake private works. By comparison, urban councils are not required to provide these services due to the greater availability of private suppliers. It might also be partly attributable to the relatively higher cost of services in remote locations; for example, the provision of water and

sewerage in some areas. It might also reflect the differences in the ability to recover the costs of services from fees. For example, the costs of some local government services (such as aerodromes and saleyards) may be fully recoverable from user fees.

Capital city local governments raise the second highest amount per person of sales of goods and services revenue, with a median of \$838. A possible reason for this is that there are a relatively large number of non-residents paying for capital city local government services, such as car parking. It might also reflect the revenue derived from servicing a greater concentration of businesses. For example, more business-based statutory charges might be collected for services such as inspection fees for restaurants and food outlets.

By contrast, urban developed and urban fringe local governments raise the lowest amount of sales of goods and services revenue per person. This might be due to the lower per person costs of service provision and differences in the range of services offered. As there are greater numbers of private providers for recreation, cultural, health and other services, urban councils do not have to provide such services, thereby earning less revenue.

Table 3.5 Sales of goods and services revenue of councils by ACLG class
2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	99	21	36	48	–	21
10 per cent	99	56	72	109	166	237
20 per cent	684	76	87	161	229	348
30 per cent	705	102	116	218	296	501
40 per cent	705	124	144	295	352	762
50 per cent (median)	838	148	165	414	437	1 073
60 per cent	1 557	157	229	504	521	1 461
70 per cent	1 557	201	265	590	655	2 365
80 per cent	2 527	268	487	658	842	3 674
90 per cent	3 400	346	556	745	1 118	6 651
Highest	3 400	643	7 193	2 370	4 576	19 557
Mean	1 401	178	384	432	578	2 463

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 108 observations for urban regional, 301 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources.

Source: ABS unpublished; Productivity Commission calculations.

Variation in 'other revenue' by council class

Capital city councils collect the highest 'other revenue' per person, with a median of \$395, followed by remote councils at \$174 (table 3.6). This revenue category includes various contributions, including developer charges, donations and fines. Urban developed councils raise the least, with a median of \$71 per person. Again, there is considerable variation across councils within each class. In this revenue category, fines are likely to contribute a relatively larger share in capital city and urban developed councils. In terms of rural and remote councils, contributions and donations are likely to account for a relatively large share of 'other revenue'. This includes items such as contributions for private work carried out by councils or work carried out on behalf of the roads and traffic authorities in each State.

Table 3.6 **Other revenue of councils by ACLG class**
2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	51	8	–	2	–	–
10 per cent	51	17	26	34	13	7
20 per cent	102	39	47	62	32	50
30 per cent	330	47	66	84	59	80
40 per cent	330	63	110	109	76	121
50 per cent (median)	395	71	153	131	117	174
60 per cent	501	88	190	171	149	258
70 per cent	501	117	250	198	189	437
80 per cent	794	146	324	270	293	683
90 per cent	923	189	616	393	500	1 134
Highest	923	596	3 515	1 539	3 845	4 706
Mean	442	101	277	182	212	451

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 108 observations for urban regional, 301 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources.

Source: ABS unpublished; Productivity Commission calculations.

Variation in grants revenue by council class

All councils receive some financial assistance from other spheres of government. This includes the minimum grant as part of the Australian Government's general purpose grants and a share of identified road grants. Grants received (current and capital) by classes of local government are reported in table 3.7.

Table 3.7 Grants revenue of councils by ACLG class

2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe^c</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	58	30	49	61	95	468
10 per cent	58	44	85	103	240	1 030
20 per cent	86	54	98	130	362	1 525
30 per cent	101	63	110	179	482	2 724
40 per cent	101	71	123	220	607	3 404
50 per cent (median)	116	79	140	267	746	3 816
60 per cent	176	99	154	295	926	4 709
70 per cent	176	119	167	335	1 187	5 463
80 per cent	227	128	191	416	1 623	6 968
90 per cent	289	169	286	573	2 199	10 841
Highest	289	262	11 519	2 996	6 431	18 146
Mean	151	97	591	315	1 059	4 939

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 108 observations for urban regional, 301 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources. ^c The highest grants revenue per person in the urban fringe councils is Aurukun Shire, located in Cape York (Queensland). It is classed as urban because 90 per cent of the population live in the 'urban' area, defined as a concentration of more than 1000 people.

Source: ABS unpublished; Productivity Commission calculations.

Remote councils receive the highest grants, with a median of \$3816 per person, significantly more than all other council classes. Urban developed councils receive the lowest grants per person, with a median of \$79. In fact, the highest grants per person in urban developed councils (\$262 in Fremantle, Western Australia) are less than the lowest grants per person in remote councils (\$468 in Broome, Western Australia). The significant differences in grants received, in per person terms, between remote and rural councils on one end, and urban councils on the other, are due, in part, to the financial assistance grants being allocated to councils based on assessed need and disadvantage.

FINDING 3.4

Rural and remote councils receive substantial grants on a per person basis. Fifty per cent of remote councils receive grants in excess of \$3816 per person, compared with \$441 per person for 50 per cent of all councils. Ten per cent of remote councils receive in excess of \$10 841 per person, compared with \$3059 per person for 10 per cent of all councils.

3.4 Expenditure of local governments

In this section, data on the expenditure by local governments are presented, along with a discussion of some of the factors that might explain variability in expenditure across councils.

Levels of total expenditure by local government vary substantially (table 3.8). The lowest level of total expenditure by a local government in 2005-06 was \$0.4 million (Cox Peninsula) and the highest was \$1.4 billion (Brisbane City Council).

Table 3.8 **Expenditure by councils**
2005-06^{a, b}

<i>Deciles and mean</i>	<i>Total expenditure</i>	<i>Total expenditure per person</i>	<i>Employee expenses per person</i>	<i>Depreciation expenses per person</i>
	\$m	\$	\$	\$
Lowest	0.4	392	46	nr
10 per cent	3.3	673	246	117
20 per cent	5.3	871	305	165
30 per cent	7.9	1 092	368	229
40 per cent	10.8	1 257	432	286
50 per cent (median)	14.5	1 443	498	343
60 per cent	19.6	1 684	586	414
70 per cent	28.6	2 159	719	551
80 per cent	48.4	3 072	1 067	783
90 per cent	82.1	5 261	1 659	1 357
Highest	1 438.2	33 511	8 970	18 154
Mean	32.8	2 570	860	644

^a The deciles presented in each column in this table are derived independently of those in other columns. The figures should not be summed or compared across columns. For example, the local government whose minimum is reported in 'total expenditure' might not be the same local government whose minimum appears for the other column variables. ^b Data are based on 624 observations. **nr** Not reported due to data deficiencies.

Source: ABS unpublished; Productivity Commission calculations.

There is a wide spread in the expenditure undertaken by councils between the top 30 per cent (at least \$28.6 million per council) and the bottom 30 per cent (\$7.9 million per council or less). The median value of council expenditure was \$14.5 million in 2005-06.

In per person terms, the local government with the lowest expenditure was Kalamunda, at \$392, and the highest was Diamantina, at \$33 511.³ Thirty per cent of councils' expenditure was less than \$1092 per person and another 30 per cent of councils spent more than \$2159 per person.

On average, almost two thirds of expenditure by councils is accounted for by employee expenses and depreciation. As illustrated in table 3.8, for the median council, employee expenses per person (\$498), represented about one third of the total expenditure (\$1443 per person) in 2005-06. Employee expenses, on a per person basis, were greater than depreciation expenses across councils, as grouped by deciles. Depreciation expenses per person varied across deciles and were less than \$783 per person for 80 per cent of councils.

Variation in expenditure by council class

Remote local governments undertake the highest expenditure relative to other classes of councils, with a median of \$6064 per person in 2005-06. Urban developed and urban fringe councils have the lowest median expenditure per person (table 3.9).

There are a variety of factors that contribute to these differences. The costs of delivering services in rural and remote areas are likely to be higher than in urban areas. Smaller local economies are less likely to achieve economies of scale and scope. For example, the NSW Local Government Grants Commission applies a disability factor that recognises the higher per person costs of providing halls, pools and playing fields in smaller communities (NSW LGGC 2006, pp. 45–52). This reflects the minimum overhead costs in service delivery. The fewer people over which to spread these fixed costs, the more expensive per person the service is to deliver.

Some local governments attempt to overcome their small population size and density by forming partnerships to deliver shared services,⁴ or by entering into shared service agreements (for example, in terms of waste management, library

³ Diamantina's population was about 300 in 2005-06. Its own-source revenue was about \$22 500 per person and grants revenue was about \$15 400 per person. Roads (about 1800 kilometres) are one of the major expenditures of the shire.

⁴ For example, the New England Strategic Alliance which consists of Armidale Dumaresq, Guyra, Uralla and Walcha councils, is a cooperative operational group.

services and health).⁵ However, where there are large distances between communities in neighbouring councils, the feasibility of forming a partnership or entering into a shared service arrangement is lower (Dollery and Byrnes, 2005). The ability of such communities to reap scale economies is diminished.

Table 3.9 Total expenditure of councils by ACLG class
2005-06, dollars per person^{a, b}

<i>Deciles and mean</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe^c</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	594	474	392	589	599	1 087
10 per cent	594	555	553	785	1 101	2 061
20 per cent	1 450	598	600	919	1 278	2 869
30 per cent	1 742	636	644	994	1 434	4 012
40 per cent	1 742	693	701	1 126	1 612	5 123
50 per cent (median)	1 751	714	736	1 210	1 775	6 064
60 per cent	4 027	744	805	1 261	2 100	8 187
70 per cent	4 027	826	968	1 371	2 551	9 695
80 per cent	6 046	931	1 086	1 448	3 072	11 499
90 per cent	6 288	1 029	1 309	1 641	4 146	17 144
Highest	6 288	1 924	19 301	5 522	10 009	33 511
Mean	3 128	774	1 457	1 254	2 285	8 334

^a Data based on 7 observations for capital city, 86 observations for urban developed, 50 observations for urban fringe, 107 observations for urban regional, 299 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources. ^c The highest expenditure per person in the urban fringe councils is Aurukun Shire, located in Cape York (Queensland). It is classed as urban because 90 per cent of the population live in the 'urban' area, defined as a concentration of more than 1000 people.

Source: ABS unpublished; Productivity Commission calculations.

Additionally, as a result of their location, more remote local governments are likely to have higher unit costs of purchasing materials and services. The further they are from large urban centres, the higher the transport costs of materials. There might also be a greater need to pay a premium on wages and salaries in order to attract staff to the area (Australian Chief Executive Officers Group, sub. 18; Municipal Association of Victoria, sub. 22).

⁵ An example of a local government undertaking such agreements is the Town of Walkerville in South Australia (Dollery and Byrnes, 2005). For instance, the Town of Walkerville entered into agreements for waste management with a number of councils, including Burnside and Adelaide Hills. Home care services are provided in cooperation with the City of Prospect.

Variation in expenditure by function

Local government expenditure by function is illustrated in table 3.10 (in per person terms). There is variation in expenditure within functions and services across ACLG classes, as well as across functions and services within each council class.

Transport and communication expenditure (primarily expenditure on roads) is the largest in remote councils, at \$1584 per person, followed by \$664 per person in rural councils. Transport and communication is also the largest per person expenditure function in remote councils. On the other hand, expenditure per person on transport and communication is relatively low in urban developed councils (\$120) and urban fringe councils (\$160).

Table 3.10 Local government expenditure by function and ACLG class
2005-06, dollars per person, median values^{a, b}

<i>Function</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Transport and communications	419	120	160	263	664	1 584
Housing and community amenities	590	150	183	259	295	761
General public services	298	126	105	175	287	1 115
Recreation and culture	409	148	132	157	172	289
Health	20	8	9	11	26	258
Social security and welfare	50	38	24	30	21	195
Education	10	3	9	3	5	65
Public order and safety	14	14	16	17	17	32
Other ^c	405	31	40	83	105	341

^a Data based on 7 observations for capital city, 86 observations for Urban developed, 50 observations for urban fringe, 107 observations for urban regional, 299 observations for rural and 75 observations for remote councils. ^b Estimates might differ from ABS or other published sources. ^c 'Other' includes expenditures not classified elsewhere, including fuel and energy, agriculture, forestry and mining.

Source: ABS unpublished; Productivity Commission calculations.

Expenditure on recreation and culture includes public halls and civic centres, swimming pools, libraries, museums and other. In urban developed councils, at \$148 per person, it is the second largest expenditure function. Although broadly similar expenditure per person is observable in urban regional councils, per person expenditure for this council class on recreation and culture is considerably lower than expenditure on other functions such as housing and community services.

The housing and community amenities function includes the provision of water and sewerage services. As noted in chapter 2, these services are provided by local governments in some jurisdictions. As such, the values for this function across ACLG classes should be interpreted carefully.

The figures for capital cities should be also considered cautiously due to the unique nature of capital city councils, as well as the variability within this class. For example, there are only seven capital cities and their rate base has a large business component. Services are provided (and revenue raised) from non-residents and there is a relatively smaller resident population. Per person expenditure (and revenue) figures may be misleading.⁶

There is evidence from submissions to suggest that different service mixes are undertaken by rural and remote local governments compared with their urban counterparts, which then leads to different revenue requirements. This is also partly observable from table 3.10. For example, rural and remote local governments have more kilometres of road per person to be maintained (as noted earlier). In Victoria, road expenditure per person for rural councils is \$406, on average, compared with \$102 in urban councils. Furthermore, this road expenditure accounts for 43 per cent of rural councils' total expenditure compared with 20 per cent for urban councils (Victorian Farmers Federation, sub. 31). In 2005-06, there were 67 councils across Australia for which more than half of their total expenditure was allocated to transport and communication services. The majority were remote councils.

As noted, rural and remote local governments appear to provide a broader range of services than urban local governments as they fill service gaps that would be undertaken by other spheres of government or the private sector in urban areas (Australian Chief Executive Officers Group, sub. 18). For example, in response to community needs, some rural and remote local governments operate aerodromes so that their community can access fly-in medical care. A small number of councils, for example, in rural and remote Western Australia, provide funding for local general practitioner services. The undertaking of a broader range of services, in combination with the increased road spending, partly explains the higher total expenditure per person and hence the higher revenue requirement per person in rural and remote councils.

FINDING 3.5

Expenditure per person varies considerably across councils. Rural and remote councils have higher expenditure per person, on average, compared with urban councils. This is largely explained by the inability of rural and remote councils to capture scale economies, having to pay higher input costs, maintaining more kilometres of roads per person and undertaking a relatively more extensive service mix.

⁶ This is less applicable for Brisbane City Council.

4 Defining revenue-raising capacity

Key points

- The revenue-raising capacity of local governments depends in substantial measure on the ability of their communities to pay for local government services.
- A comprehensive measure of the after-tax aggregate disposable income of a community is the most appropriate indicator of its ability to pay and hence of the fiscal capacity of its local government.
- However, measures of fiscal capacity are not reliable indicators of the level of revenue that local governments do, or should, raise. The willingness of the community to pay for local government services is the principal determinant of the revenue actually raised.
- There are major challenges associated with undertaking an empirical study of the revenue-raising capacity of local governments. These arise from the diversity of councils in terms of their characteristics, systems of rates, user fees and charges, the mix of goods and services they provide, the fiscal capacity of local governments and the willingness of the community to pay.
 - The Commission has adopted a pragmatic approach to undertaking an empirical analysis of the principal factors that determine the own-source revenues actually raised by different local governments.
 - This approach enables an analysis of the potential for local governments to raise additional revenue by ‘benchmarking’ each local government’s revenue-raising effort against that of all others, adjusting for the principal factors that explain the own-source revenue raised.

The Commission has been asked to assess the revenue-raising capacity of local governments in Australia. In this chapter, the meanings that can be attached to the term ‘capacity’ in the context of this study are explored. There are two broad conceptual approaches that can be taken to defining and analysing the term *capacity to raise revenue*. The first is based on the concept of a community’s *ability to pay* for local government goods and services, also referred to as its *fiscal capacity*. The second is based on the concept of a community’s *willingness to pay* for these services.

4.1 Fiscal capacity

The concept of an *individual's* ability (capacity) to pay for public services has a long-established meaning in public sector economics literature. It is often used in analysing the distribution of the burden of taxes and charges levied to fund public services (Musgrave and Musgrave 1989).

The generally accepted view is that a comprehensive measure of the income of a person (or household or business) is the best indicator of their ability to pay taxes and charges. Those with higher incomes have a greater ability to pay than others.

It is a natural extension of this concept to suggest that the aggregate income of a community is an indicator of that community's ability to pay for local government services. The higher the aggregate income of a community, the higher the ability to pay for local government services, and hence the higher the potential for its local government to raise revenue. It has become common for this indicator of a local government's potential to raise revenue — aggregate community income — to be referred to as its fiscal capacity. (Barro 2002; Bradbury and Ladd 1985; Musgrave and Musgrave 1989).

The fiscal capacities of local governments depend, to a large extent, on the underlying characteristics affecting the aggregate income of their local community. Some characteristics include population size and demographic attributes of the population, as well as their natural resource endowments and the nature and scale of their economic activity.¹ For example, a local government area with a higher proportion of its residents not in the labour force (such as those below and above working age, students and retirees) would have a lower aggregate community income compared with other council areas, all else being equal. Aggregate community incomes in some local government areas might be associated with the value of agricultural or mining output, or the concentration of business and industrial properties, within an area.

The fiscal capacity of a local government can be influenced by factors other than the aggregate income of its community. A council encompassing a central business district might have a fiscal capacity that exceeds the income of its local residents and businesses because non-resident workers, shoppers and visitors pay for the use of some of its facilities (for example, car parking and swimming pools). In holiday destinations, rates revenue may be raised from holiday homes owned by non-residents. Moreover, fees and charges for local services might be paid by

¹ Some of these characteristics might be partly dependent on the activities undertaken by local governments. Taxing and spending policies, for example, might influence the attractiveness of the area to individuals and businesses, at the margin.

non-residents (holiday home-owners or renters). However, for present purposes, these complications are set aside. Some are further considered in the analysis presented in chapter 5.

The measure of fiscal capacity used in this study is assumed to be independent of the level of revenue actually raised by a local government from rates, fees and charges. This is done in order to distinguish analytically between the capacity of the local government to raise revenue and its choices about how much revenue to generate through its fiscal effort (Barro 1986, 2002).

Income is an appropriate indicator of fiscal capacity

Income is a more appropriate indicator of the fiscal capacity of a local government than the rateable value of land. This is recognised not only in the economics literature (Collins 1987 and Barro 2002), but also in other studies by the Commonwealth Grants Commission (CGC) (1991) and Morton Consulting Services (1996). Some of the key arguments for using income or land values as the bases for indicators of fiscal capacity are summarised in box 4.1.

Although obtaining fully comprehensive measures of income at the local government level is difficult, the arguments in support of using income as an indicator are more compelling than those in support of using property values. This includes the fact that a substantially large proportion of local governments' own-source revenue, at a national level, is from fees and charges (as illustrated in chapter 2).

Moreover, the reality is that ratepayers pay their rates and charges out of their incomes and probably think in those terms when confronted with their rates notices (Caulfield 2000). Indeed, local governments, at least implicitly, acknowledge this when they set their rates, fees and charges. Councils are required under State legislation to provide concessions to pensioners, and also voluntarily offer their own concessions to people facing hardship in paying rates. In times of rapidly rising property values, councils often decrease the rate in the dollar, so as to reduce the revenue raised to match the revenue required to fund the budget.

Box 4.1 Propositions for using either income or property values as bases for indicators of fiscal capacity

In its *Report on the Interstate Distribution of General Purpose Grants for Local Government (1991)*, the Commonwealth Grants Commission presented the views of parties relating to the use of income or the value of rateable land as bases for indicators of revenue-raising capacity. The context of the discussion was to assess standardised revenue for the purpose of distributing grants to local governments. The arguments that supported income as an appropriate indicator were that:

- local government rates are set in accordance with expenditure requirements, determined through the local government budget process, and not in reference to property values
- households and businesses pay local government rates from their income. Ability to pay does not increase proportionally with increases in property values
- the increasing use of fixed charges for services, such as garbage collection, and the use of a raft of other fees and charges, is weakening the relationship between land and property values and the revenue raising of a local government. This is largely because the costs of providing such services generally do not vary in line with changes in property values
- the locational decisions of businesses are less likely to be distorted when income is used to assess revenue-raising capacity.

The propositions that supported property values as an appropriate indicator were that:

- property values reflect both the wealth and income of residents and are therefore a better indicator of ability to pay
- economic theory suggests that, in an efficient property market, at least in the long run, property values should be correlated with the expected return on holding the asset. Therefore, higher property values would imply higher returns and ability to pay
- using property values to assess ability to pay overcomes some of the practical difficulties in obtaining suitable measures of income.

Source: Based on CGC (1991).

Although there is likely to be a link between property values and incomes, property values are an imperfect and incomplete indicator of the incomes of residents and hence of their ability to pay rates.

A number of participants to this study support the view that the principal determinant of a council's revenue-raising capacity is the income of its community.

The Local Government Association of Queensland (sub. 11, p. 3) stated:

It is important that the Productivity Commission recognises that growth in the overall value of property does not determine revenue-raising capacity. It is the recurrent resources available to each sector of the economy to meet the rate impost that has a significant bearing on revenue capacity.

Similarly, the Launceston Municipal Ratepayers and Residents Association (sub. 10, p. 6) commented:

This association submits that in examining the capacity of different types of councils to raise revenue, the income of the community should be a central indicator of such capacity.

All things considered, the Commission considers that the appropriate indicator of fiscal capacity for each council in the context of this study is the aggregate income of its local community. Ultimately, it is the incomes of individuals in local communities that constrain the choices they face between consuming public or private sector goods and services.

The most appropriate indicator is based on a comprehensive measure of income. This includes income from all sources, such as wages, salaries, interest, dividends, imputed income from housing ownership, and capital gains on assets (whether realised or not). It also includes all business income (such as retained earnings) that has not been paid to residents in the form of dividends (Barro 2002; Musgrave and Musgrave 1989).

People and businesses in local government areas pay taxes and charges to other spheres of government and receive income from outside the local area (including welfare and other transfer payments from the Australian and State Governments). In principle, the indicator of a community's ability to pay for local government services should be based on disposable income, net of other taxes and charges.

However, a complete quantification of a broad measure of income disaggregated down to the level of local government areas is not available in existing data collections. In practice, it is necessary to use incomplete measures of disposable income, as explained in chapter 5.

Comparison with State grants commission's approaches

The approach to defining and measuring fiscal capacity in this study is different from that used by State grants commissions (SGCs) to estimate relative revenue-raising capacity (box 4.2).

There are two key differences to note. First, the relative revenue-raising capacity of local governments estimated by SGCs is based on a State's average level of rates (and fees and charges in some cases). This definition of revenue-raising capacity is applied in order to distribute grants without discriminating against councils in relation to their actual revenue-raising effort.

In contrast, for the purpose of this study, revenue raising is examined in the context of the policy choices available to local governments.

Box 4.2 Concept of relative revenue-raising capacity applied by the State grants commissions

The concept of fiscal capacity adopted in this study differs from the concept of relative revenue-raising capacity applied by the State grants commissions. Although the precise methodology applied by each of the Commissions differs across jurisdictions, the relative capacity to raise revenue is assessed for each council relative to a State average for all councils. This approach is employed because the policy for distributing Australian Government General Purpose Grants explicitly requires that grants be allocated on an effort neutral basis and should not discriminate between local governments on the basis of their policy choices, which affect both revenue raising and expenditure.

In New South Wales, for example, the NSW Local Government Grants Commission determines each council's relative revenue-raising capacity by multiplying the difference between the state average value per property and the council's actual value per property by the state average rate-in-the-dollar and the number of properties. Councils with low values per property relative to the State's average are assessed as having lower revenue-raising capacity.

In the case of Victoria, standardised revenue for each council is determined as standardised rates revenue plus standardised fees and charges revenue, reflecting the fact that councils also raise own-source revenue from fees and charges. Standardised rates revenue is calculated for each council by multiplying its valuation base (on a capital improved value basis) by the average rate across all Victorian councils, and, where applicable, adding payments received by the council in lieu of rates. In the calculation of standardised fees and charges revenue for each council, for each of nine functional areas, the relevant driver (such as population) is multiplied by the state median revenue from user fees and charges. For some functions, this is then modified by a series of revenue adjustors to take account of differences between councils based on characteristics which affect their capacity to generate revenue from fees and charges. The revenue-raising capacity from fees and charges is assessed on an effort neutral basis, using the State's average fee level per unit (usually per person).

Source: NSW LGGC (2007); VGC (2006).

The second difference is in the choice of base used to calculate relative revenue-raising capacity and to measure fiscal effort.² In the case of the SGCs, the bases are the rateable value of land (and population, in some cases where non-rates revenue-raising capacity is assessed). This practice might stem from the fact that local governments can only tax rateable land, not the incomes of their ratepayers directly. Moreover, local governments do not have ready access to data on the incomes of individual residents and might be somewhat limited in the degree to which they are permitted to apply differential rates in the dollar. In this study, fiscal capacity is measured by a community's disposable (after income tax) aggregate income.

Evaluating observed revenue-raising effort

As pointed out in chapter 2, the actual revenue raised by local governments is small relative to any indicator of the ability of local communities to pay for local government services. The average revenue-raising effort, measured by dividing actual revenue raised by fiscal capacity (income), is relatively low. At a national level, the own-source revenue raised by local governments was about \$977 per person in 2005-06, representing a share of GDP per person of about 2.1 per cent and a share of aggregate disposable household income per person of about 3.3 per cent. The share of rates revenue of GDP was about 0.9 per cent.

Given the relatively low value of the indicator of effort at the national level, a question arises as to the usefulness, in practice, of interpreting fiscal capacity as an indicator of the potential for local governments to raise revenue.³ A pertinent issue for this study is to what extent it might be possible for local governments to raise additional revenue from their own sources, if they so choose. It might be possible for local governments to increase revenue-raising effort from relatively low levels. However, it is unrealistic to suppose that councils could, or should, increase revenue-raising effort to levels approaching fiscal capacity.

Indicators of fiscal capacity do not represent the actual revenue a local government does, or should, raise, taking into account the community's willingness to pay (discussed in the next section) or its expenditure requirements. It is important to note that an observed low level of revenue-raising effort for a council in a high income area does not necessarily indicate that it should, for example, raise its rates. Nor does a high measure of revenue-raising effort imply that rates should

² Fiscal effort is defined as the ratio of revenue raised to some base measure.

³ The concept of ability to pay is relevant to the consideration of the impacts of revenue raising on 'individuals, businesses and organisations', where equity issues are important. This is explored in chapter 7.

necessarily be lowered. As noted by Teera and Hudson in considering revenue-raising effort at a national level (2004, p. 797):

... such decisions should emerge from careful consideration of expenditure needs, alternative sources of finance, the effects of the particular taxes that would be changed, administrative capacity, and the political acceptability of the program.

4.2 Willingness to pay

The second, rather different, concept of the capacity of a local government to raise revenue focuses on the willingness of a community to pay for local government goods and services, rather than its ability to do so. The two concepts are not entirely unrelated. Communities with higher incomes might have a higher demand, and hence willingness to pay, for at least some local government services. However, the increase in demand might be less than proportional to the increase in incomes. For example, ratepayers might choose to construct their own backyard swimming pool as their disposable income rises, rather than use the community swimming pool provided by the council. In addition, as a council endeavours to expand the range and quality of its services, it might find that many of its ratepayers are unwilling to pay for them through higher rates or user fees. This is an indication that they prefer to devote their remaining disposable incomes to private consumption rather than to additional services offered by the council.

In the situation where a council applies user fees and charges for services for which the user has discretion over consumption, the willingness to pay of individuals is revealed by the choices they make. The aggregate demand curves for such goods and services reflect the quantities that a council can sell at different prices. The price represents the marginal willingness of members of the local community to pay for the various quantities supplied by the council. This demand curve can be estimated from observed outcomes using knowledge about the key factors determining demand, which include:

- the income of the local community (ability to pay)
- the preferences of the local community for the consumption bundle of goods and services offered by the council, on a user pays basis, and all other private goods
- the prices paid for goods and services offered by councils relative to the prices paid for all other private goods and services.

However, for local government services that are paid for through rates, rather than directly through fees and charges, measuring the willingness of a community to pay is not so easily achieved.

Willingness to pay and public goods and services

There are some goods and services provided by local governments — so-called public goods and services — that private sector markets are not able to provide, or are not able to do so at optimal levels. Examples include the provision of local roads and parks and gardens. Individuals benefit from the provision of public goods whether they pay for them or not. Consequently, individuals have little incentive to reveal their willingness to pay and, in fact, have incentives to understate their true preferences.

Local governments use rates (their taxing power) to recover the costs of providing public goods and services and political processes are relied upon to signal the willingness to pay of the community. Options for signalling preferences by residents include voting and (potentially) moving, forming pressure groups, writing letters, complaining to council, responding to community or user surveys and lobbying the Australian and State Governments (Dollery, Crase and Johnson 2006).

The idea that resident-voters might reveal their preferences for local government services by ‘voting with their feet’ (moving) was originally proposed by Tiebout (1956). There are a number of assumptions necessary for this hypothesis to hold. Nonetheless, it suggests that the level of local government services and rates might influence property values and therefore affect residential and business location decisions across councils (Bailey 1999). It is likely that this hypothesis is more relevant to countries such as the United States, where local governments have responsibility for services such as education, police and fire services that more significantly affect property values in an area.

Conceptually, the observed revenue-raising effort of different local governments can be seen as being determined by councillors on behalf of their ratepayers. This may involve them choosing from a menu of options, offered to them by council managers, for various levels and mixes of services and associated expenditure, and the prices (rates, fees and charges) required to recover the expenditure. The outcome of this process can be thought of as being a sort of equilibrium arising from the interaction of demand of the community and the supply of services by the council.

The value people and businesses place on consuming public goods, their willingness to pay, is driven by the same factors that drive their demands for private goods and services — incomes (ability to pay), the preferences for public and private goods and services, and their relative costs.

In practice, the level of revenue that a local government can raise from its community is likely to be dependent on what the community wants the council to

provide. Some participants to this study have made this point. As noted by the City of Boroondara (sub. 24, p. 6):

... The total required rates revenue is determined by the individual local government's assessment of the required operating and capital expenditure required to adequately deliver its stated objectives and to meet identified community need. ... It is not the size of the tax base that matters but the willingness of the local government to increase its tax collected measured against the capacity of the community to pay.

The capacity of local governments to raise rates revenue can be constrained by the ability and willingness of ratepayers to pay in the lowest income group. This is because, within ratepayer classes, such as residential, local governments are required to apply a uniform rate structure across all ratepayers. This can reduce the scope for councils to discriminate between ratepayers with different incomes (where income information is available to councils), thus lowering the overall potential to raise revenue from rates. However, local governments have a variety of instruments they can use to at least partially reduce this apparent constraint. They can give additional concessions or rebates to pensioners to facilitate a higher rate-in-the-dollar on higher income residents. They can also apply a minimum rate to some and a higher rate-in-the-dollar to others. In some States, relatively flexible differential rating provisions might mitigate, to some extent, constraints that arise from uniform rating structures.

The NT Government (sub. 46, p. 3) noted that factors affecting revenue raising are likely to include:

- barriers or constraints from legislation
- human and physical resources available to local governments
- the capacities and willingness of residents, organisations and businesses to pay
- the benefits derived from delivery of a service.

The willingness of local communities to pay and other factors are likely to constrain the level of revenue raised by councils (and expenditure) to well below that implied by indicators of fiscal capacity. Indeed, it is likely to be these factors that explain the observed modest level of revenue-raising effort by councils, noted earlier.

Interpretation of observed levels of rates revenue

There is an issue in interpreting the observed outcomes of local government revenue raising and provision of goods and services. This is the extent to which the outcomes reflect the willingness of the community to pay for its public goods and services. The key question is whether or not institutional arrangements and political considerations lead to outcomes that fully reflect community preferences.

There are a number of mechanisms put forward to support the proposition that local governments are guided towards effectively meeting the demands of their local communities. First, there is the theoretical concept of competition between local governments arising from the potential for resident-voters to move between councils (Dollery, Crase and Johnson 2006). Competition between councils can drive councils towards offering rates–service bundles that better meet the demands of their local communities, particularly where there is a large number of competing local governments in the same metropolitan area (Bailey 1999).

A second mechanism put forward is the ability of the residents of a council to signal their preferences through democratic and administrative mechanisms, as mentioned previously. The democratic, governance and managerial processes of councils help shape their expenditure and revenue decisions. Being smaller in size than other levels of government, local governments are said to be ‘closer’ to the people in their communities. This can improve the scope for resident-voters to reveal their preferences by shortening communication channels and promoting the expression of voice by residents. This might be facilitated by councils:

- providing opportunities for users of public services to participate in decision making
- increasing consultation (with community groups and local organisations)
- establishing complaints procedures (Bailey 1999).

It is recognised that the governance or administrative arrangements required to achieve the optimal mix of rates and service provision vary across different types of councils. For example, Local Government Managers Australia (sub. 61, p. 14) submitted:

... where special remote community circumstances exist due to large area/remoteness/low population ... separate administrative, governance and financial arrangements and systems should be applied that are specifically designed for the democratic rights and service needs of such remote areas/communities.

There is evidence of local governments using a number of means to identify and respond to the demands of their communities. For example, the Best Value Policy, introduced in Victoria in 1999, aims to ensure that councils are accountable and responsive to the needs of local communities. The policy incorporates a number of principles, including that local governments measure and report on their performance against objectives set by the council in consultation with its community (PwC 2006).

In contrast to these mechanisms which help local government meet the preferences of their communities, there is also literature that points to the potential weaknesses of local government political processes, which suggests that they might not achieve

fully efficient outcomes (Byrnes and Dollery 2002). Some of the shortcomings include:

- voter apathy (whereby voters do not take an active and informed interest in the activities and operations of local government)
- asymmetric information between ratepayers and users of council services, councillors, management and staff about the costs and benefits of goods and services provided by councils
- councillor ‘capture’ (whereby council decisions are swayed by groups with vested interests)
- political entrepreneurship by councillors and management who use resources in an inefficient way to attract the attention of voters (whereby holding office is seen as a means of promoting a career in politics) (Dollery, Crase and Byrnes 2006).

Another shortcoming might include a lack of management skills of elected councillors, managers and staff — those who are inexperienced or do not possess the skills appropriate to the financial management of a council.

Some participants to this study have suggested that they do not consider that councils effectively assess community preferences regarding services. The Vacluse Progress Association (sub. 7, p. 2) stated:

The assessment of community needs by councils is theoretically the avenue through which new or different services appear on council menus. In Woollahra, we have observed a consistent thread of inquiry in community surveys undertaken for and by the Council, in which respondents are invited to nominate things/services they want. While the responses are often of interest, they are generally made in a financial vacuum: the surveys do not typically postulate a user charge, or a rate increment or other indicator of cost/funding, and so the responses by participants are simply wish lists. Nevertheless, such outcomes are frequently presented to and by the Council as needs and adopted by the Council, with resultant pressure on council financial resources.

Similarly, the Launceston Municipal Ratepayers’ and Residents’ Association (sub. 10, pp. 17–18) suggested that there is not always a link between the services offered and the community’s willingness to pay. It stated:

LCC [Launceston City Council] goes through the motions of ‘community consultation’ and surveys community satisfaction with council initiatives. The instruments used to poll the community are often designed to come up with a predetermined answer. ... The nature and structure of the questions is such that council can choose how to interpret results to support its argument for increased expenditure. Either ‘the community is satisfied, we can spend more’, or ‘the community is unsatisfied, we must spend more’. In the Community Survey, there is no attempt to temper the community’s wants with a financial aspect, no user charge, or a possible rate increment is mentioned.

A number of principles to guide revenue raising and council decision making that can help the political process to achieve more efficient outcomes based on the willingness to pay of the community are discussed in chapter 8.

4.3 Comparisons of the relative potential to raise revenue

A key issue for this study is to identify the principal factors that explain the revenue raised by different local governments and to assess the extent to which local governments can raise additional revenue. The Commission cannot tell whether observed revenue-raising levels reflect the true underlying preferences of communities or are distorted by features inherent in political decision-making processes. As a consequence, it has no alternative but to presume that the observed revenue-raising efforts of local governments at least approximate the underlying preferences of their communities.

Clearly, ultimately the observed revenue-raising efforts of local governments are driven by the demands of their communities for local government services. However, there are reasons why it is difficult to estimate directly the extent to which various characteristics of communities ‘explain’ differences in observed revenue-raising efforts. Among other things, this is because of:

- the difficulty in linking the rates paid by local residents to the services they use, which means there is no observable price for each of the services used
- the substantial variation in the mixes and levels of goods and services provided by councils
- the complexity and variation across councils in the system of rates, and of user fees and charges, levied by councils
- the limitations of the data available.

Because of these difficulties the Commission has adopted a pragmatic approach to attempting to estimate the extent to which various factors explain the revenue raised by different local governments. The approach also provides a basis for assessing the extent to which local governments might have the capacity to raise additional revenue. This involves undertaking a comparative analysis of relative revenue raised by councils. This type of comparative analysis has been widely applied to study the relative tax performance of countries.⁴ The idea is that the revenue raising (and expenditure decisions) of local governments reflect a number of factors that

⁴ See Davoodi and Grigorian (2007), Teera and Hudson (2004), Bird, Martinez-Vazquez and Torgler (2004), Piancastelli (2001) and Leuthold (1991).

tend to be beyond the control of local governments. Examples of these factors include:

- the income of the local community
- the geographical location, or type of, local government (for example, whether the council is classified as capital city, urban, rural, or remote)
- legislative frameworks (for example, rate pegging is practised in New South Wales)
- the relative costs incurred by councils which, among other things, is influenced by the delivery of certain services (for example, some councils are required to provide water and sewerage services in Queensland, Tasmania and in parts of New South Wales)
- the demographic and other social attributes of the local community (for example, the age distribution or ethnic composition of the local community)
- other economic attributes of the local economy, such as:
 - the economic base of the local economy (for example, capital city councils have higher observed levels of revenue per person because they generally have small resident populations and a significant proportion of their revenue is sourced from rates and fees paid by businesses and from non-residents who work, shop or visit in the city)
 - the rate of economic growth of the region and the level of grants received from other spheres of government.

These factors are likely to influence the expenditure on services provided by local governments and their ability to raise revenue from their local communities. To illustrate, the South Australian Centre for Economic Studies (2002, p. 20) commented:

In inner metropolitan areas which are experiencing urban regeneration and an influx of younger, higher income households, there is probably a greater willingness to pay for enhanced public services.

Statistical analysis, such as regression techniques, can be applied to determine the factors that best explain variations in revenue raised between councils. Such an approach can also be extended to develop indices of the potential to raise additional revenue. These indices could be derived by comparing the revenue raised by councils with similar attributes, that is, ‘controlling’ for the identified factors affecting revenue raised. If, after allowing for these factors, a council raises less revenue than the hypothetical benchmark, this evidence can be taken to be an indication that there is potential for a council to raise additional revenue.

This type of index could be developed by applying stochastic frontier techniques. An indication of the potential to raise additional revenue does not mean that councils *should* raise additional revenue.

The analysis of revenue-raising capacity in this study includes approaches based on both the indicator of fiscal capacity and comparisons of the potential to raise revenue. The analysis is set out in chapter 5 and appendix C.

5 Comparisons of revenue-raising capacity

Key points

- Fiscal capacity, as measured by communities' aggregate incomes, differs significantly across classes of local government. Capital city councils have the highest fiscal capacities and urban fringe councils the lowest, on average.
 - These averages mask considerable variation within classes of councils. Though remote councils have relatively high fiscal capacities on average, many have fiscal capacities that are below the national average, for example.
- Revenue-raising effort (the extent to which a council draws on its fiscal capacity), also differs across classes of local governments. Urban developed and urban fringe councils tend to draw lightly on their fiscal capacity. Urban regional, rural and remote councils draw relatively heavily on their fiscal capacity.
- The factors that have the greatest bearing on the own-source revenue per person raised by local governments include:
 - the after-tax income of their communities (personal and business)
 - key attributes driving expenditure (such as the length of the local road network, the number of properties served, whether water and sewerage services are supplied, and whether the council is experiencing rapid population growth or decline).
- Communities with larger populations tend to raise less own-source revenue per person because they are able to achieve economies of scale in the delivery of some services.
- Each local government, when benchmarked against all others adjusting for differences in key characteristics, is assessed to have some potential to raise additional own-source revenue. An indicative estimate is that, on average, own-source revenue could be raised by about 12 per cent, or about \$140 per person.
 - This would increase local government cost recovery from own-source revenue from 76 to 87 per cent, on average across Australia, assuming no matching increase in expenditure.
- However, the majority of rural and remote local governments would remain highly dependent on Australian and State government grants.
- Although this analysis indicates that councils have an assessed capacity to raise additional own-source revenue, this does *not* imply that local governments *should* increase their revenue-raising effort.

A key task for this study is to examine the revenue-raising capacity of local governments across their various classes, and the factors affecting their capacity to raise revenue. A conceptual framework was developed in chapter 4. In this chapter, a review of some of the factors that might influence the revenue raised by local governments is presented. Empirical estimates of the extent to which those factors affect revenue-raising capacity and the scope for councils to raise *additional* own-source revenue are also presented.

One of the factors affecting the revenue-raising capacity of a local government is its fiscal capacity. Evidence is presented on the fiscal capacities of local governments, as measured by the aggregate income of their local communities, in section 5.1.

However, aggregate income is only one of a number of factors that influence the revenue actually raised by local governments to fund services. In section 5.2, comparisons of the revenue-raising effort across local governments suggest that factors other than income are also important.

A statistical analysis is undertaken to investigate the potential influence of a range of factors that might explain the levels of revenue raised by different local governments. A review of possible factors is presented in section 5.3. The statistical analysis of these factors is presented in section 5.4.

The analysis of the factors on their own does not indicate whether councils have the potential to raise *additional* revenue, given their particular circumstances. To examine this matter, the statistical analysis of revenue raised is extended. An index is calculated for each local government that measures the extent to which it is able to raise additional own-source revenue. Each council's index is derived by comparing the local council's own-source revenue with that of all other councils, after adjusting for systematic differences due to a range of factors including the classes of local governments. The results are presented in section 5.5.

The financial implications of a hypothetical increase in own-source revenue are provided in section 5.6. This analysis is presented for illustrative purposes only. It does not imply that local governments *should* increase their own-source revenue or that their communities would support them doing so.

Before proceeding, there is a note of caution required about the analysis presented in this chapter. In order to undertake the analysis, the Commission has pooled the best available data from a variety of sources. However, the data do have limitations, as outlined in chapter 3 and appendix C. Data were not available for all local governments and, in a number of cases, there were limitations in the available data. This has meant that a number of local governments were excluded from the data set.

Many of these were remote local governments.¹ In applying the framework and statistical techniques, many assumptions were required. Given this, the results should be interpreted as indicative, not definitive.

5.1 Fiscal capacity

One factor affecting the ability of a local government to raise revenue is its fiscal capacity. The best indicator of fiscal capacity is the aggregate after-tax income of the local community, as explained in chapter 4. As a community's income increases so does the fiscal capacity of its local government.

As also stated in chapter 4, the indicator of the income of a community should be broadly defined. It is broader than normal definitions of personal income, in that it ideally includes all income that is actually or potentially available to the community. It includes personal income, retained corporate earnings, unrealised capital gains and imputed returns on assets (including from home ownership).

In practice, measures of fiscal capacity are not published at the local government level. Gross product (value added), for example, would provide a comprehensive, though not complete, indicator of the income generated in a local area as it is a measure of profits, wages and salaries. Although a measure of gross product is available at the national level (as gross domestic product) and state level (as gross state product), it is not available at the local government level (Bureau of Transport and Regional Economics [BTRE] 2005).

In the absence of such measures, it is necessary to estimate the aggregate income of each local government area. For the purpose of this study, an indicator of income is constructed using information about the aggregate taxable personal income, the imputed return from the ownership of dwellings and the gross operating surplus (GOS) of businesses in each local government area.²

¹ The full data set covers 3330 observations covering 666 local government bodies over five years (appendix C). After excluding unreliable observations, the final data set comprises about 2872 observations representing about 573 councils although not all local governments are represented in every year. (The exact number of observations and councils reported in this study varies according to the different types of analyses undertaken.) About 40 per cent of the local governments excluded from the analyses were remote. Other local governments for which reliable data were not available were small urban fringe and small urban regional councils (appendix C).

² GOS is equal to the income of incorporated enterprises less their operating expenses (including wages and salaries), but not depreciation, interest and company income taxes.

Personal incomes

The Commission's estimate of after-tax personal income is equal to the aggregate taxable income (ATI) based on Australian Tax Office (ATO) data from personal income tax returns), plus an estimate of the return from the ownership of dwellings (as reported by the Australian Bureau of Statistics [ABS]) less personal income taxes. Taxes are deducted for both actual income and imputed income. According to the BTRE³ (2005, p.2), real ATI:

... is an undifferentiated aggregate of all the income accruing to taxpayers from any source. It therefore includes income derived from salary and wages, net [unincorporated] business income, distributions from partnerships or trusts, interest and dividends, eligible termination payments, some government pensions and allowances, superannuation payments and reportable fringe benefit amounts less any allowable deductions ... [It] does not include the income of individuals who earned below the tax-free threshold, either positive or negative. Also, [undistributed] taxable income for companies, [and] funds ... is *not* included.

According to the ABS, the return from the ownership of dwellings is defined to include the rental income from the ownership of dwellings (actual rent in the case of the rental properties and imputed rent in the case of owner-occupied housing), less operating expenses (ABS 2000).⁴

The Commission's estimate of personal income based on ATI has several limitations. First, ATI omits welfare payments, except for cases where such payments are reported to the ATO in personal tax returns. Second, it excludes the incomes of those persons earning below the tax-free threshold, who are not required to lodge tax returns. Third, it omits unrealised capital gains from the ownership of assets. Fourth, it excludes the retained earnings of superannuation funds. Finally, although dividends paid to shareholders are counted in personal incomes, it excludes undistributed incomes (retained profits) of incorporated businesses.

The Commission's estimate of after-tax personal income as a result is only an approximation. Personal income is likely to be underestimated in low income communities (such as those with a high level of welfare dependence). Personal income might also be underestimated in more affluent local government areas because of the exclusion of unrealised capital gains and of retained income from companies and superannuation funds.

³ Now the Bureau of Infrastructure, Transport and Regional Economics (BITRE).

⁴ Expenses include council rates, building insurance, repairs and maintenance, consumption of financial services (such as accountants and financial advisers) and the payment of commissions to real estate agents for the management of rental properties (ABS 2000).

Business incomes

ATO statistics on the taxation of businesses do not provide reliable estimates of the geographic distribution of the income of corporations that operate in more than one locality. This is because financial and taxation accounts, for some circumstances, are reported for the group as a whole according to the legal structural arrangements. Reporting arrangements may not correspond with the physical operations of the business.

Consequently, the Commission has sought to construct some other indicator of business income using ABS estimates of GOS. The business income of a local government area is estimated to be equal to the GOS of its industries, after tax. Estimates of GOS are available for each industry in each State. Since the ATO also provides data on the total business income tax paid by different industries, it is possible to estimate an amount of corporate income tax to be deducted from the ABS estimates of GOS.

The ABS 2001 and 2006 Censuses provide data on the place of work (by local government area) of employees in each industry. Using this information, it was possible to apportion the after corporate-tax GOS of each industry in each State to a local government area. However, a shortcoming of this measure is that there is some double-counting between the dividends received by householders and estimates of GOS, though this amount is likely to be small.⁵ The Commission's method for deriving this measure of business income by local government area is outlined in appendix C.

The indicator of fiscal capacity for each local government area is estimated to be the sum of the disposable personal income (after income tax) plus the business income (after corporate tax) of the area. The data are reported on a per person basis to remove differences that reflect population size.

Total community fiscal capacity

The fiscal capacities of local governments, for the period between 2000-01 and 2004-05, are shown in table 5.1. The median council has a fiscal capacity of about \$20 700 per person. There is a large range in the fiscal capacities of local governments. The council ranked at the 20th percentile (that is, ranked at the top of the lowest twenty per cent) has a fiscal capacity of less than \$16 300 per person.

⁵ At a national level, gross dividends account for about 3 per cent of personal income.

The council ranked at the 80th percentile has a fiscal capacity greater than \$29 000 per person.⁶

One factor potentially contributing to the observed variation in total income is under reporting of the personal income in communities with a high degree of welfare dependency. As noted, personal taxable income does not include many welfare payments — many individuals on welfare do not lodge tax returns. However, as also noted, income (comprehensively measured), might also be underestimated in more affluent communities.

Another factor contributing to the variation in total income is the concentration of business income in particular local government areas. The very high estimate of total income for the City of Perth reflects its head office role for many mining and energy companies (table 5.1). Given that GOS is allocated to local government areas in accordance with each industry's employment, (a substantial) part of the mining industry's income was allocated to Perth, for example, rather than the location in which the mining and extraction took place.

Table 5.1 Distribution of the average fiscal capacity of local governments
2000-01 to 2004-05, dollars per person^{a, b}

<i>Local governments ranked in order of total income</i>	<i>Personal income^c</i>	<i>Business income</i>	<i>Total income^d</i>
<i>Decile and mean</i>			
Lowest	2 096	2 538	4 634
10 per cent	9 218	5 197	14 415
20 per cent	8 980	7 259	16 239
30 per cent	8 385	9 454	17 839
40 per cent	8 878	10 284	19 162
50 per cent (median)	16 058	4 723	20 781
60 per cent	13 298	9 227	22 524
70 per cent	14 463	10 567	25 030
80 per cent	10 184	19 298	29 483
90 per cent	7 094	31 988	39 083
Highest ^e	22 001	438 162	460 163
Mean ^f	12 837	15 213	28 050

^a Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years. ^b The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. ^c Care must be exercised when interpreting personal income because of its estimation. ^d Totals might not add due to rounding. ^e The maximum per person business income is in Perth, reflecting both large business income and relatively small residential population. ^f The average is calculated across councils and does not reflect the average across the Australian population.

Source: Productivity Commission estimates.

⁶ The ranking of local governments is based on their total income. The rankings of personal income, business income and total income are therefore not independent.

Income might also vary over time. The fiscal capacities of some local governments would be expected to be cyclical in nature. Rural local governments, for example, are dependent on their community's agricultural income. Given the relatively short time period, it is not evident by how much the estimates of fiscal capacities in rural areas are below or above their long-term average fiscal capacities.

Fiscal capacity differs across classes of councils. The average fiscal capacities of classes of local governments (based on the Commission's aggregated version of the Australian Classification of Local Governments [ACLG] as explained in appendix D) are shown in table 5.2. The per person estimates are based on the residential population of each council and the estimates of total income are the average for each class.

Capital city councils have the highest fiscal capacities as a group. This is due to their roles as centres of economic activity. With the exception of Brisbane, Darwin and Hobart, the high fiscal capacities are also due to their relatively small residential populations. The number of residents in the City of Perth in 2001, for example, was less than one-twelfth of the number of persons reported to be working in the city. Therefore, care must be exercised when interpreting the per person estimates of fiscal capacity of capital city councils.

Table 5.2 Distribution of average fiscal capacity, by class of local government

2000-01 to 2004-05, dollars per person^{a, b, c}

	<i>Personal income</i>	<i>Business income</i>	<i>Total income</i>
Capital city	18 488	98 307	116 795
Urban developed	17 715	7 069	24 783
Urban fringe	13 013	5 072	18 085
Urban regional	12 359	10 163	22 522
Rural	11 774	12 730	24 504
Remote	11 009	54 411	65 420
All councils	12 837	15 213	28 050

^a The estimates of total, personal and business income are an average for that class. They are calculated across councils and do not reflect the average across the Australian population. ^b Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years.

^c The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: Productivity Commission estimates.

The relatively high level of business income reported for remote councils also reflects both the nature of economic activity and relatively small residential populations. A number of remote councils had significant mining and energy businesses in their area. As a result, 12 remote councils had average business incomes above the average of all councils of \$54 000 per person. The remaining 39 remote councils had average business incomes less than the average of all councils.

Business income was smallest in the urban developed and urban fringe councils. This reflects the relatively lower economic activity in these suburbs.

Care should be exercised when interpreting the fiscal capacity estimates of councils. Many councils might be restricted from accessing part of their reported fiscal capacity. The Pilbara Regional Council (sub. DR76) argued that under the *Local Government Act 1995* (WA), councils are restricted in the value they can place on the unimproved capital value of mining land and the level of rates that may be applied to different area ranges (s. 6.3). Moreover, the fiscal capacity of some councils might be understated because of the exclusion of the income of day visitors. For example, inner metropolitan councils (such as central business districts and councils in coastal areas) can access the income of day visitors through other revenue instruments such as car parking fees.

FINDING 5.1

Fiscal capacity, as measured by a community's total after-tax income per person, differs across classes of local governments. There is considerable variation both between classes of local governments and within classes of local governments. Capital city and some remote local governments have very high fiscal capacities because of the concentration of business income and their relatively small resident populations.

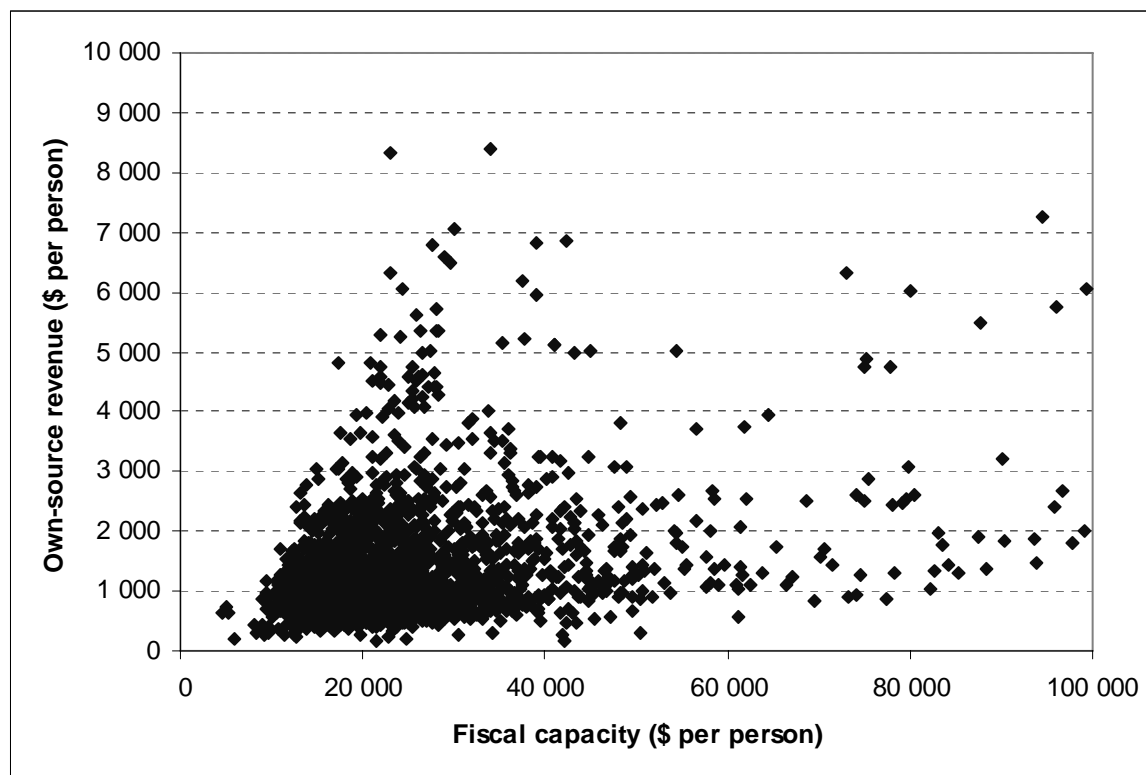
5.2 Revenue-raising effort

As outlined in chapter 3, there is considerable variation in the own-source revenue raised by councils. To gain insights into the efforts of local governments to raise revenue, it is useful to examine the relationship between own-source revenue raised by local governments and their fiscal capacity. This relationship is illustrated in figure 5.1.

It is difficult to draw conclusions about the link between the revenue raised by councils and their fiscal capacity from figure 5.1. The amount of revenue raised by local governments appears to increase with the community's fiscal capacity. However, given there are significant differences in the own-source revenue of councils that share similar fiscal capacities, other factors clearly are also contributing to the differences in revenue raised across councils. This is particularly evident for councils with fiscal capacities of between \$10 000 and \$40 000 per person, though it is also the case for the entire range of fiscal capacities per person.⁷

⁷ Some of this variation is likely to be attributable to measurement error.

Figure 5.1 **Own-source revenue versus fiscal capacity**
2000-01 to 2004-05, dollars per person^{a, b}



^a Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years. ^b The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

One way to account for the effect of income on the amount of revenue raised is to express own-source revenue as a ratio to fiscal capacity. Revenue-raising effort, defined as own-source revenue divided by income, is a widely used indicator of *relative* revenue-raising effort (Barro 2002; Bird, Martinez-Vazquez and Torgler 2004; Davoodi and Grigorian 2007; Leuthold 1991; Piancastelli 2001; Teera and Hudson 2004).

The distribution of revenue-raising effort for councils across Australia and for classes of local government is shown in table 5.3. There are significant differences in revenue-raising effort, both between and within classes of councils. Nationally, the median level is about 4.9 per cent of income. The range in effort for the 30th to 70th percentile council is from 3.6 to 6.5 per cent of income.

The unweighted mean is the average across councils of each ACLG class. The weighted mean is the average across the *populations* of each ACLG class. Weighting averages by population provides an indication of the average

revenue-raising effort of the populations in each ACLG class. The weighted average revenue-raising effort is highest for urban regional (5.8 per cent), rural (6.0 per cent) and remote councils (6.4 per cent). These estimates are significantly higher than the national average of 4.5 per cent.

Table 5.3 Distribution of revenue-raising effort
2000-01 to 2004-05^{a, b}

<i>Decile and mean</i>	<i>All councils</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Minimum	0.3	1.3	1.6	1.6	0.7	0.5	0.3
10 per cent	2.4	1.8	2.1	2.6	2.7	3.0	1.1
20 per cent	3.0	2.3	2.3	3.0	3.5	3.8	1.6
30 per cent	3.6	3.1	2.6	3.2	4.1	4.4	2.5
40 per cent	4.1	3.6	2.7	3.5	4.5	5.1	4.0
50 per cent (median)	4.9	4.1	2.9	3.8	5.2	5.7	6.3
60 per cent	5.7	4.9	3.1	4.4	5.9	6.4	9.0
70 per cent	6.5	5.4	3.3	5.0	6.5	7.3	10.9
80 per cent	7.7	6.0	3.6	5.7	7.2	8.7	15.7
90 per cent	10.1	6.4	4.2	6.9	8.5	10.7	20.3
Maximum ^c	36.2	7.6	6.5	11.2	16.6	27.5	36.2
Mean (unweighted) ^d	5.8	4.2	3.1	4.4	5.4	6.4	8.7
Mean (weighted) ^e	4.5	5.2	3.1	4.1	5.8	6.0	6.4

^a Revenue-raising effort is own-source revenue (total revenue less grants) divided by fiscal capacity (after-tax income). ^b Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years. ^c Care must be taken when interpreting the revenue-raising efforts of urban regional, rural and remote local governments. The relatively large estimates may reflect the underestimation of fiscal capacities in those areas. It might also reflect additional non-traditional services provided by local governments. ^d Average is calculated across local governments and is not weighted for relative population size. ^e Average is weighted for population size.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

The wide variation in the distributions of revenue-raising effort within each class indicates that other factors are affecting the revenue-raising efforts. There are a number of possible explanations why some councils have higher revenue-raising efforts than others. It is possible that the local governments with above average revenue-raising effort are those with above-average costs, or below-average community incomes, or both. These and other factors are explored in the next section.

Revenue-raising effort, a measure of how much own-source revenue a local government raises relative to its income base, varies significantly within and between classes of local governments. Capital city, urban regional, rural and remote local governments have the highest average revenue-raising efforts, when adjusted for population size.

5.3 Factors affecting revenue raised by local governments

One of the key tasks for the Commission is to examine the factors that affect the revenue raising of local governments. A local government's own-source revenue raising is determined by community decisions about the desired levels and standards of service. The preferred way to explain differences in revenue raised between local government areas is to estimate the effects of all factors likely to influence the demands of each local community. As noted in chapter 4, it is difficult to estimate the demands for local public goods because the prices of many local government services are not observable.

In this study, local government own-source revenue is assumed to reflect how much the community is prepared to pay for services. How much a community is prepared to pay is in turn reflected by the attributes of a local community (such as its population size and income) and the services provided by its council. Local government services (such as, the number of kilometres of roads provided by local governments, and the number of properties serviced by the local government) can be thought of as key 'cost-drivers' of local government expenditure.

The Commission has drawn on evidence in submissions and reviewed a number of international and Australian studies to identify factors that might affect a local government's revenue raising. A number of factors identified in this study are similar to those used by State grants commissions (see for example, VGC 2007).

Not all the factors identified in submissions and other studies were included in the statistical analysis. This is because data were not available for some of the factors. Where data were available, many were not considered statistically significant when included in the estimation. Some data were only available for some years. Other data were only available for some States and Territories.

Since reliable data were not available for all the possible factors, it was necessary to rely on proxy indicators to represent the underlying factors that cannot be directly measured. For example, a variable representing the State in which the local

government is located (for example, measuring ‘1’ if in New South Wales and ‘0’ if not) can be used to test the extent to which there are other state-wide influences on the revenue raised by local governments. This might arise from differences in policies, or in legislative and regulatory arrangements (chapter 6).

Income of the community

As discussed earlier, a significant factor that affects the capacity of a local government to raise revenue is the income of its community. Communities with higher incomes per person are likely to spend more on local government services than communities with lower incomes per person, albeit probably at a diminishing rate as income increases.

Several participants to this study argued that income is an important determinant of the revenue-raising capacity of local governments (for example, Australian Chief Executive Officers Group, sub.18). The Local Government Association of Queensland (sub. 11, p. 26) stated:

The revenue-raising capacity is likely to be directly related to the economic performance of an area, so revenue-raising capacity will vary significantly from location to location, even in what might appear to be similar communities ([in terms of] population and geographic dispersion).

Local government services

The type and level of services provided by local governments are likely to be important determinants of the actual revenue raised by local governments. Higher levels of service provision have higher expenditure and, therefore, higher revenue requirements. Some local government services for which data were readily available include:

- *Kilometres of local roads per person* — local roads represent a major area of expenditure for councils. A physical indicator of the level of road provision is the kilometres of local roads per person in the local government area. This indicator does not account for the quality of roads (such as whether they are sealed or unsealed or the standard of the road surface), or differences in the cost of provision for reasons of geology and topography.
- *Number of properties per person* — other core activities of local governments include the provision of waste collection, footpaths and building regulations. A physical indicator associated with property services is the number of properties per person serviced and rated in the local government area.
- *Water and sewerage services* — in New South Wales, Queensland and

Tasmania, many local governments are required to provide water and sewerage services. It has not been possible to measure reliably the level of these services for each council. In the regression analysis reported later, a proxy variable is used instead, which takes a value of '1' if the local government provides water and sewerage and '0' if not.

Other factors affecting the costs of local government services

A feature of local government services is that many exhibit some elements of fixed costs. This implies that some local governments can experience economies of scale in the provision of particular services. Even though the total expenditure might increase with the level of services, it is possible that per person expenditure (and hence revenue required per person) might decrease with the level of service, depending on whether economies of scale are present. The Municipal Association of Victoria (sub. 22), for example, noted that both populations and population densities could influence the average costs of local governments.

It might also be the case that there are minimum scales of operation before local governments are able to provide some services. The Department of Transport and Regional Services (sub. 38, p. 19) stated:

Councils with low populations generally do not have the revenue base or economies of scale to deliver the range of services a larger organisation can provide. ... The experience in Victoria suggests that a population of at least 50 000 people may be required to create a viable local government.

To test the extent to which scale economies or economies of density are present, two factors are considered:

- *Population size* — as the residential population of a local government area increases, so does the need to service that community. If there are scale economies present, the unit cost (and therefore the own-source revenue per person) would be expected to decline with increases in population.
- *Population density* — analogous to population size, an increase in the population density of a local government area is expected to be inversely related to its unit costs.

Another factor that might affect the costs of local government service provision over time is the population growth of the community. The Western Australian Local Government Association (sub. 51) argued that rapid population growth and decline provided substantial challenges to local governments to fund infrastructure maintenance and investment. In the absence of borrowing for future infrastructure, communities experiencing rapid population growth may find the costs imposed on

current ratepayers are high. For example, high costs associated with new infrastructure investment required to accommodate the increasing population. Similarly, communities experiencing rapidly declining populations will find it more costly per person maintaining relatively extensive infrastructure assets.

State and class of local government

The State in which the local government is located can potentially affect its ability to raise revenue. There are a number of possible reasons for this. One factor might reflect the legislative and regulatory arrangements in which the local government operates. Regulatory arrangements that are restrictive might dampen revenue raised. Another reason is that there might be other state-wide influences or neighbourhood effects. It is possible that other State government policies or economic trends might be influencing the revenue raised by local governments.

Finally, the own-source revenue raised by local governments could be influenced by factors associated with the local government's geographic location. One reason is that remote communities have higher per person operating costs than non-remote. Another reason is that remote local governments find it more difficult to attract and retain staff than do non-remote. The Local Government Association of the Northern Territory (sub. 46), for example, stated that it recruited 30 chief executive officers in 2005-06. One council had 15 chief executive officers over eight years.

Several authors and participants to this study also argued that local governments are sometimes motivated to supply services that are not met by the private sector or other spheres of government (LGASA sub. 53; LGMA sub. 61). The South Australian Financial Sustainability Review Board (FSRB) (2005, p. 60) said:

Councils can also feel pressured by the community to pick up service gaps left by Commonwealth and State Governments.

The withdrawal of services by the State Government from regional South Australia has been a major source of cost shifting for country councils. Councils are also challenged with the fact that they see themselves as the last resort for the community to receive government support.

Including an ACLG class variable might serve as a proxy for differences in both service mixes and costs between classes of local governments.

Other factors

Participants to this study and several authors have identified that sociodemographic factors might also influence the ability of local governments to raise revenue.

Mullins (2004) and Shadbegian (1999), for example, considered the effect of different age cohorts on the level of revenue raised by local governments, given that they had differing effects on local government expenditures.

Sociodemographic factors (such as the age distribution, unemployment levels and Indigenous composition of the population) could have two possible influences on the revenue raised by local governments. First, sociodemographic groups may have different preferences and, therefore, may make demands on local governments for particular services. ALGA (2004), for example, noted that ageing communities place demands on local government for social and activity support services, meals programs, in home support, respite and allied health services. These in turn lead to higher levels of expenditure and revenue.

Conversely, some sociodemographic groups might restrain local government revenue raising. In particular, some age cohorts (such as residents with young families and residents on fixed incomes) are thought to be particularly sensitive to the prospect of local government rate increases. As a result, the ability of local governments to raise own-source revenue might be influenced by the effect that rate increases would be likely to have on particular groups (Bentley 1973; Inner South Metropolitan Mayors Forum, sub. DR87).

5.4 Analytical results

To investigate which factors best explain the differences in the revenue raised by different local governments, the Commission undertook a multivariate regression analysis using the stochastic frontier analysis technique. A detailed description of this technique is provided in appendix C.

Like any multivariate regression analysis, stochastic frontier analysis allows for statistical relationships to be established between the dependent variable and the independent variables. This is the subject of this section.

Stochastic frontier analysis simultaneously enables determination of the scope for each local government to raise *additional* revenue after controlling for:

- explicitly identified factors influencing revenue raised per person
- random variations across councils reflecting
 - the effect of random events, that might include measurement error in the variables and other random factors that affect revenue raised per person across councils, for example, droughts

- the combined effects of other omitted factors, many of which are not amenable to quantification. These might include local preferences and attitudes towards local governments.

The results of this second part of the stochastic frontier analysis are reported in section 5.5.

Table 5.4 Regression results of the stochastic frontier analysis

<i>Independent variables</i>	<i>Model 1 Dependent variable is: Log of own-source revenue per person (broad)^a</i>	<i>Model 2 Dependent variable is: Log of own-source revenue per person (narrow)^b</i>
Characteristics		
Log of personal income per person	0.309 ^c	0.275 ^c
Log of business income per person	0.089 ^c	0.108 ^c
Log of roads per person	0.079 ^c	0.078 ^c
Log of properties per person	0.084 ^c	0.072 ^c
Water (categorical variable)	0.237 ^c	0.219 ^c
Log of residential population	-0.125 ^c	-0.145 ^c
Population growth rate squared	0.009 ^c	0.004 ^c
State^f		
New South Wales	0.168 ^c	0.169 ^c
Queensland	0.110 ^c	0.154 ^c
South Australia	-0.147 ^c	-0.094 ^c
Western Australia	-0.096 ^c	-0.078 ^c
Tasmania	-0.075 ^d	..
Northern Territory	-0.711 ^c	-0.714 ^c
ACLG class^g		
Capital city	0.845 ^c	0.964 ^c
Urban fringe	..	-0.103 ^c
Urban regional	0.074 ^e	..
Rural agricultural	-0.2217 ^c	-0.290 ^c
Remote	..	-0.069 ^e
Constant	4.225 ^c	4.527 ^c
Number of observations	2854	2854
Number of councils ^h	604	604
Log likelihood	-758.133	-646.463

^a Defined as total revenue less grants. ^b Defined as total revenue less grants, dividends, interest, and capital contributions. ^c Significant at less than the 0.1 per cent level. ^d Significant at the 5 per cent level. ^e Significant at the 10 per cent level. ^f The reference state captured in the constant term is Victoria. ^g The reference ACLG class captured in the constant term is urban developed. ^h Not all councils are represented in all years. .. Not significant at 10 per cent level or below.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

A number of models describing the effects of factors on own-source revenue per person were estimated. They reflect different assumptions about which sources of revenue local governments should be assessed against and the factors that might account for the differences (heterogeneity) across councils. The results of two models are presented here. In the first, own-source revenue is broadly defined to be equal to total revenue less grants. In the second model, own-source revenue is narrowly defined to be equal to total revenue less grants, interest, dividends and capital contributions. Some summary results of these analyses are in table 5.4. A more detailed summary of the results and sensitivity analyses are reported in appendix C. For both models, the estimated parameter values appear plausible and have the anticipated signs, given prior expectations.

Own-source revenue per person increases with both per person personal income and business incomes. An interpretation of this result is that as each after-tax source of income increases, the community prefers to spend proportionally less of it on local government services (chapter 4). The coefficient on business income is smaller than that of personal income, suggesting that a local government's revenue stream is inelastic (that is, less sensitive) to changes in business income than from changes in personal income.

In terms of local government services, own-source revenue per person also increases with the length of roads per person. This suggests that as the length of roads (in per person terms) increases, so do the per person costs of maintaining them. Similarly, own-source revenue per person increases with the number of rateable properties per person, reflecting higher services and expenditure needs. Some councils are required to supply water and sewerage services. As expected, the revenue raised by councils supplying water and sewerage services is higher.

In terms of other factors that might influence the costs of local government services, own-source revenue per person decreases with the size of the population, which suggests economies of scale. Population density, however, was not found to be statistically significant. Population density was not strongly correlated with own-source revenue, but was correlated with population level. This suggests that communities that benefit from economies of scale also benefit from economies of density. Population growth was found to be positively correlated with own-source revenue. This confirms the view that communities experiencing rapid population growth or decline are also those likely to be raising more own-source revenue per person.

There are also differences in the level of revenue raised by councils between States. The reference state for comparisons is Victoria. Councils in New South Wales and Queensland on average tend to raise more revenue than councils in Victoria.

Councils in South Australia, Western Australia and the Northern Territory raise less than in Victoria.

There are also differences in the level of revenue raised by councils between ACLG classes. The reference ACLG class for comparison is urban developed. Capital city, and to some extent urban regional councils, tend to raise more own-source revenue per person than urban developed councils. This most likely reflects the higher per person (resident) costs of servicing those areas and, in the case of capital cities, the number of visitors to the area. Rural councils raise less than urban developed (after taking account of other factors such as roads, population and income). This suggests that rural communities on average make fewer demands of their councils than do urban developed councils.

FINDING 5.3

An empirical assessment indicates that local government own-source revenue raised per person:

- *increases with personal and business incomes per person of the community*
- *increases with the length of roads, the number of properties rated and served, and whether water and sewerage services are provided*
- *increases in communities experiencing population growth*
- *decreases with population size.*

There are also differences between jurisdictions and classes of local governments.

5.5 The scope to raise additional own-source revenue

The statistical analysis in the preceding section focuses on identifying the factors influencing the revenue *actually* raised by local governments. Such an analysis can be used to predict the revenue that an average council raises, given its values for the variables specified in the regression equation and the estimated parameters. However, it cannot provide insights into whether it might be possible for councils to raise more revenue, if they so choose. That is, it does not reveal information about their potential to raise *additional* revenue.

The next step is to identify the extent to which local governments have scope to raise additional own-source revenue. It needs to be stated at the outset that the purpose of such an analysis is not to suggest that councils *should* raise additional revenue. Clearly, it is the responsibility of councils and their local communities to choose the appropriate level of revenue to be raised.

The method used here to identify any potential to raise additional revenue is to

compare (that is, to benchmark) the own-source revenue raising of local governments. There are a number of techniques that allow for such benchmarking. One well known technique is data envelopment analysis. Ordinary least squares regression (as used by Teera and Hudson 2004) is another. The scope for a local government to raise additional revenue is based on how the local government compares to a frontier determined by the ‘best practice’ local governments (in the case of data envelopment analysis), or the average performance of all councils (in the case of ordinary least squares regression). However, both are unsuitable for the purposes of this study since they overestimate the scope to raise additional revenue by incorporating measurement error in the estimates of revenue-raising potential (appendix C). As noted in chapter 3, measurement error is a particular problem for this study.

Another challenge posed for this study is the high level of diversity among local governments, as noted in chapter 2. Local governments vary significantly in the services they provide, the communities they support, and the regulatory and geographic environments in which they operate. Such diversity introduces a high degree of heterogeneity into local government data.

Stochastic frontier analysis is the Commission’s preferred method to make comparisons across local governments. It takes account of the factors that explain council revenue raising, the random influences (such as measurement error) and the heterogeneity across local governments. It is able to distinguish between measurement error and heterogeneity as well as what is thought to be the underlying scope to raise additional revenue. A detailed discussion of how these effects are separately handled within stochastic frontier analysis is provided in appendix C.

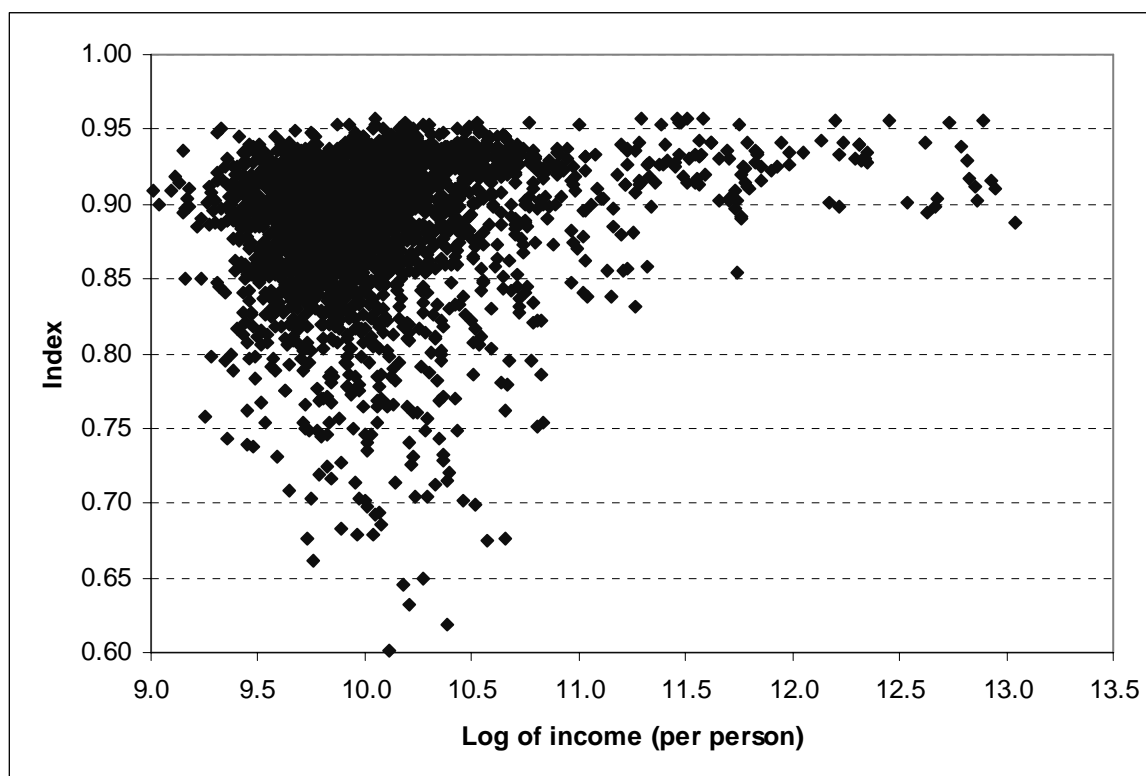
Compared with alternative methods, stochastic frontier analysis yields more conservative estimates of the relative potential of local governments to raise additional revenue. This is because the estimated potential to raise additional revenue is determined after controlling for the identified factors, random events and heterogeneity of data.

Invariably, the index of how much revenue each council is raising relative to its potential revenue will be less than unity. If a local government has an index of 0.8, it is raising 80 per cent of the revenue that it potentially could raise as assessed against its hypothetical benchmark. It is rare for any council to be ranked 1.00 using this analysis, since each council’s frontier is uniquely determined using *all* the observations in the sample rather than a few outliers. Put simply, even councils with the highest indices of relative revenue raising can increase their revenue raising.

The estimated indices of the relative potential to raise additional own-source revenue (based on the first model in table 5.4) are shown in figure 5.2. Most local

governments have indices between 0.75 and 0.95. There are a number of councils with lower values, mainly between 0.6 and 0.75. Most councils are clustered between incomes of \$13 000 and \$36 000 per person.

Figure 5.2 Estimates of each local government's own-source revenue relative to its potential own-source revenue, by income
2000-01 to 2004-05^{a, b}



^a The index is defined as the current own-source revenue divided by the potential own-source revenue. ^b Log of 9 is equivalent to about \$8000, log of 9.5 is about \$13 000, log of 10 about \$22 000, log of 10.5 about \$36 000, and log of 11 about \$59 000 and log of 12 about \$160 000.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

A summary of the indices by class of council is presented in table 5.5. Across all councils, the (unweighted) average index is 0.88. This means that, on average, Australian councils are raising about 889 per cent of what they hypothetically could raise. On average, councils have an assessed scope to raise an additional 12 per cent of own-source revenue.

There is considerable variation in mean and median indices between classes of councils. The urban councils are assessed to have greater scope to raise additional own-source revenue than do non-urban councils. The councils with the greatest scope to raise additional revenue are capital city (unweighted average index of

0.85), urban developed councils (0.84) and urban fringe (0.85). Rural (0.90) and remote (0.92) councils have the least scope to raise additional revenue (table 5.5).

Table 5.5 Distribution of each local government's own-source revenue relative to its potential own-source revenue, by class of local government

2000-01 to 2004-05, per cent^a

<i>Decile and mean</i>	<i>All councils</i>	<i>Capital city^b</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	0.56	0.75	0.56	0.67	0.60	0.67	0.84
10 per cent	0.83	0.77	0.75	0.78	0.83	0.87	0.90
20 per cent	0.86	0.78	0.80	0.82	0.85	0.88	0.91
30 per cent	0.87	0.80	0.83	0.83	0.86	0.89	0.91
40 per cent	0.89	0.82	0.85	0.85	0.87	0.90	0.92
50 per cent (median)	0.89	0.85	0.86	0.85	0.88	0.91	0.93
60 per cent	0.90	0.87	0.87	0.86	0.89	0.91	0.93
70 per cent	0.91	0.89	0.88	0.88	0.89	0.92	0.94
80 per cent	0.92	0.91	0.89	0.89	0.90	0.92	0.94
90 per cent	0.93	0.93	0.91	0.91	0.91	0.93	0.95
Highest	0.95	0.94	0.93	0.94	0.94	0.94	0.95
Mean (unweighted) ^c	0.88	0.85	0.84	0.85	0.87	0.90	0.92
Mean (weighted) ^d	0.86	0.81	0.85	0.86	0.88	0.89	0.91

^a Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years. ^b There are 33 observations representing seven capital city councils over five years. One capital city was not represented for one year. ^c Average not weighted by relative population share. ^d Average weighted by relative population share.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

FINDING 5.4

A sophisticated benchmarking analysis of the relative potential of local governments to increase their own-source revenue suggests that, on average, councils are raising about 88 per cent of their hypothetical benchmarks. Whether a council can realise its assessed potential to raise additional revenue will depend on its individual circumstances. (The scope for raising additional revenue should not be taken to imply that local governments should increase the revenue they raise.)

To put this result into perspective, the dollar equivalents are presented in table 5.6. The average hypothetical potential to raise additional *total* revenue per person is about \$140. There are differences between classes of councils in the potential to increase total revenue. The average increase ranges between \$120 and \$140 per person for several types of councils to about \$500 per person for capital city councils.

Table 5.6 Estimates of the average potential to increase total revenue, by class of local government

2000-01 to 2004-05, per person^{a, b}

<i>Local governments by ACLG class</i>	<i>Number of observations</i>	<i>Number of councils^c</i>	<i>Actual total revenue</i>	<i>Potential total revenue</i>	<i>Average increase in total revenue</i>
			\$	\$	\$
Capital city	33	7	4 251	4 751	500
Urban developed	394	87	829	955	126
Urban fringe	219	48	905	1 029	123
Urban regional	506	111	1 317	1 453	135
Rural	1 409	298	2 367	2 502	135
Remote ^d	223	51	6 642	6 837	194
All councils	2 784	602	2 208	2 350	142

^a Average not weighted by relative population share. ^b The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. ^c Not all councils are represented in all years. ^d Care must be exercised due to the quality of data for remote local governments.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Care needs to be exercised when interpreting the results for capital city and remote councils. Melbourne, Adelaide and Perth have relatively small residential populations and very high own-source revenue per person. Even though the analysis suggests that these cities have less scope to raise additional own-source revenue in percentage terms when compared to other capital cities, they nonetheless have the potential to raise large amounts of additional revenue in total. Moreover, the estimate that capital city councils can raise an additional \$500 per person is an unweighted average — that is, it is an average taken across all the capital city councils irrespective of population size — the same weight is given to, for example, Brisbane City Council and Darwin City Council.

Care also needs to be exercised when interpreting the results for remote councils, as the average increase in total revenue may not be reflective of all remote councils. The estimated average increase in total revenue reflects the scope for larger remote councils to collect additional revenue from rural and mining businesses as distinct from residents. This is because 173 of 400 observations for remote councils were removed from the database data quality reasons (appendix C). Most of these were smaller councils, many of which are Indigenous. Moreover, it is likely that the estimates of fiscal capacity for the most affluent remote councils are over estimated, given the practice of exempting all or part of mining leases from paying rates in some jurisdictions.

5.6 Financial impacts of increased revenue raising

One of the issues prompting this study relates to the financial sustainability and financial performance of local governments. The terms of reference, however, do not ask the Commission to examine the extent to which local governments are, or could, become financially sustainable. Notwithstanding this, there will be some financial impacts on local governments, should they choose to raise the additional own-source revenue which the Commission's analysis suggests they might be able to raise.

To provide some insights into how material the scope is for local governments to raise additional revenue on local government finances, the Commission has simulated the effect of a hypothetical increase in own-source revenue on the:

- revenue-raising effort of each council
- cost recovery from own-source revenue of each council.

Revenue-raising effort was defined in section 5.2. Cost recovery from own-source revenue is defined to be equal to own-source revenue (broadly defined) divided by total expenditure. This indicator is not a measure of the real cost recovery or financial viability of local governments because it does not include:

- costs from any outstanding infrastructure renewals and maintenance
- grants that would contribute to the total cost recovery of local governments.

Further, in this exercise it is assumed that:

- expenditure and grants are held constant and there are no changes to costs from raising additional revenue
- increases in prices of goods and services do not yield smaller than expected increases in revenue (residents might respond to price increases by reducing their consumption of those goods and services).

The Commission undertook sensitivity analyses of the effects of increasing own-source revenue based on projections using alternative models of own-source revenue raising (such as model 2 in table 5.4). These results are presented in appendix C.

The distributions of the indices of cost recovery from own-source revenue for all councils and for classes of councils, are shown in table 5.7. Councils are required to set rates, fees and charges after taking into account budgeted costs and grants received from other spheres of government. Consequently, most councils have cost-recovery ratios (as defined here) of less than unity, and some at around 0.5.

Table 5.7 Distribution of the ratio of cost recovery from own-source revenue, by class of local government

2000-01 to 2004-05, ratio^{a, b}

<i>Decile and mean</i>	<i>All councils</i>	<i>Capital city^c</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	0.07	0.76	0.61	0.50	0.47	0.15	0.07
10 per cent	0.46	0.82	0.78	0.73	0.61	0.43	0.24
20 per cent	0.55	0.88	0.83	0.82	0.70	0.50	0.35
25 per cent	0.58	0.91	0.85	0.83	0.74	0.52	0.38
30 per cent	0.62	0.95	0.86	0.86	0.78	0.56	0.41
40 per cent	0.70	1.02	0.89	0.89	0.83	0.60	0.48
50 per cent (median)	0.77	1.05	0.93	0.94	0.86	0.65	0.51
60 per cent	0.83	1.13	0.96	0.98	0.91	0.71	0.55
70 per cent	0.89	1.18	0.99	1.02	0.97	0.77	0.59
75 per cent	0.92	1.19	1.01	1.05	0.99	0.80	0.63
80 per cent	0.96	1.22	1.03	1.07	1.03	0.83	0.68
90 per cent	1.06	1.29	1.09	1.18	1.11	0.93	0.80
Highest	1.80	1.35	1.67	1.80	1.55	1.69	1.26
Mean ^d	0.76	1.06	0.94	0.96	0.87	0.68	0.52

^a Cost recovery from own-source revenue is defined as total revenue less current and capital grants all divided by total expenditure. ^b Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years. ^c There are 34 observations representing seven capital city councils over five years. One capital city was not represented for one year. ^d Average not weighted by relative population share.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

As expected, there are differences in the ratios across the groups of councils (table 5.7). Remote councils have the lowest ratios and are highly dependent on grants, as are many rural councils, though to a lesser extent. Capital city councils have the highest ratios followed by urban fringe, urban developed and urban regional.

The impact of a hypothetical increase in own-source revenue (of the magnitudes described in table 5.5) on the revenue-raising effort of councils is illustrated in table 5.8. The average increase in own-source revenue would lead to a rise in the average revenue-raising effort across all councils from 5.8 per cent of fiscal capacity to 6.4 per cent. For urban developed councils, the revenue-raising effort would increase, on average, from 3.1 per cent of income to 3.6 per cent. The revenue-raising effort of remote councils would increase from 8.7 per cent to 9.3 per cent (table 5.8).

As noted earlier, the unweighted averages do not provide an indication of the incidence of revenue-raising effort across the population. If there are significant differences in the population size of local governments, then taking account of

these, would provide an indication of the overall revenue-raising effort across the population. It is estimated that the weighted average revenue-raising effort would increase from 4.5 to 5.1 per cent, on average. Similarly, the average revenue-raising effort in remote councils would increase from 6.4 to 6.9 per cent (table 5.8).

Table 5.8 Effect of a hypothetical increase in own-source revenue raised on revenue-raising effort, by class of local government
22000-01 to 2004-05, per cent^a

<i>Local governments by ACLG class</i>	<i>Revenue-raising effort not adjusted for population</i>			<i>Revenue-raising effort adjusted for population</i>	
	<i>Actual mean</i>	<i>Hypothetical mean</i>	<i>Hypothetical distribution^b</i>	<i>Actual mean</i>	<i>Hypothetical mean</i>
Capital city	4.2	4.9	2.8–6.8	5.2	6.4
Urban developed	3.1	3.6	3.0–4.0	3.1	3.6
Urban fringe	4.4	5.1	3.6–6.2	4.1	4.7
Urban regional	5.4	6.2	4.3–7.7	5.8	6.5
Rural	6.4	7.0	4.6–8.5	6.0	6.6
Remote	8.7	9.3	2.2–13.0	6.4	6.9
All councils	5.8	6.4	3.8–7.8	4.5	5.1

^a Based on a sample of 2784 observations representing 602 councils. Not all councils are represented in all years. ^b This is the distribution of the middle 50 per cent (inter-quartile range) of observations around the median hypothetical revenue-raising effort.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

The impact of the hypothetical increase in own-source revenue on the cost recovery from own-source revenue and grant dependency of councils is illustrated in table 5.9. Overall, cost recovery would increase from 0.76 to 0.87 for the unweighted case. The average cost-recovery ratio of capital city councils would increase from 1.06 to 1.25. At the other end, the average cost recovery for remote councils would increase from 0.52 to 0.56. Similarly, the cost recovery of rural councils would increase from 0.68 to 0.75, on average. About 87 per cent (about 250) of rural and 95 per cent (about 48) of remote councils would remain dependent on grants, even if they adopted the assessed increases in own-source revenue raising. About 27 per cent of urban developed, 36 per cent of urban fringe, and 50 per cent of urban regional councils would also remain dependent on grants.

Even though the average business income in remote councils is high (table 5.2), many remote councils would still remain dependent on grants. The relatively high average business income of remote councils is likely due to a small number of councils with mining activities. Even after accounting for a number of Indigenous councils which have been removed from the dataset, there still remains a relatively large number of remote councils that do not have mining activities.

Table 5.9 Impact of a hypothetical increase in own-source revenue on cost recovery from own-source revenue, by class of local government

2000-01 to 2004-05^{a, b}

Local governments by ACLG class	Cost recovery not weighted by population share				Cost recovery weighted by population share	
	Actual	Potential	Hypothetical distribution ^c	Share of councils remaining grant dependent	Actual	Potential
	Ratio	Ratio	Ratio	Per cent	Ratio	Ratio
Capital city	1.06	1.25	1.13–1.34	–	1.01	1.23
Urban developed	0.94	1.11	0.99–1.20	27	0.94	1.10
Urban fringe	0.96	1.12	0.99–1.21	26	1.00	1.16
Urban regional	0.87	0.99	0.84–1.13	50	0.95	1.08
Rural	0.68	0.75	0.58–0.89	87	0.74	0.83
Remote	0.52	0.56	0.41–0.68	95	0.56	0.61
All councils	0.76	0.87	0.64–1.06	67	0.94	1.09

^a Cost recovery from own-source revenue is defined as total revenue less grants, divided by total expenditure.

^b Based on a sample of 2784 observations representing 602 councils over five years. Not all councils are represented in all years. ^c This is the range of the middle 50 per cent (inter-quartile range) of observations around the median hypothetical cost-recovery ratio.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Weighting by population size gives a slightly different perspective of the effect of raising additional own-source revenue. Across all local governments, cost recovery from own-source revenue would increase from 0.94 to 1.09. For urban developed communities, the ratio would increase from 1.01 to 1.23. For remote communities, the increase would be from 0.56 to 0.61. It is also possible to consider the effect of population sizes on the extent to which local governments remain dependent on grants. On average, about 34 per cent of the population resides in local governments that would remain dependent on grants, assuming that each local government increased its own-source revenue by the assessed amount (appendix C).

As a generalisation, all councils have some potential to raise additional revenue. For urban councils, a modest increase in own-source revenue has a material effect on their cost recovery and grant dependency. For rural and remote councils the situation is different. Increases in own-source revenue would increase their already relatively high levels of revenue-raising effort. However, given their relatively high expenditure in per person terms, such increases would still leave them substantially dependent on grants, at current levels of expenditure.

A number of councils, particularly in capital city and urban developed areas, have the means to recover additional revenue from their communities sufficient to cover their expenditure without relying on grants. However, a significant number of councils, particularly in rural (87 per cent) and remote (95 per cent) areas would remain dependent on grants from other spheres of government to meet their current expenditure. Some councils would remain highly dependent on grants.

5.7 Policy implications

The ability to recover expenditure is not, however, the same as being financially sustainable. Cost recovery from own-source revenue is defined using the ABS government finance statistics definitions of revenue and expenditure items. These items are reported in current terms. As noted, the definition of cost recovery from own-source revenue used in this study makes no reference to a local government's future liabilities, such those associated with infrastructure renewal, where adequate provision has not been made to cover these.

The Commission's findings are broadly consistent with the findings in other studies (for example, PwC 2006; Access Economics 2005, 2006a, 2006b and 2007) relating to the financial sustainability of local governments. PwC reported that the 'majority of larger metropolitan councils are generally viable or have the ability to self-effect an improvement in financial sustainability', whereas, 'rural remote and rural agricultural have more pronounced viability problems' (PwC 2006, p. 113).

Depending on the extent of the projected growth in the expenditure on renewing and maintaining infrastructure assets, the estimates presented in table 5.9 might over state the true cost-recovery position of local governments (Local Government Association of South Australia, sub. DR86).

In 2004-05, the Commonwealth and the States distributed over \$3.6 billion in grants to local governments of which almost 30 per cent (or \$50 per person) was Commonwealth general purpose grants (table 2.3). Even though the largest recipients of grants (capital and current) were councils in urban fringe, urban regional, rural and remote areas, grants were distributed to all types of local governments — including capital city and urban developed (table 3.7).

A number of participants have questioned the appropriateness of the existing arrangements for distributing Commonwealth general purpose grants. Participants to this study have identified that the existing arrangements fail to meet the objective

of full fiscal equalisation. The WA Department of Treasury and the WA Department of Local Government and Regional Development (sub. 65, p. 21) said that full equalisation was not achievable because of:

... the quantum of FAGs [financial assistance grants] and the minimum grant condition. This particularly impacts on the financial capacity of local governments in regional and remote areas of Western Australia. To achieve full equalisation there would need to be an increase in the FAG pool and no minimum grant.

The WA Department of Local Government and Regional Development argued eliminating the minimum grant component of general purpose grants could significantly increase the allocation of funding to rural and remote councils. In a case study, the department showed that the removal of the minimum grant from the City of Stirling in Western Australia (a minimum grant council) would reduce its total revenue by 2.6 per cent. In contrast, the removal of the minimum grant would increase the total revenue of Halls Creek by almost 7.8 per cent (sub. DR89).

Other participants have called for a more substantial reform of the grants allocation process. The City of Mandurah (sub. DR73, p. 4), for example, argued that the Commonwealth Grants Commission:

... should introduce a ‘national distribution’ model, providing general purpose grants directly to local governments (bypassing the States), based on their relative ‘need’ (horizontal equalisation), rather than on their State’s population.

The issue of the appropriateness of the current distribution of financial assistance grants is beyond the scope of the Commission’s terms of reference. To the extent that full equalisation remains a policy objective of the Australian Government there is a case for more work in this area.

FINDING 5.6

Given the differences in the scope to raise additional revenue across different classes of councils, there is a case to review the provision of Australian Government general purpose grants to local governments.

6 The effects of legislative and regulatory factors

Key points

- A variety of legislative and regulatory restrictions are imposed by State Governments on the use by local governments of the revenue-raising instruments available to them. In particular:
 - rates exemptions are required to be given which reduce local governments' rates bases and do so differentially across local government areas
 - land valuation methods often are prescribed and there are limits on the extent to which local governments can apply differential rating structures within and between classes of ratepayers
 - statutory limits are imposed on some fees and charges for local government services, often at levels below the full costs of providing the services.
- There are some partial offsets. For example, local governments are exempt from some State and Commonwealth taxes. Also, State grants for the provision of some services subject to statutory limits on fees, reduce the net claim on local government revenues, to some extent:
 - Nonetheless, the restrictions generally affect the ways in which local governments can raise revenue.
 - As a result, they affect the distribution of the burden of revenue raising within communities and can have adverse consequences for the economic efficiency of the outcomes of local governments' decisions.
- Overall, however, in most jurisdictions the major constraint on revenue raising by local governments appears to be policy choices they make in response to the preferences of their local communities.
- The NSW situation appears to be somewhat different. Rate pegging and reimbursement of 55 per cent of State-mandated pensioner concessions suggest that the NSW Government has chosen to have more influence on local government revenue than have other State Governments.
- There is a case for periodic reviews of the restrictions and regulations imposed on local government by other spheres of government to assess both their rationales and their benefits and costs.

There are a number of legislative and regulatory requirements and restrictions placed on how local governments collect revenue from property rates, fees, charges and contributions. The potential limitations of local government processes were

identified in chapter 4. Associated with these, possible motivations for legislative or regulatory controls on local government revenue raising are outlined in box 6.1.

Box 6.1 Why regulate local government revenue raising?

The literature contains various arguments that might support the case for regulation of local government revenue raising.

- It has been argued that because local governments are monopoly suppliers of some basic community services, their rates, fees and charges should be regulated to prevent misuse of monopoly power (Abelson 2006).
- Governments at higher levels might consider that the governance challenges in the local government sector are best overcome by direct regulation (Stiglitz 1999).
- Voters, if aware of the limitations of council governance, might prefer that other spheres of government impose legislative and regulatory constraints on councils' revenue-raising capacity (Dollery, Crase and Byrnes 2006).

Several submissions to this study have supported regulation of local government revenue raising on such grounds:

- Some argue for rate pegging on the basis that it limits the ability of councils to divert funds from essential infrastructure to other projects, and to spend on marginal services which are better provided by the private sector (Crisp, sub. 3).
- The Vacluse Progress Association (sub. 7) maintains that regulations on rates protect ratepayers somewhat from subsidising council services to non-ratepayers.
- The New South Wales Farmers' Association (sub. 43) claims that farmers need protection from further redistribution of the rates burden to them.
- The Launceston Municipal Ratepayers' and Residents' Association (sub. 10) suggests that Australian Government-imposed disincentives (such as withholding grants) to local governments that excessively burden their ratepayers (which it describes as setting rates above the national average) would be desirable for ratepayers. This would help to control cross subsidisation and restrict council provision of non-core services and infrastructure that might prove to be unsustainable by ratepayers.

In this chapter, the nature of these requirements or restrictions are identified and their impact is explored. The Commission's terms of reference refer only to their possible consequences for the revenue-raising capacity of local governments. However, constraints on the level and structure of rates, fees, charges and contributions might also influence the economic efficiency of revenue and spending decisions made by local governments. Similarly, they might affect the distribution of the burden of revenue raised among ratepayers (an issue which is examined in greater detail in chapter 7). Some of these consequences on efficiency and distribution are also noted in this chapter.

In explaining the nature and importance of these constraints and their consequences, it is useful to distinguish between revenue from *rates* and revenue from *fees, charges and contributions* because:

- legislation and regulation apply differently for rates than for fees, charges and contributions
- as a general rule, it is more efficient to use rates revenue to fund public goods and services because these cannot be funded through market mechanisms, and to use fees, charges and contributions to fund goods and services with substantial private good characteristics because of the advantages of preference revelation.

6.1 Constraints on rates

In broad terms, revenue from untied grants and property rates constitute local government's general revenue — that is, revenue that is not tied to, or derived from, the provision of particular services. Property rates are the only tax instrument, and discretionary source of general revenue, available to local governments.

In this section, the legislative and regulatory constraints on the level and structure of rates, that have been identified by participants in this study as having an impact on local government revenue raising and decision making, are examined. Key constraints include:

- the land and property valuation methods imposed or allowed
- the ability to impose differential rates on different categories of ratepayer and other elements of the rating structure
- the exemptions required to be made for particular classes of land owners or users, offset by reciprocal tax arrangements (in part or in full)
- the concessions that must be applied to some categories of ratepayers, offset by reimbursements (in part or in full)
- rate pegging (currently imposed only in New South Wales, but to apply to residential rates in the Northern Territory for the next three years).

Some broad efficiency and distributional issues relating to rates revenue are discussed in box 6.2.

Box 6.2 Rates revenue — some efficiency and distributional issues

Access to sufficient rates revenue is necessary if local governments are to:

- provide services for which user fees cannot be charged appropriately (for example local roads, bridges, street lighting, drainage systems, many parks, visitor centres and some human services, such as public health campaigns)
- subsidise the provision of services for which other community members benefit in addition to the private benefits of individual users (that is, there are positive externalities)
- fund services where equity of access is considered important (for example, libraries, community centres and public toilets).

If legislative or regulatory factors constrain the capacity of local governments to raise revenue from rates, they might prevent local governments from providing these services and subsidies at the levels preferred by their communities (that is, levels for which the community would otherwise be willing to pay through rates).

Such legislative or regulatory constraints might also induce other distortions in local government decision making. Councils, for example, might decide to fully cost recover through user fees and charges, the provision of some services even though there is a case to at least partially subsidise them from rates. Or they might attempt to exceed cost recovery levels in order to generate extra income to supplement constrained rates revenue.

Another possible outcome of legislative or regulatory constraints might be to limit local governments' capacity to achieve the distribution of rates burdens among different ratepayers than they otherwise would choose. To the extent that this is so, or that local governments respond to rates revenue constraints by seeking other funding sources (or reducing services), there will be distributional consequences for ratepayers, in addition to efficiency impacts.

Prescribed valuation methods

State Governments specify in legislation property valuation methods that can, or must, be used by local governments. These vary considerably across jurisdictions (table 6.1). In Victoria, Tasmania and the Northern Territory, councils have the greatest freedom of choice among three different bases. In South Australia, there are three choices, but two of these apply only in specific circumstances. In Western Australia, two methods are used, but these are restricted by land type, effectively meaning that there is no choice of methods. In New South Wales and Queensland, councils are restricted to a single valuation method. More information on valuation methods is provided in appendix B.

Table 6.1 Property valuation methods permitted to be applied

<i>Group^a</i>	<i>Method</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA^b</i>	<i>SA</i>	<i>Tas</i>	<i>NT</i>
A	Assessed annual value (AAV)						✓	
	Annual value (AV)					✓ ^c		✓
B	Capital improved value (CIV)		✓					
	Capital value (CV)					✓	✓	
	Improved capital value (ICV)							✓
C	Gross rental value (GRV)				✓			
	Net annual value (NAV)		✓					
D	Site value (SV)		✓			✓ ^c		
	Land value (LV)	✓					✓	
E	Unimproved capital value (UCV)							✓
	Unimproved value (UV)			✓	✓			

^a Various terms are used across jurisdictions to describe methods that are essentially the same and these are grouped together. ^b Two methods are used in Western Australia, but these are restricted by land type: UV for rural only and GRV for non-rural only. ^c The AV and SV methods can be used in South Australia if the council declared rates for that land on that basis for the previous financial year; or if the council declared rates for that land on the basis of capital value for the previous three financial years.

Source: State government legislation various.

Views about prescribed valuation methods

A number of submissions made to this study and reports commissioned by local governments suggest that prescribed valuation methods might be a constraint on revenue raising, both on rates revenue and total own-source revenue (PwC 2006; Beale, sub. 9; Local Government Association of Queensland [LGAQ], sub. 11; Local Government Managers' Association of New South Wales [LGMANSW], sub. 17; Pilbara Regional Council, sub. DR76; Shire of Collie, sub. 55; Mosman Municipal Council, sub. 60). It is argued that a limited choice of valuation methods constrains the flexibility of local governments to raise rates revenue, thereby reducing councils' ability to raise sufficient revenue to meet their infrastructure requirements and demands for public goods and services. This is claimed to be especially the case in New South Wales, Queensland and Western Australia.

Specifically, it is suggested that greater choice of valuation methods is associated with higher rates revenue per person and higher rates revenue growth. PwC data comparisons appear to indicate that, where State Governments permit councils to choose between valuation methods, councils tend to have the highest average rates revenue per person and have had the highest rates revenue increases over the five years to 2004-05 (Australian CEOs Group, sub. 18; PwC 2006).

Beale (sub. 9, p. 8) claims in relation to New South Wales:

... the doubtful usefulness of the inflexible UCV indicates a new base is necessary plus the fact that users are not paying is the ultimate cause of lack of funds, from which the other problems [such as financial sustainability] are a natural progression.

Similarly, the Local Government Association of New South Wales (LGANSW) and the Shires Association of New South Wales (SANSW) (sub. 52, p. 12) argue:

ICV would help alleviate the apparent distortion where, for example, very high value home units pay significantly less rates than free standing homes (of comparable or lesser value) in the same council area ... Outside a rate pegging environment, capital values could increase a council's rate revenue-raising capacity by increasing the valuation base. Within a rate pegging environment, there may be indirect advantages via greater flexibility to maximise rate revenue through special rate variations; for example, better targeting of capacity to pay.

Assessment of prescribed valuation methods

The low rates of annual revenue growth in recent years in New South Wales and Queensland (figure 6.1), prima facie, appears broadly consistent with the view that prescribed valuation methods constrain rates revenue. This proposition is consistent with strong rates of growth in Victoria and South Australia. This, however, does not explain the low rates of growth in Tasmania and the Northern Territory, which are both permitted to use several property valuation methods for rating. Moreover, these statistical comparisons are far from conclusive, for two reasons.

First, it is likely that other factors have more directly influenced the rates revenue growth experienced in these jurisdictions. The low growth in New South Wales is more likely to be driven by rate pegging (discussed later in this chapter) than the land valuation method *per se*. Similarly, Victoria's highest increase in annual rates revenue over the period is likely to reflect, at least in part, a catch-up in response to the rates reductions imposed during the 1990s when local government amalgamations took place. Also, for South Australia, local government has a relatively heavy historical reliance on rates, rather than fees and charges, compared with other jurisdictions (South Australian Government Officials, Adelaide, pers. comm., 7 May 2007).

Second, and more fundamentally, it is not obvious why local governments using a particular valuation method, say UCV, should be more constrained than those using another, say CV. Local governments can set a higher rate in the dollar on their lower UCV valuation base to raise the same total revenue from their ratepayers as they would if they used CV. In such circumstances, rates revenue growth would reflect aggregate budget requirements rather than choice of valuation methods.

Figure 6.1 **Growth in real council own-source revenue**

Per person, per year, 1998-99 to 2005-06^{a, b, c}



^a Data are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator. ^b Other revenue includes fines, developer charges and contributions, and other current and non-current revenue. ^c Data for Victoria before 2001-02 are derived from the Victorian Grants Commission collection because earlier years are unavailable from the ABS collection at the local government level. Data for the Northern Territory are from 1999-2000 to 2005-06 because data for 1998-99 are considered unreliable.

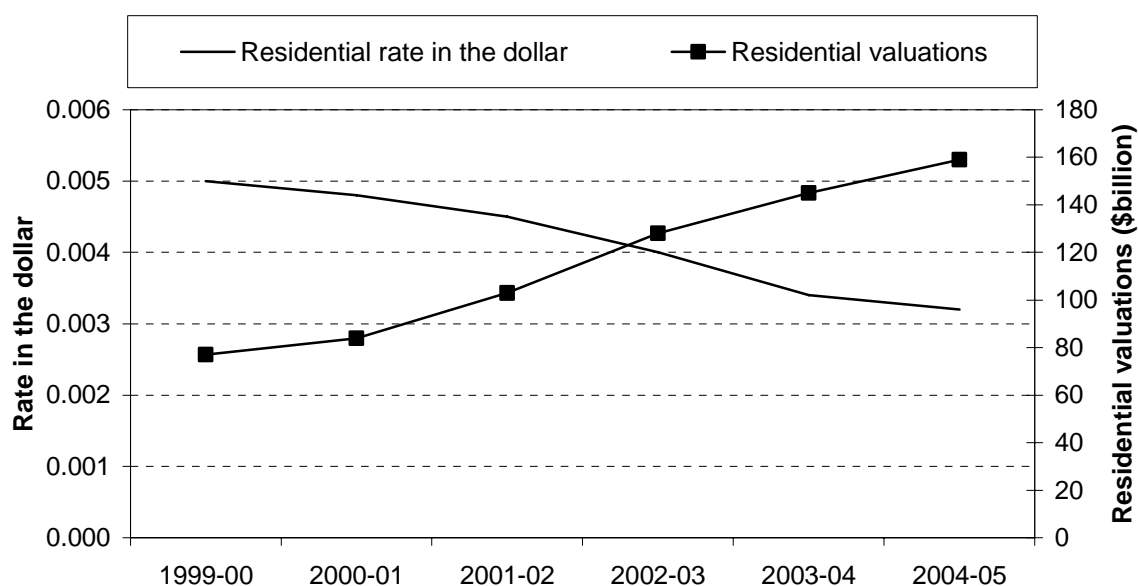
Source: ABS unpublished; Productivity Commission calculations.

The WALGA (sub. DR78, p. 4), however, notes that there are regulatory restrictions on rates for land covered under State Agreements. The Pilbara Regional Council (sub. DR076, p. 2) provides an example of how the requirement under s. 6.30 of the *Local Government Act 1995* (WA) to use specified amounts based on the size of land (appendix B) and on UV for rating natural resources, constrains the amount of rates revenue raised from commercial land under State Agreements:

Accordingly the unimproved value of 40 000 hectares of land being mined is only \$100 000. And to provide some perspective, this is less than a quarter of the price of an average home in the Pilbara.

Because councils alter the rate in the dollar each year to align with their budget requirements, rates revenue is typically less volatile than the underlying property valuations. Evidence of this using SA data shows that over the period 1999-2000 to 2004-05, as residential property valuations increased, the rate in the dollar decreased (figure 6.2). Similar results are available for Darwin (Darwin City Council unpublished).

Figure 6.2 Residential property valuations and rate in the dollar
South Australia



Source: Adapted from Local Government Association of South Australia (LGASA) (2007).

FINDING 6.1

In principle, rates revenue is not constrained by limits on the range of land valuation methods available to councils or the specific type of land valuation method applied because councils can adjust the rate in the dollar to achieve their revenue requirements.

Choice of valuation methods, however, will have implications for efficiency and distributional consequences of local government decisions. Using UCV (or SV) as the rates base is more economically efficient compared with CV. The use of CV (or annual rental equivalent) might distort land use decisions because it creates a disincentive to make capital improvements to property. Thus, in principle, the prescribed use of UCV and UV in New South Wales, Queensland and Western Australia have efficiency advantages (while not constraining rates revenue, in aggregate) over other methods. In practice, any efficiency effect of land valuation method adopted is likely to be relatively small in Australia because rates are relatively low.

In addition, the distribution of the rates burden between ratepayers will be different between valuation methods. Rates per residence, for example, would be higher under UCV, relative to CV, for those living in an inexpensive house compared with

those living in an expensive apartment block on land of similar value.¹

Differential rates and other elements of rating structures

State Governments specify in legislation the rating structures (minimum rates, fixed and variable components, tiered or differential rates) that are permitted.² These specifications vary across jurisdictions and are described in detail in appendix B.

There are broad limits to the extent to which councils may determine the composition of land categorisation (for example, residential, commercial, farmland or agricultural, and mining) and other structural elements (for example, the setting of fixed and variable rates components). There are sometimes more detailed specifications within this. For instance, NSW land is not to be categorised as farmland if it is rural residential land. There are also other flexible rating options in some jurisdictions. Among them, ‘mixed development apportionment factors’ provide further rating options in New South Wales allowing councils to rate land with both residential and business uses proportionally (LGANSW and SANSW, sub. 52; *Local Government Act 1993* s. 518[B], 519 and 515[2]).

Views about differential rates and rating structures

The dominant view from participants and other commentators appears to be that constraints imposed by State Governments on rating structures are minimal, and that the legislative categorisations of differential rates provide adequate scope and flexibility. The LGANSW and SANSW (sub. 52), for example, noted that the Local Government Act provides considerable scope to categorise properties for rating purposes, as well as minimum and base rates, and special rates mechanisms. Most NSW councils apply differential rating to at least the main, four-category, level of property type. Administrative simplicity appears to be a primary reason for not more fully utilising differential rating options, such as property type sub-categories.

Similarly, the LGAQ (sub. 11) notes that legislative flexibility of differential and special rating instruments assists Queensland councils to more fully access rates revenue.

¹ Such differences might cause interactions between perceptions of value for money and willingness to pay, although they might be able to be mitigated through the use of differential rates sub-categories in some jurisdictions (Queensland, for example), but not in others (New South Wales, for example).

² There are also *special* and *separate* rates in some jurisdictions (see appendix B for details). The characteristics of these rating instruments are more similar to fees and charges than to rates, because they are identifiable to the service for which they are collected and to those they benefit.

Assessment of differential rates and rating structures

Rating structures that councils are typically permitted to apply provide them with a high degree of flexibility. However, the ability of local governments to differentiate between and within categories of ratepayers is not unlimited. In particular:

- there can be limits on the degree of differentiation allowed between ratepayer categories. In Victoria, for example, ‘the highest differential rate in a municipal district must be no more than 4 times the lowest differential rate in the municipal district’ if using CIV (s. 161[5] *Local Government Act 1989* [Vic])
- where minimum rates can be applied, there usually are limits on the proportion of properties that can be subject to them, or on the proportion of rates revenue that can be collected from them
- more generally, within each differentiated ratepayer category, councils are restricted to applying uniform rating structures, including a uniform rate in the dollar of property valuation.

Generally, these sorts of restrictions do not limit the capacity of local governments to meet their overall revenue requirements. They can, however, limit the ability of local governments to determine the distribution of rates burdens between and within categories of ratepayers. For example, in the residential rates category, some councils report that they are constrained in setting the rate in the dollar by their assessment of what pensioners can afford to pay (after taking into account State Government funded concessions). Since councils can only apply a single uniform rate in the dollar to all residential ratepayers, this might limit their capacity both to raise revenue in the residential category and to distribute the rates burden to reflect their preferred outcomes. However, the strategic use of, for example, minimum rates, fixed charges, and concessions or rebates, can help to alleviate some of these impacts.

Some councils use sophisticated modelling approaches to rate setting, taking into account all of the options available to them and can do so at a cost outweighed by the resulting substantial benefits (Maroondah City Council, sub. DR93). For other councils, the costs of modelling and administering complex rating structures is likely to lead them to choose not to fully utilise the flexibility which, in principle, is available to them.

FINDING 6.2

Differential rating provisions generally increase the capacity of councils to raise revenue from property rates. They do so by enabling councils to structure better rates payable to the different capacities to pay of, and services received by, different categories of ratepayers.

Rating exemptions

Rating exemptions are prescribed in State legislation. Although these vary across jurisdictions, common exemptions include much Commonwealth and State-owned land, and land used by public hospitals, libraries, cemeteries, charities, religious organisations, universities, schools and foreign embassies, many of which are non-government not-for-profit organisations. Exemptions are described in detail in appendix B.

Views about rating exemptions

According to some submissions and research, rating exemptions act as constraints on rates revenue-raising capacity (Australian CEOs Group, sub. 18; Australian Local Government Association, sub. 50 and DR79; Beale, sub. 9; City of Boroondara, sub. 24; City of Gosnells, sub. 12; City of Mandurah, sub. 36 and DR73; Department of Transport and Regional Services [DOTARS], sub. 38; Guyra Shire Council, sub. 23; LGANSW and SANSW, sub. 52; Local Government Association of the Northern Territory [LGANT], subs. 46, DR92; LGAQ, sub. 11; Municipal Association of Victoria, sub. 22; North Sydney Council [NSC], sub. 13; NSW Farmers' Federation, sub. DR75; Victorian Farmers' Federation, sub. 31; Wellington Shire Council, DR74; Western Australian Local Government Association [WALGA], subs. 51, DR78; Willoughby City Council, sub. 30).

Rates exemptions provided by councils to other spheres of government are extensive. For example, the NSW Farmers' Federation (sub. DR75, p. 2) states:

... the Association would hypothesise that the effect of rating exemptions has a more severe effect on rural, regional and remote councils. For example, National Parks do not currently pay local council rates. With 7 per cent of the State covered by national parks it represents a significant area of land within local government areas where no rating revenue is raised ... Similarly 34 per cent of NSW land area is State forest. Forests NSW currently do not contribute towards local government rates although there are some situations where agreements between Forests NSW and local councils provide for funding of some roads and local bridges ... Furthermore, rural areas of NSW are also experiencing an increase in the number of small landholders who are purchasing agricultural land and gifting or donating this land for conservation purposes. This land is in turn taken out of the land base on which rates are levied and results in a reduced ratepayer base.

It has been further suggested by Dollery, Crase and Johnson (2006, p. 33):

That State Governments are exempt from rates, even for some commercial activities ... further limits the revenue-raising powers of local government, and sees local communities subsidise the activities of State Governments.

Others suggest that, although rate exemptions to other spheres of government are a constraint, they are not a major one. In particular, some arrangements enable local governments to levy rates on selected State-owned land (PwC 2006). LGAQ (sub. 11, p. 4) notes:

... while rate exemptions provided to State and Federal government agencies do have some impact on the revenue base of councils, it is not as significant [an] issue as it once was. Most government agencies that are of a commercial nature do pay general rates. However, there are some anomalies that should be addressed.

Where rate equivalent payments are made directly to Australian or State Governments by entities that have received local government rates exemptions, these are not always subsequently redistributed to local governments (Dollery, Crase and Byrnes 2005; Hawker Committee 2003). The LGMANSW (sub. 17) claims that the NSW Government does not necessarily pass on these payments to local government.

Some commercial activities, such as business initiatives by airport lessee companies on Commonwealth Government-owned land, are partly exempt from rates in some cases. According to the Australian Mayoral Aviation Council (2007, p. 4):

In the further interests of the policy of competitive neutrality, the Commonwealth has included in the airport leases a clause which requires the airport lessee companies to pay to the relevant local authority an amount equivalent to rates for those parts of the airport site which are leased or on which financial or trading operations take place. The lease provisions are very clear and specific but the Department of Transport and Regional Services has continued to administer the lease in such a way, contrary to the lease provisions, as to encourage the airport lessee companies to expect that they are entitled to some sort of discount on the amount payable. Such action clearly puts the airport lessee companies in a privileged position compared to other similar ratepayers.

Some non-government operations of an essentially commercial nature on rates-exempt land also escape rates payments. As the City of Mandurah (sub. 36, p. 7) explains:

... retirement villages that are operated by 'charitable institutions' should not be provided with rates exemptions, except for any component of the village that provides 'high-care' accommodation.

Similarly Wellington Shire Council (DR74, p. 2) states:

A key issue for us is the inability to rate infrastructure that is owned by large corporations which is currently exempted in Victoria (and maybe other States). Specifically Council has gas pipelines traversing the municipality which are currently unrateable under the Victorian Gas Act. Latrobe City Council has a similar issue with coal mining and electricity generating plant in the Latrobe Valley ... The impact of State regulation has potential from time to time to disrupt and erode Council's revenue base. A current example of this is the Victorian Government's 'Water Unbundling'

initiative which separates the value of irrigation water from the value of the property and therefore excludes it from municipal valuation for rating purposes. Council estimates that this particular initiative will cost us \$500 000 per annum on a recurring basis.

The LGANT (sub. DR96) also identifies that even after the NT New Local Government Reform initiatives are implemented, not all classes of mining tenements (for example, licences) will be rateable.

Assessment of rating exemptions

The City of Gosnells (sub. 12, p. 1) attempts to quantify exemptions to charities in Western Australia, arguing they are a major constraint on local government revenue-raising capacity:

Section 6.26(2)(g) of the Western Australia *Local Government Act 1995* ‘prevents local governments from rating land used exclusively for charitable purposes.’ The estimated value of rate revenue forgone by local governments in Western Australia as a result of this legislation is around \$6.5 million.³

Although exemptions prevent local governments from raising rates revenue from rates-exempt entities, they do not limit overall rates revenue. However, rates exemptions can limit revenue raising for some councils, such as those with low rates bases, such as some rural and many remote and Indigenous councils, or those that have large exemptions relative to their rates base. For these councils it might not be feasible to compensate for rates exemptions by applying higher rates to other ratepayers.

FINDING 6.3

Rates exemptions reduce local governments’ rates bases and do so differentially across local governments with different proportions of exempt land. Whether exemptions constrain the overall capacity of local governments to raise revenue from rates depends on the extent to which it is (politically) feasible for them to set rates higher than otherwise would be required on non-exempt land.

Although local governments are obliged to provide rates exemptions to other spheres of government, there are also reciprocal tax arrangements, whereby local governments receive exemptions from paying taxes and charges to other spheres of government. Local governments, for example, receive exemptions from payroll tax,

³ ABS (unpublished) data indicate that WA rates revenue for 2005-06 is \$928 million, therefore \$6.5 million in forgone revenue is approximately 0.7 per cent.

stamp duty and debits tax, as well as income tax.⁴ These might, at least partially, offset any disadvantage experienced from rates exemptions given by local governments to other spheres of government (FSRB 2005; LGAQ, sub. 11).⁵

There is a paucity of data available to assess the net effect of rates exemptions plus the gains from Commonwealth and State provided tax benefits (that is, reciprocal tax arrangements). Available estimates of the net effect are incomplete and inconclusive (City of Ryde sub. 45; FSRB 2005; SCEFPA 2003; LGAT sub. 42; Victorian Government 2007). For example, LGAQ (sub. 11) suggests that, in Queensland, reciprocity might largely offset the impact on local government revenue arising from Commonwealth–State exemptions (and concessions, discussed below). Further, LGAQ (sub. 11, p. 29) estimates:

... mandated exemptions and concessions potentially amount to around \$100 million per annum in revenue forgone across Queensland councils ... councils are exempt from some taxes and charges of other spheres of government ... It is very difficult to accurately estimate the extent of benefit conferred on Queensland councils from such exemptions. It is possible that they could be around the \$100 million mark noted as the revenue lost by mandated rate exemptions and concessions.

Rating exemptions also have efficiency and distributional implications. One potential efficiency issue is that exemptions might benefit private entities by reducing the cost of producing their goods and services. This can distort economic activity, by encouraging increased consumption of these goods and services. LGANSW and SANSW, and NSC provide examples:

... the distinction between public and private or commercial use is becoming blurred in many instances. This arises in areas such as seniors residential and aged care facilities. Many facilities operated under the banner of churches, charities and benevolent institutions bare little distinction from privately owned complexes and facilities. Similarly, many councils cannot see why rate exemptions apply to the large land holdings of many private schools, a large proportion of which is utilised for sporting, recreational, staff accommodation and other non-core educational uses. (LGANSW and SANSW sub. 52, p. 16)

Government buildings, government agencies and private schools attract large numbers of workers and students from outside the North Sydney Council's boundaries who utilize the local facilities without making any financial contribution. If these organisations were rateable then Council could expect to receive a significant increase in rate revenue. (NSC sub. 13, pp. 4-5)

⁴ Debits tax has been abolished in some jurisdictions (for example, New South Wales and Western Australia) but continues to apply in others. For example, in Victoria local governments are exempt from debits tax unless it relates to business activities of local government (SROV 2007).

⁵ NSC (sub. 13), however, claims that NSW local governments are disadvantaged because they are not completely exempt from taxes and charges of other spheres of government.

In addition, rating exemptions have distributional effects. Abelson (2006, p. 8) suggests that there are inequities in some jurisdictions due (in part) to wide ranging rate exemptions. The City of Boroondara (sub. 24, p. 6) explains:

The existence of rate exempt properties reduces the opportunity to raise revenue as the rating burden is transferred to the owners of remaining rateable properties.

The total dollar amount of rates required for a council's budget will not change, but the burden of rates will be higher than otherwise on rateable properties, and these distributional impacts will vary between local governments.

Rating concessions and rebates

Rating concessions and rebates are prescribed in legislation across jurisdictions. These are commonly for pensioners and other welfare recipients (holders of Commonwealth health care cards and various State concession cards — see, for example, *Rates and Charges [Rebates and Deferments] Act 1992 [WA]*). They even apply to some privately owned commercial property (see below).

Views about rating concessions

In most jurisdictions, rates revenue losses from State government mandated levels of pensioner concessions are fully rebated by State Governments (Australian CEOs Group, sub. 18; Australian Local Government Association, sub. 50; Beale, sub. 9; City of Boroondara, sub. 24; DOTARS, sub. 38; LGANSW and SANSW, sub. 52; LGANT, sub. 46; LGAQ, sub. 11; Municipal Association of Victoria, sub. 22; NSC, sub. 13; WALGA, sub. 51).

However, there are some exceptions. Most notable is the case of New South Wales where only 55 per cent of rates revenue lost from pensioner concessions is reimbursed by the State Government (Dollery, Johnson and Byrnes 2007; IIFS 2006; NSC, sub. 13).

LGAQ (sub. 11, p 18) maintains that legislatively required concessions are one of the few constraints on council rating in Queensland and provides an example of:

... the requirement of s. 25 of the Queensland *Valuation of Land Act 1944* to give developers a 40% concession on rates per property while they are still in the original developers name. In addition, Councils cannot charge a minimum rate on these lots resulting in some situations where the developer landowner pays less than \$10 in rates per subdivided lot. This contrasts with rates paid by individual owners of vacant lots who would typically pay a minimum of between \$350 to \$400 in general rates ... Because of the concession, the properties pay only \$12 million, an effective subsidy by other ratepayers of some \$8 million.

Local governments in some jurisdictions (see appendix B, table B.3) can choose to waive, rebate or defer revenue owing to councils. Concessions of this nature appear to be policy choices of individual local governments, as distinct from State legislative or regulatory requirements. The LMRRA (sub. 10, p. 27) gives the example that Launceston City Council is providing various concessions to private, for-profit organisations and this results in forgone revenue to the Council:

Launceston ratepayers are burdened beyond a reasonable level through Council-owned properties not being let to the public at large at commercial rental rates plus equivalent municipal rates (including water, sewerage and fire levy's etc.) and land tax, commonly charged in the private sector for commercial tenancies.

COTA (2005, p. 2) claims that in Western Australia:

... some local government authorities are considering abandoning their early payment discounts for rates as the State Government does not compensate them for the discount.

Further, the WALGA states that 'State mandated concessions for local government rates should be funded by the State' (sub. 51, p. 23) implying that (other than pensioner concessions on rates) not all other concessions are fully reimbursed.

Assessment of rating concessions

Whether or not legislated rating concessions reduce rates revenue-raising capacity by local governments depends on:

- the extent to which councils are compensated by other spheres of government for the lost revenue
- the ability to recoup any remaining rates revenue forgone by increasing the rates paid by other ratepayers, in order to meet councils' total budget requirements
 - any minimum, or fixed amount, of rates might prevent councils setting a sufficient level of rating for residential (or urban) ratepayers to compensate for concessions, in areas with high levels of people eligible for concessions.

Information presented here suggests that councils (with the exception of those in New South Wales), are fully reimbursed for rates concessions to pensioners that local governments must provide at the discretion of State Governments. This is generally the most significant concession, by value.

Another issue (albeit not due to statutory requirements) associated with foregone rates revenue through concessions, is that many local governments set council policy to provide pensioner concessions that are above the level required and rebated by, State Governments. The rebated value of the concessions relative to rates otherwise payable appears to have diminished over time (in some States) and

local governments have self-funded additional concessions and rebates.

An example from the WALGA, however, notes that there are sometimes specific circumstances whereby State regulation does prohibit councils granting a concession in relation to a rate or service charge on the basis of whether the land is occupied by the owner of the land (WALGA, sub. DR78; *Local Government [Financial Management] Regulations 1996* part 5, reg. 69[A]). This might have revenue-raising implications if it means that a council sets the rate in the dollar for residential ratepayers lower than it would have if it was permitted to offer concessions to owner-occupiers (in order to reduce the rates burden on owner-occupiers).

Notwithstanding that there might be little revenue-raising constraint arising from rating concessions, they have a distributional impact on the remaining rateable properties, as previously discussed in the ‘rating exemptions’ section.

Rate pegging

Rate pegging refers to State government restrictions on the annual percentage increase in rates revenue. Rate pegging is currently applied in New South Wales only (and has been since 1977). However, NT residential rates are to be capped in municipalities to the Consumer Price Index (CPI) for the first three years (DLGHS 2007) of the NT Government’s New Local Government reform program. Rate pegging was also applied temporarily in Victoria in the early 1990s and in South Australia in the late 1990s (Dollery, Crase and Byrnes 2006; IIFS 2006; PwC 2006). These rate freezes (and rates reductions in Victoria) were applied as part of a package of local government reforms that included amalgamations, intended to achieve efficiency savings (Australian Services Union, sub. 27; OMPLG Victoria 1996).

The Australian Services Union (sub. 27, p. 15) notes:

... local government and some hundreds of councils throughout Australia are, or have been, faced with rate pegging or limitations of one sort or another by some State Governments.

Any State Government can, through its regulatory powers, impose some form of capping on annual movements in rates. The FSRB (2005, p. 55) notes, for example, that in South Australia:

State politicians have proposed capping annual movements in rates to CPI movements. Such a cap based on the CPI — or any other index that does not reflect the annual movement in (efficient) costs of providing services — is unwarranted and will only put upward pressure on rates at some time in future.

Similarly, the LGASA (sub. DR86, p. 20) notes ‘increased regulation is a constant threat to local government. For example, a cap on rates based on the CPI is always a possibility’. Further, this does not take into account the circumstances of individual councils.

This section focuses on the NSW rate pegging system, the only ongoing system operating currently, to illustrate the issues involved in this form of constraint on rates revenue raising (box 6.3 and appendix B).

Box 6.3 Rate pegging in New South Wales

Under s. 506 of the *Local Government Act 1993*, the NSW Government sets a limit on the percentage increase in total general income that councils can raise from particular rates and charges. This is called the rate-peg percentage and it is specified by the Minister for Local Government each year.

Under s. 508 of the Act, councils can apply for Ministerial approval to exceed the rate-peg percentage (that is, seek a special variation). This approval is usually for one year, but can be for up to seven years. There are extensive informational and reporting requirements associated with such applications.

Source: DLG (2006, 2007d); DLG (sub. DR92).

Views about rate pegging

On the basis of submissions and literature considered, there are perceived to be three main effects of rate pegging (Australian Services Union, sub. 27; Baulkham Hills Shire Council, sub. 28; Beale, sub. 9; Economic Planning Advocacy, sub. 14; Fitton, sub. 26; LGANT, sub. DR96; LGMANSW, sub. 17; Mosman Municipal Council, sub. 60; NSW Inland Forum, sub. DR88; Shoalhaven City Council, sub. 25; Willoughby City Council, sub. 30). Specifically, it is suggested that rate pegging might:

- constrain the scope for local governments to raise sufficient rates, and total own-source revenue, to meet community preferences for local government services
- create an incentive to increase fees and charges as an alternative source of revenue to rates
- create additional compliance and administrative costs.

Each of these claims is examined below, including the extent to which any of these effects might distort local government decision making.

One view is that rate pegging in New South Wales is a significant constraint on revenue raising, both on rates revenue and total own-source revenue. It is claimed that this is because it limits the ability of councils to raise:

- revenue autonomously (Hornsby Shire Council, sub. 40; Lane Cove Council, sub. 16; LGANT, sub. DR96; LGAQ, sub. 11; LGAT, sub. 42; Mosman Municipal Council sub. 60; NSC, sub. 13; Penrith City Council, sub. 19; Tumbarumba Shire Council, sub. 8)
- rates commensurate with the need to meet infrastructure requirements and community demand for local public goods and services (Australian Services Union, sub. 27; Bankstown City Council, sub. 41; Baulkham Hills Shire Council, sub. 28; Dollery, Crase and Byrnes 2006; LGANT, sub. DR96; Sutherland Shire Council, sub. 39).

Access Economics (2006a, p. v) states:

... were councils with relatively low rates revenue per assessment and/or relatively low degrees of cost recovery in their tax-supported sector not constrained by rate pegging and other forms of State government regulation, they would be able to increase their revenue-raising efforts to levels commensurate with higher-effort councils. Admittedly, a proportion of differences presently observed among councils in per person revenue collections is no doubt due to differences between them in average household and business income levels. However, even if only 50 per cent of the observed differential in per person collection levels were eliminated, our modelling indicates that the combined effect of increased investment income and increased revenue-raising effort could see the total operating revenues of the tax-supported sector of NSW councils on average a further 12 per cent higher in real per person terms in 10 years time.

In some cases, this constraint might adversely affect financial sustainability by exacerbating fiscal stress on local governments. This might especially apply to councils servicing a growing population, compared with councils with either a static, or a diminishing population given that the increase relates to total rates, not rates per person.

Even where special variations to increase rates are approved by the Minister, it is claimed that these do not address the underlying, ongoing problem of rates revenue not keeping up with rising costs (Australian Services Union, sub. 27; Bankstown City Council, sub. 41; City of Boroondara, sub. 24; Fitton, sub. 26; Guyra Shire Council, sub. 23; LGANT, sub. DR96; LGMANSW, sub. 17; NSC, sub. 13; Penrith City Council, sub. 19; Shoalhaven Shire Council, sub. 25).

An alternative view is that rate pegging is not a significant constraint on rates, or own-source revenue raising because:

- rates revenue might be constrained by factors other than rate pegging — most

importantly, the willingness of communities to pay. That is, if the peg were removed, rates might be similarly constrained by political factors

- other provisions, including special variations, allow considerable discretion in raising rates revenue
- the ability to raise revenue from other sources allows considerable discretion in raising revenue even where rates are restricted.

In particular, local governments might be induced to offset pegged rates revenue by seeking increases in revenue through user fees and charges, where possible. In New South Wales, Crisp (sub. 3) asserts that permitting cost transfers (this is both capital and operational) from general rates to charges for services, enables a council to offset constraints that otherwise would apply because of rate pegging. Lane Cove Council (sub. 16) and the LGMANSW (sub. 17) explain that rate pegging is largely the reason why local governments over the past 10 to 15 years have accessed more direct user charges (such as from property portfolios, that might comprise council premises, community facilities, parking stations and rental properties), parking fines and investment income as alternative revenue sources to rates.⁶

Assessment of rate pegging

The international literature provides examples which suggest that rate capping is a constraint on rates revenue. Some US studies suggest rate capping:

- reduces the level and growth of property rates revenue in capped jurisdictions compared with uncapped ones
- changes the composition of revenue from property rates to other taxes, fees and charges (ACIR 1995; Dye and McGuire 1997; Mullins 2004; Mullins and Joyce 1996; Shadbegian 1999).

The Australian literature documents similar outcomes (Carnegie and Baxter 2006; Crase and Dollery 2005; Dollery, Crase and Byrnes 2005, 2006; FSRB 2005).

Nevertheless, rate pegging in New South Wales is not absolutely binding. There are provisions for councils to seek Ministerial approval to increase their revenue beyond the rate peg, to raise special rates and to exercise discretion in setting base and *ad valorem* amounts of ordinary rates (Abelson 2006; *Local Government Act 1993* NSW).

⁶ It is likely that the provision of local government services in most jurisdictions has shifted somewhat from rates funding to a greater emphasis on user fees and charges because of the economic reform culture in all spheres of government over the past couple of decades.

Many councils have successfully applied for special levies, such as environmental levies or infrastructure levies, as well as levies in commercial areas for streetscape improvements. Further, if a NSW council does not take advantage of the full rate peg available for a particular year, it can recoup the shortfall in either or both of the next two years (Abelson 2006; DLG 2007a, 2007d).

The NSW Minister for Local Government appears to approve most applications (on average 82 per cent, over the past seven years) by councils to increase rates by more than the rate peg (table 6.2). For 2007-08, this resulted in rates increases in some councils of just below 10 per cent, equivalent to nearly three times the rate peg (AFR 2007; Lynch 2007; Nicholls, Jacobsen and Garnaut 2003).

Table 6.2 Applications to exceed the NSW rate peg

Year	Total councils		Councils applied			Applications approved		Rate peg
	No	No	No ^b	%	No ^c	No ^d	%	%
2001-02	173	27	1	16	10	8	67	2.8
2002-03	172	30	2	17	14	8	73	3.3
2003-04	153	23	–	15	14	9	100	3.6
2004-05	152	25	–	16	22	–	88	3.5
2005-06	152	42	2	28	24	6	71	3.5
2006-07	152	39	2	26	27	6	85	3.5
2007-08 ^a	152	34	–	22	28	3	91	3.4

^a Data for 2007-08 might be under-reported because, for example, the Department of Local Government has indicated the Minister will likely approve another council's application of 5.54 per cent which is not included above. ^b Withdrawn applications. ^c Approved as requested. ^d Approved at a lesser amount than requested.

Source: Lynch (2007); DLG (2006); DLG (sub. DR92); DLG unpublished.

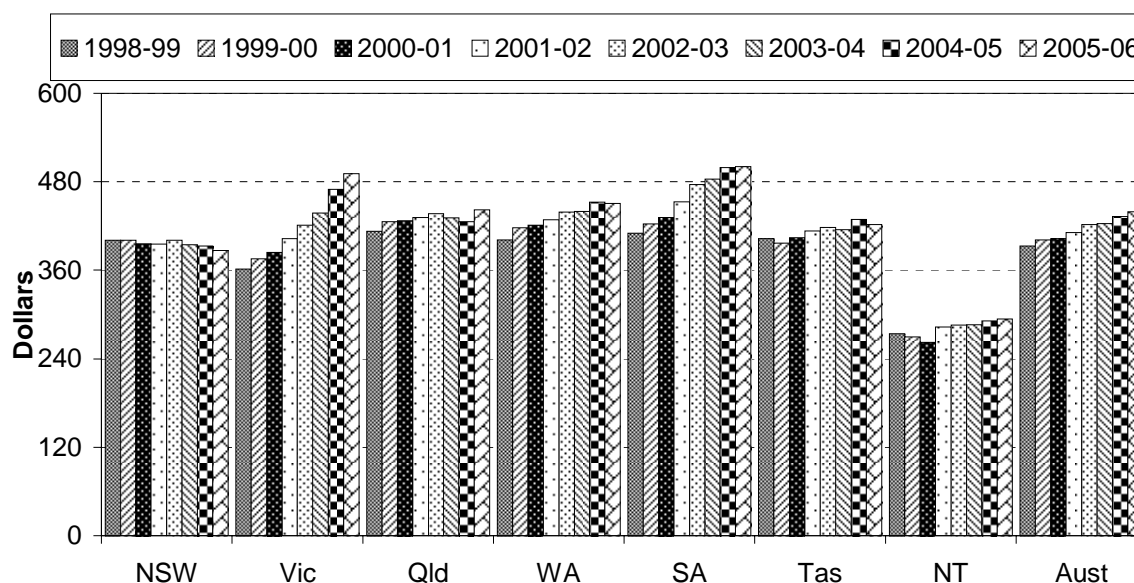
Notwithstanding the approval of numerous applications, the NSW Inland Forum (sub. DR88, p. 3) states that 'previous ministers have publicly stated that they will not approve applications which exceed 10 per cent regardless of the merits of the application'. Some statistical evidence also appears to support the view that rate pegging does restrict increases to rates revenue. New South Wales had the lowest average real rates revenue per person (\$387, compared with other jurisdictions between \$422 and \$501 per person) in 2005-06 (Northern Territory results excluded, because many areas were not rateable in 2005-06) (figure 6.3). Furthermore, NSW real rates revenue per person was largely unchanged between 1998-99 and 2005-06, compared with increases in all other jurisdictions, and an average national growth of 1.4 per cent per year (figure 6.1, presented earlier).

Moreover, the statistical evidence does not support the view that rates constraints can be offset by other revenue sources. NSW councils have the lowest growth in real own-source revenue per person of 0.3 per cent a year over the period 1998-99 to 2005-06, compared with a national average of 2.2 per cent per year (figure 6.1).

In particular, local governments in New South Wales had a lower than average growth rate from sales of goods and services. NSW revenue per person from sales of goods and services increased by 0.2 per cent per year compared with the national average annual growth per person from 1998-99 to 2005-06 of 1.9 per cent.

This might be driven, at least in part, by the already higher levels of revenue from sales of goods and services by NSW local governments. Specifically, real revenue per person from sales of goods and services was \$343 on average in 1998-99 compared with the national average of \$292. Between 1998-99 and 2005-06, NSW local governments sales of goods and services revenue per person ranged from \$342 to \$369, higher in each year than the national average, which ranged from \$292 to \$346 (ABS unpublished, PC calculations).⁷ This might suggest that any opportunity to offset forgone rates revenue with additional fees and charges might have been utilised some time ago, ahead of local governments in other States, in response to the introduction of rate pegging, and the scope for further increases has been minimal more recently.

Figure 6.3 Real rates revenue per person^a



^a Data are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator.

Source: ABS unpublished; Productivity Commission calculations.

⁷ In adjusting sale of goods and services data to remove revenue amounts raised from commercial water and sewerage services, results are consistent with this trend. NSW real revenue per person from sales of goods and services was \$194 on average in 1998-99 compared with the national average of \$176. Between 1998-99 and 2005-06, NSW local governments sales of goods and services revenue per person ranged from \$184 to \$200, higher in each year (except in 2001-02, where it was approximately equal) than the national average, which ranged from \$161 to \$201.

Overall assessment of rating issues

Analysis suggests that the overall impact on revenue raising of State government legislative and regulatory requirements is minimal in most jurisdictions because of the considerable flexibility in rating regimes. Most constraints can be mitigated, at least to some extent, because they are either avoided or other categories of revenue are raised. However, New South Wales appears to be the exception. Its rates revenue raising per person has been the lowest of all jurisdictions over the past seven years and appears to be restricted by rate pegging. Further, there is only part compensation (55 per cent) for State mandated concessions.

The political visibility of rates is high, largely because they are paid in a lump sum or quarterly (Caulfield 2000; Groenewegen 1990; Oates 2001). The political environment, rather more than legislative and regulatory constraints of State Governments, is likely to be the key factor driving revenue-raising decisions of local governments.

Legislative and regulatory impacts on the capacity of most local governments to raise rates revenue appears to be minimal. Notwithstanding this, there are both economic efficiency and distributional effects that might arise from State government restrictions on rating levels, structures, exemptions and concessions.

FINDING 6.4

Rate pegging has dampened the revenue raised from rates in New South Wales relative to other States and there seems to have been little offset from non-rates revenue sources in recent years.

6.2 Constraints on fees, charges and contributions

A wide variety of local government services are provided on the basis of users paying a fee which covers at least part of the costs of supply (see appendix B). These range from charges in some jurisdictions for the supply of water and sewerage services, to fees for the use of recreational and sporting facilities and for licences (for example, dog registration) or for permits (building approvals and on-street parking).

Some broad efficiency aspects of fees and charges are discussed in box 6.4. Conceptually, it is useful to distinguish between two broad categories of services and their associated fees and charges.

- *Compulsory* services and charges that ratepayers cannot avoid. Typically, these are property based services such as sewerage, garbage collection and disposal,

and recycling. Most local governments use fixed annual charges for such services, usually accompanying rates notices. Other examples are the special rates that a local government can levy for a service that is judged to especially benefit particular properties.

- *Discretionary* services that residents can choose to consume or not, and hence pay or not pay, according to their preferences. These range from some property services (such as development and building approvals and use of larger garbage bins), to a range of human services, recreational activities and information provision.

Box 6.4 Some efficiency aspects of fees and charges

In situations where services have private goods characteristics, it is generally preferable to provide them on a fee-for-service (user-pays) basis, rather than fund them out of rates revenue. If user charges are set to appropriately recover the opportunity cost of the resources used to supply the services, and the quantity supplied is responsive to user demand (willingness to pay), an efficient outcome is likely to result. Such an outcome is less assured if these services are funded out of rates revenue and service levels determined through political and administrative processes.

This is the case where the services are purely 'private' in that the benefits of their use by each consumer accrue solely to that user. But even where there are judged to be 'spillover benefits' to the rest of the community from an individual's (or group's) use of a service (such as is argued to be the case for library services, sporting facilities and building and other approvals), a presumption exists in favour of their provision along commercial lines for the private benefit component. Targeted subsidies for the spillover benefit to users or providers of the services would encourage the desired service levels. Only subsidies, not total costs, would be funded out of rates revenue, thereby reaping the benefits of market discipline in service production and consumption.

Statutory or regulatory requirements or limits applied to setting user fees and charges might sometimes enhance, and other times detract from, appropriate fee setting by local governments. A requirement, for example, that local governments fully recover the costs of providing a service is likely to encourage more efficient outcomes than if local governments were to subsidise service provision from their rates revenue. On the other hand, imposing limits on fees and charges to levels below the opportunity cost of service delivery will encourage over-consumption of local government services, and require subsidisation from rates revenue.

This distinction, as well as the structure and level of associated fees and charges is particularly important for assessing the efficiency and distributional impacts of the pricing of individual goods and services provided by local governments.

The likely consequences of a number of requirements and limitations placed on the setting of fees and charges by local governments are analysed in the remainder of

this section. These restrictions include:

- pricing principles that can or must be applied — in particular, partial cost recovery requirements and pricing and costing guidelines and frameworks
- statutory price capping of the levels of some fees and charges by State Governments
- limitations on the range of services for which charges can be applied — in particular, developer charges and contributions.⁸

Partial cost recovery and costing and pricing frameworks

This section relates to user fees and charges that are associated with council activities provided to the community through the sale of goods and services, or rental of property or facilities. These fees and charges, for the most part, are not statutorily set. Fees of this type include those for: camping, swimming pools, land clearing and community hall hire.

Partial cost recovery arrangements are commonly applied in some jurisdictions to some goods and services.⁹ In virtually all jurisdictions, for example, councils provide services for garbage waste collection. These services generally have identifiable beneficiaries and specified fees and charges, but do not always reflect full cost recovery.

Partial cost recovery arrangements sometimes reflect legislative requirements but, in other instances, reflect local government policy choices, especially relating to discretionary services.

Views about partial cost recovery and costing and pricing frameworks

Restricting fees and charges to less than full cost recovery constrains local governments' ability to raise own-source revenue. In some jurisdictions (for example, New South Wales), annual charges for property services (in addition to rates) are capped (Abelson 2006). The LGAQ (2006) asserts that local governments

⁸ The *ultra vires* issue, whereby a council cannot introduce new fees and charges where these are not specifically provided for in the legislation, might be another restriction. *Ultra vires* is defined as 'outside legal authority or beyond the scope of an organisation'.

⁹ Full cost recovery requirements are commonly applied to the commercial water and sewerage services where they are provided by councils in New South Wales (non-metropolitan only), Queensland and Tasmania. Full cost recovery arrangements do not constrain revenue-raising by local governments and these pricing arrangements are efficient. Full cost recovery arrangements are not discussed further in this chapter.

would benefit from improved ability to recover infrastructure costs. The FSRB (2005, pp. 55-6) claims that the fees and charges that SA local governments are permitted to apply are highly restrictive, generally preventing full cost recovery.

Further, the WALGA indicates that concessions must be applied to a number of fees and charges but are not always fully funded. For example, WA councils are required to apply a 50 per cent pensioner concession on at least some charges, with no rebate from the WA Government. The *Dog Act 1976* Regulations 4(2), for example, provides for pensioners to be charged 50 per cent of the fee otherwise payable. There is no State funded rebate provided in this case (WALGA unpublished). Examples of unfunded concessions also apply in Victoria.

Assessment of partial cost recovery and costing and pricing frameworks

Notwithstanding the fee and charge setting restrictions operating in most jurisdictions, these do not appear to be a major constraint on revenue raising, both on fees and charges revenue and overall revenue. Indeed, the LGASA (sub. 53, p. 13) notes:

... in activities such as sewerage/drainage schemes, off street car parking and caravan parks local councils more than cover operating expenses through the revenue raised.

In Western Australia, the City of Gosnells (sub. 12, p. 43) notes that it can apply commercial principles to increase and broaden the user charges base, as it is not constrained from doing so by regulation or legislation. The WALGA notes that there are sometimes specific exceptions to this, whereby State regulation does specify, for example, that councils cannot impose parking fees in some areas (such as at Cottesloe beach foreshore) (WALGA, sub. DR78).

In Queensland, there are no specific guidelines or requirements relating to cost measurement and allocation for local government service levels and pricing (LGAQ, sub. 11, p. 33). Even in New South Wales, where there are regulatory constraints upon a council raising revenue from fees and charges, these are not always strictly enforced (Crisp, sub. 3, p. 2). The Vacluse Progress Association (sub. 7, p. 5) notes:

Councils in New South Wales are broadly free to decide what they do [regarding fees and charges] ... Woollahra categorises its fees and charges according to whether they represent full cost recovery, partial cost recovery, and subsidy.

There are also special rates associated with property-based services that are effectively a charge. In Queensland (*Local Government Act 1993*, s. 971), for example, a local government may levy a special rate on rateable land for a service if it considers that the land or the occupant specially benefits from that service, or that

the use made of the land specially contributes to the need for the service. These special rates can be targeted to specific services and their beneficiaries, reducing the need for general rates to be used to fund such specific benefits.

Fees and charges relating to non-property based services (for example, human services, recreational and cultural activities, provision of facilities and information) appear to be largely unconstrained. Determination, for example, of a fee or charge in Western Australia is not limited to the cost of providing the service, other than specified or regulated services (*Local Government Act 1995*, s. 6.17). In Tasmania, a broad range of fees and charges need not be fixed by reference to the cost of service provision (*Local Government Act 1993*, s. 205).¹⁰

In addition, many non-property related goods and services provided result from local government policy decisions where State Government constraints do not necessarily apply. The broad scope and flexibility to set such fees and charges is implicitly provided by regulation allowing local governments the autonomy to set prices (appendix B, table B.3). This flexibility is important where many of these types of services result in identifiable private benefits, suggesting that a user-pays approach is the most efficient. Where there are some spillover public benefits (such as improving community health through immunisation programs), it is appropriate to charge a fee that partially cost recovers and to subsidise the remainder from general revenue sources.

Statutory setting and capping of fees and charges

This section relates to user fees and charges that are set by State Governments. SA councils, for example, are subject to specified fees under the *Aerodrome Fees Act 1998*, *Development Act 1993*, *Dog and Cat Management Act and Regulations 1995*, *Environment Protection Act 1993*, *Natural Resources Management Act 2004*, *Public and Environment Health Act 1987*, and *Road Traffic Act 1961*, among others.

The dollar amount (or other measure) of particular fees and charges is sometimes specified under local government, or other, legislation. The *Environmental Planning and Assessment Regulation 2000* (NSW), for example, provides that the maximum council fee for approvals relating to the erection or demolition of a building, or the carrying out of work, and having an estimated cost within the range of \$50 001 — \$250 000, is \$352, plus an additional \$3.64 for each \$1000 by which the estimated cost exceeds \$50 000 (s. 246(1)). Similarly, a maximum fee of \$364 is

¹⁰ There are some exceptions to this, such as the provision of information free of charge required by broader legislation in New South Wales (discussed in the statutory fees section).

payable for approvals relating to the erection of a dwelling with a construction cost of \$100 000 or less (s. 247).

It should also be noted that, councils are *required* by legislation to provide some specified services, such as the planning and building approvals noted above. That is, not only is the fee or charge set by State Governments for the particular service, it is also mandatory for councils to provide the service. This, in turn, raises the possibility of councils having to provide services with fees set below the cost of provision.

Views about statutory capping of fees and charges

The FSRB (2005, pp. 55-6) claims that the SA Government regulates a significant number of fees and charges that are levied by councils. These include fees for development assessment applications, waste inspection and control, and public notification. Furthermore, a reluctance to allow regulated fees and charges to recover, or keep pace with, forces councils to recover costs through rates.

The South Australian Centre for Economic Studies (SACES) (2007) found that 76 per cent of council respondents perceived that the SA Government's imposition of maximum charges can be a significant constraint on council revenue raising. Examples cited by respondents included development applications, building inspections and searches and where works cost more than the maximum charge. It also found that 71 per cent of council respondents perceived State regulation preventing the application of user charges to be a significant constraint on revenue raising. Respondents cited examples such as charges for waste management.

In the case of New South Wales, IIFS (2006) notes that charges for domestic waste management, water supply and sewerage, use of public spaces and parking meters, parking fines and developer charges for water supply and sewerage are not subject to State controls (that is, are not capped) (p. 18), but recommends that restrictions on some other fees (for example, development application processing fees) be lifted to allow councils to determine them (p. 29).

The NSC (sub. 13) provides evidence from a study on the total cost of operating the development application process in 2002 (developer contributions are covered in a later section). It found that only 23 per cent of the cost was recovered by way of statutory fees. Consistent with this, Woollahra Municipal Council and the Vacluse Progress Association argue:

We are limited by statutory fees. Development and building applications are a prime example of the community actually subsidising developers ... deregulation of fees [is needed] so that each council can properly charge developers for their activities

within any council area. (WMC in IPART 1998, p. 42)

The statutory ceiling on many of the development fees and charges that councils may levy ... are in many instances well below those charged by the New South Wales Planning Department for services of a similar nature. (VPA sub. 7, p. 3)

In the Northern Territory, planning (development assessment) or building regulation fees and charges are Territory Government revenue (LGANT 2007), indicating that there is no possibility of NT local government raising revenue from this source (and accordingly councils do not bear the costs). However, local government is permitted to mandate contributions toward infrastructure external to a development, but only for car parking, roads and drainage (NT *Planning Act 1999*, part 6).

The LGMANSW (sub. 17, p. 4) provides examples of other State government impositions that reduce local governments' revenue-raising capacity by restricting the range of services for which fees can be set:

Revenue derived from Freedom of Information (FOI) applications has been in decline in the last 5 years as State Government agencies such as NSW Ombudsman and Privacy NSW have increased pressure on councils to provide access to its files and documents free of charge under the Local Government Act. Previously, councils had used the provisions of the FOI Act to charge the public to access its documents.

Assessment of statutory fees and charges capping

A summary of the extent of statutory limits relating to local government fees and charges is provided in appendix B, table B.3. Two major issues are evaluated here to ascertain the effects on revenue-raising capacity.

State government legislation and regulations can determine both whether or not:

- it is mandatory for councils to provide a particular service
- the fees that can be charged for a particular service are set, or capped, by State Governments.

Various combinations of such requirements and restrictions are possible. The different degrees of restriction on local governments in relation to service provision and the extent of cost recovery that is possible are identified in figure 6.4.

Figure 6.4 Level of restriction

	<i>Mandatory services</i>	<i>Discretionary services</i>
<i>Statutorily set or capped fees or charges</i>	Most	Intermediate
<i>Council set fees or charges</i>	Intermediate	Least

Most restrictive: mandatory services (required by State Governments through legislation or regulation to be provided by local governments) and statutorily set or capped fees and charges.

Intermediately restrictive: mandatory services (required by State Governments through legislation or regulation to be provided by local governments) but with council set fees and charges or discretionary services but with statutorily set or capped fees and charges.

Least restrictive: discretionary services with council set fees and charges.

Two specific issues need to be addressed in order to assess the significance of State government imposed restrictions on fees and charges:

- the number and scope of services subject to statutory fee setting or capping
- the potential cost to revenue — that is, the scale associated with State government imposed requirements and restrictions.

Number and scope of statutorily set or capped fees and charges

While comprehensive information about specific statutory fees and charges is difficult to access, some local governments distinguish in their fees and charges schedules those components set by State Governments (box 6.5).

These examples suggest that there are few fees and charges statutorily set relative to those set by councils. Prima facie, the impact of specific statutory limits as a constraint on overall revenue raising can be ameliorated by generally liberal arrangements for setting other fees and charges, and rates, in most jurisdictions.

FINDING 6.5

In most jurisdictions, only a small number of fees and charges are statutorily set by State Governments. Most are set by councils and the extent to which they recover costs will largely reflect the preferences of their communities.

Box 6.5 **Examples of statutory fees and charges**

The following examples, one for each jurisdiction, are taken from published local government schedules of fees and charges for 2007-08, legislation and regulations. Most categories of fees and charges contain no items that are statutorily set or capped. Fees and charges' categories that are most commonly statutorily set or capped are FOI, planning, building control and development application related services.

New South Wales — Of approximately 625 fees and charges (excluding caravan parks), 73 are statutorily set in Ballina Shire Council. These range from no charge for 20 hours of processing FOI personal requests (after payment of \$30 application fee) to in excess of \$15 875 for development application fees. Interest of 10 per cent is statutorily set for overdue rates (*Local Government Act 1993* s. 566; DLG 2007e)

Victoria — Of approximately 520 fees and charges, 18 are statutorily set in the City of Boroondara. The dollar amounts and/or percentages of statutory fees are not identified. Interest of 11 per cent is statutorily set for overdue general and special rates (*Penalty Interest Rates Act 1983*)

Queensland — Of approximately 910 fees and charges, 410 are statutorily set under the *Building Act 1975*, the *Integrated Planning Act 1997* and other legislation in Cairns City Council. Fixed fees range from 20 cents for in-library photocopying to up to \$12 039 for commercial recreation facilities. Interest is statutorily capped to a maximum of 15 per cent for overdue rates (*Local Government Act 1993*, s. 1018).

Western Australia — Of approximately 600 fees and charges, 58 are statutorily set in Town of Victoria Park. Fixed fees range from \$0.20 cents for FOI request photocopies to in excess of \$10 642 for development applications. Interest of 5.5 per cent is statutorily set for rates instalments and 11 per cent for overdue rates and service charges (*Local Government [Financial Management] Regulations 1996*).

South Australia — Of approximately 175 fees and charges, 13 are statutorily set in Kangaroo Island Council. These range from \$50 for deposits on Aviation Security cards to more than \$348 for new waste control systems. Interest of 7.25 per cent is statutorily set for overdue rates in addition to a 2 per cent fine (*Local Government Act 1999*).

Tasmania — Of approximately 275 fees and charges, one appears to be statutorily set in Dorset Council. Interest is statutorily capped at the ten-year long-term bond rate plus 6 per cent for overdue rates in addition to a fine of up to 10 per cent (*Local Government Act 1993*, s. 128).

Northern Territory — Of approximately 200 fees and charges, five appear to be statutorily set in Palmerston City Council. Interest on overdue rates and charges is set by council (*Local Government Act 2005*, s. 82).

Source: Various 2007-08 local government fees and charges schedules.

Level of restriction

Where fees and charges are statutorily set by other spheres of government, there are issues of revenue adequacy, especially where provision of the associated services is required by other governments or councils. That is, the services are mandatory and the prices are statutorily set or capped.

The impact of fees and charges set by other spheres of government on a council's overall financial position is illustrated by the case of the City of Boroondara (sub. DR71, p. 2):

Fees and charges have significant revenue implications in terms of cost recovery for a particular service. While statutory fees do not form a large proportion of a Council's revenue, the quantum is important in terms of a local government's capacity to receive adequate compensation for the provision of the statutory services. Statutory planning fees and land information certificates provide an example. In these two instances, failure by the Victorian government to index fees for many years resulted in considerable cost shifts from specific service users to the general ratepayer. In fact for Boroondara, the cost of the State Government's failure to index statutory planning fees between 2001 and 2007 is estimated at \$320 000. The land information certificates fee was established in 1992 at \$20, and is still \$20!

The revenue foregone from lack of indexation seems minor. However, a more material issue, is the level of cost recovery from mandatory services with statutorily set or capped fees and charges. Extending the example of the City of Boroondara, the Council processed 1273 planning permits in 2006-07. On average, the direct cost of processing planning permits was \$2653 per permit (this estimate excludes overhead costs such as IT, finance and building maintenance). On average, the statutory fee received was less than \$698 per permit, which equates to a revenue shortfall for the planning permits process of nearly \$2.5 million (or 3 per cent of total rates revenue) to be funded from rates, grants and other revenue.

Using examples from Victoria, the services that councils are mandated to provide and for which the related fees and charges are set or capped, are generally for functions such as *planning and development* or *building control* (MAV DR81; MAV Officials, personal communications, 12-17 March 2008). According to MAV estimates, based on Victorian Grants Commission data, the statutorily set fees and charges relating to planning and development recover 22.2 per cent of the associated total expenditure of \$223 million and for building control, 56.6 per cent of the associated total expenditure of \$48 million is recovered (sub. DR81).

FINDING 6.6

Where councils are required by another sphere of government to provide a service that has a statutorily set or capped fee or charge below full cost recovery, associated revenue-raising capacity from fees and charges is constrained.

Local governments choose to provide a large range of services that are not strictly mandatory. Grants are often available to assist in the provision of these services but may carry restrictions on fees and charges that can be levied. That is, there are other council services that councils are not required to provide but do have revenue-raising capacity issues due to associated set or capped fees and charges.

As a case in point, the MAV (sub. DR81, pp. 9-10) provides an analysis based on Victorian Grant's Commission 2005-06 data, that Victorian councils (aggregated average) providing 'maternal and child health' services recover only 2 per cent of the expenditure relating to this function from associated user fees and some funded by tied grants. A similar situation occurs with libraries, where, conditions of State grants preclude charging for core services.

The MAV provides estimates of service costs (both those statutorily required to be provided and those that are delivered through council policy choice). These costs are based on averages across all Victorian councils using Victorian Grant's Commission data (sub. DR81, pp. 9-10) indicating that for goods and services that are:

- essentially private (infants and mothers service, home and community care, libraries, planning and development, building control, and community welfare), own-source revenue from licences, charges, fees and fines funds 15.5 per cent of the cost of these functions
- mixed public-private (local laws and preventative safety), own-source revenue from licences, charges, fees and fines funds 42.9 per cent of the cost of these functions
- essentially public (council operations and administration, local roads, footpaths, kerb and channel, traffic control, street beautification, street lighting, street cleaning, fire protection, environment protection, passive recreation, community amenities), own-source revenue from licences, charges, fees and fines funds 3.3 per cent of the cost of these functions.

The revenue shortfall from applying statutory fees and charges (91.4 per cent), is sourced from rates (72.1 per cent) (MAV sub. DR81, PC calculations) with the remainder presumably from grants and other sources. The major statutorily binding constraint on own-source revenue principally relates to private goods and services that a council in Victoria is *required* by other spheres of government to provide (such as planning and development, and building control) and has a statutorily prescribed fee attached that represents less than full cost recovery. Principally public goods are most appropriately fully funded by rates (and grants) and mixed public-private goods and services are most appropriately funded at least partially by rates (and grants). In the absence of these restrictions, councils would only partially cost recover in many cases, to reflect the preferences of their communities.

The LGASA (sub. 53, p. 13) also indicates that for equity reasons, local governments may choose to under recover costs:

... there are also issues of social equity that are raised with regard to many of the goods and services provided ... local councils are mindful of the issue of social equity and community access in setting user charges for the use of community services and amenities such as sporting and swimming facilities. These considerations often result in less than full cost recovery being achieved for access and use to these community facilities and might be regarded as a form of community service obligation.

Similarly, NSC (sub. 13, p. 6) indicates:

Generally councils under-recover the costs of supplying goods and services, because of the need to provide value for money to the rate-payers, willingness of residents to pay and community service obligations.

It is not possible to provide a comprehensive assessment of the impact on local governments of the statutory setting of fees and charges by State Governments. Clearly, it is most restrictive where the service provision is mandatory and the fee or charge is set below full cost recovery. Even in cases where provision of the service is not strictly mandatory — library services, for example — the pricing restrictions attached to the applicable grants similarly restrict local government revenue-raising capacity.

FINDING 6.7

State government setting and/or capping of fees and charges applies to some services which councils are not legislatively required to provide. But where these services are provided (for example, because of community pressure), the impacts on councils are no different from the provision of mandated services at fees that do not cover costs.

An assessment of the appropriateness of specific State set fees and charges, as well as mandated services for local government, is not included here. Notwithstanding this, it would be desirable for the regulation of revenue raising through fees and charges, and services that local governments are required by other spheres of government to provide, to be subject to periodic review to assess the cost-benefit effects (as with private sector regulation) on councils and communities (chapter 8; Office of Best Practice Regulation 2007).

FINDING 6.8

There is a case for periodic reviews of the restrictions and regulations imposed on local government by other spheres of government to assess both their rationales and their benefits and costs.

Developer contributions

The legislative arrangements for each jurisdiction collecting revenue from developer contributions are set out in appendix B.¹¹ Generally, councils can:

- levy property developers up-front for the cost of providing a service or infrastructure
- require developers to construct infrastructure and transfer it to local government upon completion
- require developers to donate land to local government for facilities such as public open space and roads.

The scope for collecting developer contributions is greatest in Queensland, Tasmania and parts of New South Wales because local governments are responsible for providing commercial water and sewerage services to which much developer activity relates.¹² The LGAQ (sub. 11, p. 6) notes, for example:

Contributions (primarily from developers) is the third most significant source of revenue for Queensland councils providing \$815 million in 2004-05, with 95 per cent of these contributions being of a capital nature. This is primarily the result of the responsibility of Queensland Councils for water and sewerage infrastructure, with headworks charges being a major component of developer contributions in Queensland.

As a general rule in local government, developer contributions can only be used to fund specific infrastructure investments, and cannot therefore be used to subsidise other services to the community.

Views about developer contributions

The Australian Chamber of Commerce and Industry (ACCI) (sub. 62, pp. 7-8) claims that developer charges are over-recovered:

Developer charges should only recoup the direct costs of infrastructure and are not used for general revenue raising. In some areas developer charges are well in excess of the actual costs of infrastructure ... It is also important to prevent 'gold plating' of infrastructure (unnecessarily high expenditure on infrastructure). This can be prevented by measures to control the costs of building infrastructure and other activities that are subject to user charges.

Consistent with this, Master Builders Australia and the Housing Industry

¹¹ The NSW Government is currently reviewing developer contribution arrangements for councils (NSWDLG DR92).

¹² Victorian legislation also provides for councils to supply and charge for water services, but these are currently not provided by Victorian councils (*Local Government Act 1989*, s. 162).

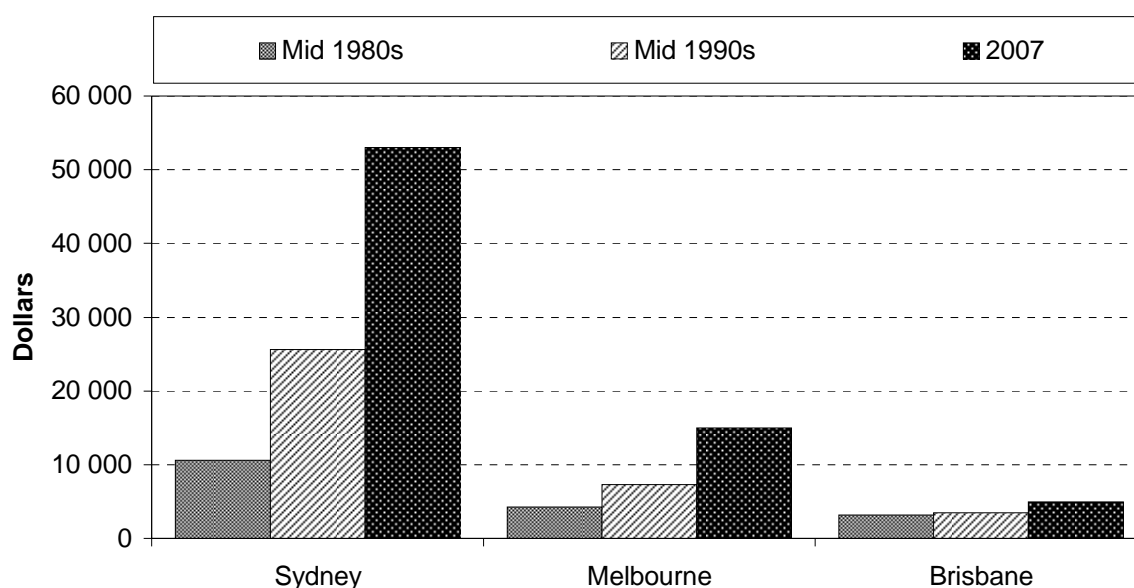
Association (HIA) assert that the reliance on development levies in many jurisdictions has grown dramatically (HIA, sub. 47; Master Builders Australia, sub. 48). The HIA (sub. 47, p. 19) claims that in Sydney:

... if a developer is charged around \$100 000 per allotment in development levies, HIA would expect up to \$40 000 of this to be a local levy with the remainder being for regional infrastructure and servicing components.

In Brisbane, a new Infrastructure Contributions Planning Scheme Policy developed by Brisbane City Council outlines plans under the state-based Integrated Planning Act that will see development levies across the city increase by 40 per cent taking the average to a total of \$25 000 per allotment.

Further, the HIA provided examples of two councils where the *local government component* of developer charges and contributions was around \$53 000 per lot (HIA unpublished). Average estimated local government developer charges and contributions for three capital cities over time are shown in figure 6.5 (HIA unpublished).

Figure 6.5 **Local government developer charges and contributions per lot**
Various years, estimated average, real dollars^{a, b}



^a Data are adjusted to 2006 dollars using the ABS non-farm GDP deflator. ^b Data are HIA estimates of primary charges for lot developments based on case studies and other research.

Source: HIA Economics Group unpublished; Productivity Commission calculations.

A related view from an ACCI member is that there might be double charging by councils, if applied once through the up-front developer charge and again through ongoing property rates (Canberra, pers. comm., 20 June 2007). Dollery (2005) makes a similar point, referred to as ‘double-dipping’, arguing that those that have

purchased land on which developer contributions to construct capital facilities have been levied should not then contribute to the capital cost from rates or charges. This principle holds, irrespective of whether the contribution paid by the developer is passed back to the land vendor or forward to the purchaser.

On these points, the Economic Planning Advocacy (sub. DR67, p. 2) comments:

... costs estimates are routinely excessive, works are abandoned at a whim, Council's collect grants and contributions for the same works, contributions are indexed and most works are new.

There is also the issue of 'gold plating', or conversely, 'lead plating', which might determine infrastructure quality and will affect the level of revenue raising across councils for similar types of infrastructure.

An opposing view is that local government own-source revenue raising can be constrained by the failure to recover fully development costs. Dollery (2005) estimates that, because developer contributions are calculated using historic and estimated costs, councils absorb a shortfall of between 10 and 20 per cent.¹³ There are also some exemptions to cost recovery from developer contributions. Dollery (2005, pp. 4-5), for example, claims that the NSW Government has consistently argued that development for 'social purposes' (for example, building hospitals) should be exempt from the associated developer levy.

The FSRB (2005, pp. 56-7) claims, in relation to South Australia, that access to developer contributions is highly constrained by State legislation:

Compared with the case in other States, SA councils have limited means to legally access contributions from developers. As a result, South Australia has the lowest level of developer contributions in Australia. This has the effect of shifting the cost of providing infrastructure for new and infill development from developers and purchasers of land to all ratepayers.

There needs to be clear legislative power to levy developer contributions for the wider cost of their development, so that councils have the powers to recover their costs where private benefits are clearly involved. The introduction of arrangements on a similar basis to those in place in some other States would provide some relief for ratepayers.

Similarly, SACES (2007) suggests that 63 per cent of respondents to a survey undertaken for the LGASA perceive that the extent to which the legislative regime makes it possible to achieve full cost recovery relating to developer contributions occurs in only a few cases. The LGASA notes that development contributions are

¹³ The Economic Planning Advocacy (sub. DR67, p. 2), however, notes that, while historical cost was an issue for a limited number of works, that has been remedied in that these are now also indexed to the date of the Contribution Plan, before the contribution calculation is made.

only voluntary (sub. DR86) and that (sub. 53, p. 16):

SA legislation provides extremely limited power to require developer contributions particularly beyond a development site (except in relation to open space and car parking).

Assessment of developer charges and contributions

In New South Wales, Victoria and Queensland, a formal development plan is required before developer contributions can be levied by local government (DIPNR 2005; DLGPSR 2004; DSE 2003). WA local governments do not have the authority under planning legislation to require developer contributions except where expressly provided for in town planning schemes which have been recommended by the WA Planning Commission and approved by the Minister (WAPC 2007).

All jurisdictions can levy developer contributions for roads, and all, except the Northern Territory, for parks. New South Wales and Victoria appear to have the most flexible legislative arrangements for accessing developer contributions, with legislative scope to levy for a broad range of economic and social infrastructure needs (such as public transport, child care centres, libraries, community centres, recreation facilities and sports grounds) beyond basic infrastructure. Other jurisdictions may not have scope to apply a levy for these facilities. However, in some jurisdictions (for example, Tasmania), voluntary arrangements are expressly allowed for, which enables local governments to negotiate for developer provision of infrastructure to meet economic, social and environmental needs as a condition of obtaining various approvals. Further, unless precluded by legislation, voluntary arrangements can be made.

Local governments in most jurisdictions can levy property developers for the cost of service provision or have developers construct infrastructure at their own expense (table B.3).¹⁴ Where this is the case, it suggests that regulation of developer charges and contributions is not a constraint on revenue-raising capacity to meet specific expenditure needs.

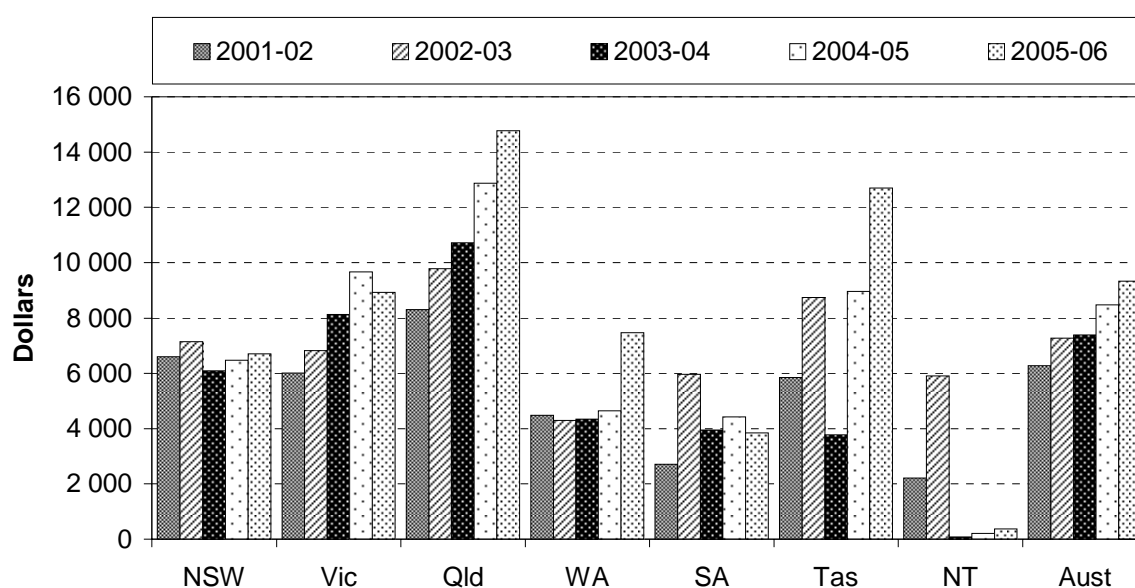
The developer contributions component of local government revenue has grown considerably in recent times in most jurisdictions. The national annual real average growth rate was 8.2 per cent per new dwelling commenced over the four years to 2005-06, with the highest growth in Tasmania (ABS 2007e, unpublished; Productivity Commission calculations).¹⁵

¹⁴ Generally, developer contributions are paid in advance of construction (see for example, IPART 2007).

¹⁵ The ABS dwelling units commenced data are estimates from the quarterly *Building Activity*

In contrast, revenue raised from developer contributions to local governments appears to have declined in New South Wales between 2002-03 and 2003-04, increasing in the following years to 2005-06 (with a growth rate of 0.3 per cent over the four years to 2005-06). The latter result reflects changing patterns of development activity in New South Wales (figure 6.6).¹⁶ The data in figure 6.6 are based on developer contributions to local governments only, that is, other amounts of developer contributions are also paid (or provided) to other spheres of government.

Figure 6.6 Developer contributions revenue per new dwelling commenced
2005-06 dollars^{a, b, c, d}



^a Data are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator. ^b A building is commenced when the first physical building activity has been performed on site in the form of materials fixed in place and/or labour expended. A dwelling is a self-contained suite of rooms intended for long-term residential use. ^c The NT revenue data prior to 2002-03 are considered unreliable and are not reported. NT local government can levy developers only for contributions to car parks, roads and drainage infrastructure, external to a development. ^d Results might be driven somewhat by timing differences, and/or time lags, in the data.

Source: ABS (2007e); ABS unpublished; Productivity Commission calculations.

Real developer contributions revenue per new dwelling commenced was highest in Queensland in all years to 2005-06, followed next by New South Wales to 2002-03, Victoria in 2003-04 and 2004-05, and Tasmania in 2005-06 (figure 6.6). Important

Survey which comprises new dwellings in established areas as well as in broadacre developments. Data for dwellings on new land releases alone are not available. Results reported are therefore understated because the denominator used is overstated.

¹⁶ In recent years development activity levels have been highest in Victoria, Queensland and Western Australia and higher than the national average per rateable property in these jurisdictions (ABS 2007e; Productivity Commission calculations).

caveats to these data are:

- developer contributions data used are based on an ABS revenue category ‘assets acquired below fair value’ and includes other assets contributed and/or donated
- assets acquired below fair value data total \$213 million for New South Wales and \$343 million for Victoria in 2005-06. An analysis of councils’ published annual financial reports (PC forthcoming, pp. 120-21) estimates total developer contributions at \$232 million for New South Wales (8 per cent higher than the ABS data) and \$454 million in Victoria (24 per cent higher than the ABS data) in 2005-06.
- the analysis based on individual councils’ financial reports indicates that for the 10 largest councils receiving developer contributions in New South Wales and Victoria, approximately 91 per cent is cash in New South Wales compared with 14 per cent in Victoria (the remainder are in-kind contributions). This suggests:
 - in-kind contributions might be more reflective of future expenses (related to infrastructure maintenance and replacement) than increases in current revenue
 - cash contributions might be more reflective of increases in current revenue as well as future expenses and might cancel each other out
 - ... further cash contributions are tied to future infrastructure development and cannot be used by councils to supplement operating expenses.

Developer contributions revenue is tied to future infrastructure investment and/or reflects current sunk assets, therefore, revenue and expenditure relating to developer contributions are likely to be equal over time. That is, where assets are contributed in-kind in year one, these are depreciated over their useful lives which might be across many years (except for the related land component because this does not depreciate). Actual cash contributed in year one is (presumably) offset by a corresponding liability in the form of a provision for future capital purchases and is spent on land, facilities and infrastructure, sometimes in a subsequent year.

Future expenses arising from either assets contributed, or funded subsequently through current cash contributions saved, are most appropriately funded through rates to avoid ‘double-dipping’.

FINDING 6.9

Nationally, developer contributions per new dwelling commencement have increased substantially over the four years to 2005-06. However, the effect of developer contributions (either in cash or in-kind) on councils is generally likely to be revenue neutral over time.

7 Impacts on individuals and businesses

Key points

- Councils have some scope to influence the impact of revenue raised across residents and users of services. The instruments available to local governments include different rating structures and valuation methods, and choices about which services to include and exclude from their rates-funded budgets.
 - Assessing the distributional impacts within council areas is difficult. There is a lack of information matching the incomes received and payments made on rates, and fees and charges, by residents. Also, non-residents contribute to both rates and fees and charges revenues to different degrees in different local government areas.
- There is a limited number of Australian studies that attempt to measure the distributional impact of rates, and of fees and charges, across councils. Notwithstanding the data and measurement difficulties, a number of indicators across councils are reported on the impacts on communities of local government revenue raising.
- The estimates have been derived using data from the ABS and State grants commissions, and from the Household Expenditure Survey. In general, the estimates indicate that the ratio of expenditure on rates to income across local governments is lower at higher levels of community income.
 - The analysis in this study suggests that rates incidence is between 1.5 per cent and 1.8 per cent of after-tax income for the majority of councils.
 - In terms of the Household Expenditure Survey data, the rates incidence is estimated to be about 1.7 per cent or less for 50 per cent of households.
- There is some variation in the incidence of rates at the national and state levels. The incidence of rates are generally higher for rural and remote councils than for urban councils.
- Even setting aside data limitations, providing meaningful measures of the net burden of fees and charges across local government areas is complex, as the provision of user-pay services might be discretionary or compulsory, fully paid for by users or cross-subsidised from rates.
 - Consequently, estimates of the burden of fees and charges need to be treated with particular caution.

The Commission has been asked to assess the impacts of local government revenue raising on individuals, organisations and businesses. The approach taken to assessing the impacts of rates, and of fees and charges, depends on the purpose of the assessment. The purpose here is to assess the burden that rates, and fees and charges, impose on those who pay them (that is, the distributional effects).

In section 7.1, issues related to assessing the impacts of rates, and of fees and charges, on communities are discussed. This is followed by a summary of previous international and Australian studies on the incidence of rates, which provides some information about the magnitude of the impacts on communities (section 7.2). In section 7.3, the indicators available to assess the impacts on communities are briefly discussed. In sections 7.4 to 7.6, estimates of the incidence of rates on communities are presented, drawing on available data. In section 7.7, issues with defining and measuring the burdens of revenue raising from fees and charges are discussed and estimates of (purely indicative) ‘burdens’ are presented.

7.1 Issues about assessing the impacts

In this section, the basic principles commonly used to assess distributional impacts are discussed first. This is followed by a brief discussion of how rates are perceived in the community and the scope for councils to influence the distribution of rates and fees and charges. The available indicators of incidence presented in this chapter and their interpretation are then considered, including a discussion of the shifting of the rates burden.

The benefit principle and the ability to pay principle

There are two principles commonly used to assess the distributional impacts of revenue raising. These are the *benefit principle* and the *ability to pay principle*. Under the benefit principle, distributional judgments are based on the extent to which those who benefit from (and value) services provided by councils contribute to the total costs of providing those services. Under the ability to pay principle, distributional judgments are based on the extent to which individuals contribute to the cost of services based on their ability to pay, normally measured by their incomes (Abelson 2003; Musgrave and Musgrave 1989).

Councils are likely to have multiple objectives in setting rates and fees and charges. In practice, they appear to apply a combination of the benefit and ability to pay principles. For example, according to the City of Marion (2003), the council considered both the benefit principle and the ability to pay principle in its decision to adjust the ‘rate in the dollar’.

The Local Government Association of Tasmania (sub. 42, p. 8) noted that councils:

... do not have access to income information [of ratepayers]. General rates are, therefore, based on a notion of fairness.

Hornsby Shire Council (sub. 40, p. 16) noted:

Councils' rating structures are based on principles of equity and approximate ability to pay. This is achieved by combining minimum rates, base rates and ad valorem rating.

Concessions, given to some ratepayers, reflect the ability to pay principle, whereby rates for concession holders are subsidised by other sources of revenue. The higher the value of concessions, the greater the amount of revenue needed to be raised from other sources, or ratepayers, in order to maintain expenditure levels.¹ The City of Boroondara (sub. 24, p. 7) stated:

Any exemptions and concessions automatically transfer the burden of the tax to be raised amongst the remaining ratepayers. This creates distortions in the equitable distribution of the tax burden ...

The common application of a combination of minimum and variable rates by councils suggests that both principles are being applied. The application of minimum rates indicates that councils give weight to the benefit principle, if the owners of properties receive similar benefits from at least some services to property, irrespective of property values. On the other hand, the use of the variable component suggests that weight is also given to the ability to pay principle. That is, if the benefits from services funded by rates or other compulsory charges are not substantially higher to owners of higher-valued properties than to owners of lower-valued properties.

Obtaining data to enable to assess the application of the benefit principle is difficult in practice. It requires knowledge of the total cost of each service and of the benefits accruing to individuals consuming each service. The valuation of the benefits individuals obtain from using local services is difficult to estimate at the council level, particularly when they are public goods and services. Using data to apply the ability to pay principle is less difficult, but challenging nevertheless. Incomes of households and businesses, which are usually used as the indicator of ability to pay, are generally not observable by councils. Local government rates apply to property values and not income, so councils can only indirectly seek to apply the ability to pay principle, to the extent that the incomes of taxpayers are correlated with property values.

¹ The exception to this is where, for example, State governments reimburse councils for concessions granted to pensioners (chapter 6).

It has not been possible for the Commission to apply either the benefit or ability to pay principle to assessing the distributional impacts of revenue raised by local governments because of:

- a lack of information on the relationship between the rates, and fees and charges, paid by residents and businesses and their incomes *within* council areas
- a lack of information for each service provided by councils about the benefits received by households and businesses and the total costs of providing these services.

The indicators used in this chapter to estimate the impacts of local government revenue raising cannot be used to make inferences about the extent of the use of the benefit principle and/or the ability to pay principle.

How rates are perceived in the community

Property rates are the only tax available to local governments. They are necessary to fund the level and quality of public goods and services (particularly local roads and bridges, drainage systems, street lighting and parks and gardens), for which direct fees and charges cannot be applied. Rates are also typically used to subsidise the use of some local government services for which fees and charges can be applied (such as for sport and recreation facilities), in order to provide some degree of equity and access to users. In addition, rates concessions are given to low income residents, especially aged pensioners.

A number of reasons have been advanced to explain why rates might be perceived as unpopular, among them: ²

- rates are a highly visible form of tax, especially for residential ratepayers
- ratepayers do not consider they are getting value for money (the rates paid do not necessarily align with perceived benefits of ratepayers)
- rates payments are not closely aligned with ratepayers' *cash flow*, unlike income tax which, for most, is paid as income is received. This is a particularly contentious issue for farmers and others with fluctuating incomes
- property rates are perceived by many, especially those on lower cash incomes including pensioners, as a regressive tax

² These issues were broadly canvassed during roundtable discussions organised by the Commission in late February 2008 with representatives from local governments, local government associations, relevant State departments and other interested parties.

-
- it has been suggested that the unpopularity of rates has been compounded by requirements imposed on local governments by State governments to collect levies, some of which are also based on property values, for state-wide or regional purposes.

It is possible that property rates are little or no more unpopular than other taxes, but that people feel relatively powerless to affect them. They find it easier, less costly, and with a perceived greater probability of success to mobilise and coordinate a campaign against (especially increases in) rates than attempting to influence State, and more so, Commonwealth taxes.

However, property rates have considerable strengths as a local tax. For one thing, they are the only tax available to local communities to provide a substantial degree of autonomy over the nature, level and quality of local services. They also serve to test the underlying willingness of the community to pay for local services that cannot be funded from fees and charges.

Rates are also a relatively efficient tax, in the sense that they create no or few distortions in choices, as discussed in chapter 6. They are cost effective to collect and difficult to avoid because property is immobile and ownership is relatively easily identified. Moreover, compared with other taxes, there is a high degree of predictability to decision makers and ratepayers of the revenue that is likely to be collected over time.

Councils can impact on the distributional outcomes in many ways

As a general rule, the prior expectations in undertaking analysis of the distributional impact of rates are that:

- with only a flat ‘rate in the dollar’, rates payments cannot be progressive with respect to income, unless property values are progressive relative to income. That is, when property values of higher-income ratepayers are a higher ratio to their incomes than is the case for lower-income ratepayers. If property values are ‘regressive’ relative to incomes, then a flat ‘rate in the dollar’ leads to rates being regressive.
- other things equal, imposing a minimum (or fixed) charge makes rates more regressive (or less progressive) than otherwise.

The degree of regressivity depends on the level of the minimum (or fixed) charge (if any), the level of the ‘rate in the dollar’ and the degree of regressivity between property values and income.

In chapter 6, it was noted that councils have the scope to influence the distribution of rates and fees and charges across residents and users of services, including by altering:

- the percentage rate in the dollar applied to the value of rateable land
- the structure of rates (for example, imposing fixed (or minimum) and variable components, tiered or differential rates)
- the categorisation of land for the purpose of applying differential rates (for example, residential, commercial or rural)
- the valuation method applied to each category of land (where councils can choose between methods)
- the levels of fees and charges and the extent to which they fully recover costs or rely on cross-subsidies from rates revenue
- the concessions available for particular classes of property use or property owners or users of services.

Ideally, assessing the impacts on individuals, businesses and organisations of revenue raised by local councils should be undertaken *within* each local government area. This would provide information about how the burden of financing a given bundle of local government services affects people with different levels of income. Such analysis would require the matching of the incomes of residents with their corresponding rates payments on properties and the fees and charges they pay (and the benefits they receive in return) within each local government area.³

A set of hypothetical examples of rates incidence (rates paid by households relative to their income) within and between councils is provided below (box 7.1). The example illustrates how differences in the rating structures and methodologies applied by councils impact on the total rates paid by households when compared with their incomes. The example also illustrates how the average rates incidence at the council level can differ between councils, depending on the distribution of household incomes within councils, even when councils apply identical rate structures and have identical property values.

³ In appendix G, the incidence of residential rates is estimated within a council based on rates revenue and income of residents at the postcode level for the City of Charles Sturt (South Australia). While the analysis illustrates how the rates burdens vary at the postcode level, they are only average measures and do not illustrate the impact of rates relative to income within each postcode.

Box 7.1 Rates incidence within and between councils

Councils A and B have a rating strategy that partly embodies the application of the benefit principle by imposing an identical fixed charge for their rates. Councils C and D have a rating strategy that reflects a greater emphasis on the ability to pay principle, where the total rates are based on an identical 'rate in the dollar' on the value of property. The distribution of household income is identical in councils A and C and councils B and D, and the levels of household income are the same for councils A and B and councils C and D.

	<i>Fixed charge</i>	<i>Rate in the dollar</i>	<i>Property valuation</i>	<i>Total rates</i>	<i>Income</i>	<i>Household weight</i>	<i>Rates incidence^a</i>
	\$	\$	\$	\$	\$	%	%
Council A							
Household I	300	0.002744	200 000	849	37 000	0.25	2.3
Household II	300	0.002744	250 000	986	45 000	0.25	2.2
Household III	300	0.002744	325 000	1 192	57 000	0.25	2.1
Household IV	300	0.002744	400 000	1 398	72 000	0.25	1.9
Average (unweighted)	1 200	0.002744	1 175 000	4 424	211 000		2.1
Council B							
Household I	300	0.002744	200 000	849	37 000	0.40	2.3
Household II	300	0.002744	250 000	986	45 000	0.40	2.2
Household III	300	0.002744	325 000	1 192	57 000	0.15	2.1
Household IV	300	0.002744	400 000	1 398	72 000	0.05	1.9
Average (weighted)	1 200	0.002744	1 175 000	4 424	211 000		2.2
Council C							
Household I	0	0.002293	400 000	917	47 000	0.25	2.0
Household II	0	0.002293	450 000	1 032	55 000	0.25	1.9
Household III	0	0.002293	550 000	1 261	90 000	0.25	1.4
Household IV	0	0.002293	700 000	1 605	120 000	0.25	1.3
Average (unweighted)	0	0.002293	2 100 000	4 816	312 000		1.6
Council D							
Household I	0	0.002293	400 000	917	47 000	0.40	2.0
Household II	0	0.002293	450 000	1 032	55 000	0.40	1.9
Household III	0	0.002293	550 000	1 261	90 000	0.15	1.4
Household IV	0	0.002293	700 000	1 605	120 000	0.05	1.3
Average (weighted)	0	0.002293	2 100 000	4 816	312 000		1.8

^a The rates incidence for each household refers to the rates paid on property divided by household income. Average rates incidence for each council is derived using the household incidence rates and the corresponding household weight within each council. Given the equal weights for households in councils A and C, the weighted average rates incidence is equal to the unweighted average rates incidence for these councils. The unweighted average rates incidence for councils B and D are 2.1 per cent and 1.5 per cent, respectively.

Source: Productivity Commission calculations.

Based on these hypothetical examples in box 7.1, the average rates incidence is lower in the councils with higher incomes (councils C and D). In other words, as income increases, expenditure on rates increases at a diminishing rate. The average rates incidence at the council level is also lower for councils in which there is a greater share of higher income households (council C). However, within council C, the rates incidence is more regressive (where it is 2 per cent for lower-income households and 1.3 per cent for higher-income households) compared with council A, for example.

The above illustration demonstrates that comparisons of aggregate measures of incidence across councils can be misleading. They can disguise what is occurring within each council, for example:

- councils might have the same rate structure, property values and aggregate income. A difference in the average rates incidence at the council level could be due to the varying distribution of household income within councils
- rate structures between councils may vary and imply a different average incidence of rates, even though property values and the aggregate income of the community and its distribution might be the same
- levels of income between councils may differ and will lead to a different average incidence of rates for the same rate structure and property values and distribution of household income
- the relationship between income and property values is not uniform across councils
- an average rates incidence measure across councils could reflect the preferences of the community for services provided by their local government.

Available data and interpretation of incidence measures

As noted earlier, there are no data available on the rates paid by residents and businesses relative to their incomes within a council area. Two principal sources of data are used:

- aggregate data on revenue and income for each local government area (LGA) in Australia, sourced from the ATO, the ABS and State grants commissions.⁴ There are deficiencies in these data, as described in chapter 3 and appendix C
- household income and expenditure on rates, sourced from the Household Expenditure Survey of the ABS.

⁴ The ATO data were provided at the council level by the Bureau of Transport and Regional Economics (BTRE) (appendix C).

Based on the LGA data, the indicators of average incidence of each council area are defined as the aggregate rates paid by residents divided by the estimated aggregate disposable income of the local community. These indicators cannot be used to infer the distribution of incidence within councils, as illustrated in box 7.1. They do not reveal the nature of the incidence of rates across individuals within each council. It is possible that councils have rate structures that impose higher rate burdens on higher-income property owners, but that the average incidence might be higher in councils with lower average incomes because expenditure on local services as a share of income is relatively higher.

Nationally, each council sets its rates, and fees and charges, taking into account its budgeted expenditure and community preferences, as well as grants from other spheres of government. This process is guided by the democratic process in each local government area. The incidence from the community's perspective reported in this chapter is a measure of the rates revenue-raising effort from the local government's perspective. As such, it is likely to be an indirect indicator of the overall willingness to pay of the local community rather than a measure of the distribution of the revenue-raising burden within councils, based on residents' ability to pay.

When viewed collectively across local governments, the reported incidence indicators reflect the average propensities of local communities to consume local government services as disposable income varies across councils.⁵ The incidence indicator (or rates revenue-raising effort) in different local governments reflects different levels of expenditure and local community preferences (or benefits received). As such, a relatively high or low incidence should not be viewed as necessarily a good or bad outcome for the community.

In the case of the Household Expenditure Survey, incidence is defined as the expenditure on rates by households divided by household total disposable income. The Household Expenditure Survey has advantages over the data available by LGA in that disposable income includes income from social welfare payments (as reported by respondents) and is measured by household rather than as an average over an entire council. Nevertheless, it is a less than complete measure of income because some of the returns on assets owned by households are not included in the measure of disposable income. Like the LGA data, the HES observations are across (different and unidentified) councils rather than within observable councils. Thus,

⁵ Average propensity to consume refers to the percentage of income spent rather than saved. As income increases, the evidence suggests that individuals' demand for local government services increases but at a diminishing rate. For councils with high-income communities, the average propensity to consume local council services is relatively low compared with councils with low-income communities.

the distribution of the rates burden across residents within a council is not observable from the HES data.

Incidence of rates and their shifting

An assessment of the distributional impacts of rates is about who ultimately bears the burden of rates, that is, who in the community ends up paying the council rates.⁶ This can be a complex analysis that extends beyond the initial legal or statutory requirement to pay the rates (that is, the legal incidence). Rates paid by businesses, for example, may be ‘shifted forward’ (to consumers) through higher prices of goods and services and/or ‘shifted backward’ (to suppliers of services such as tradesmen, contractors and others) by offering lower input prices. That is, the ultimate (economic) incidence can differ (significantly) from the legal incidence (Boadway and Wildasin 1984; Stiglitz 1988).

The extent to which ratepayers are able to shift the rates burden forwards or backwards depends on the market and institutional circumstances they face. Importantly, however, the tax deductibility of rates enables the rates expense incurred by a business or by a rental investor to be shifted, in part, to taxpayers more generally.

The incidence of rates may be analysed in terms of the legal incidence, a partial equilibrium framework or a general equilibrium framework. In the context of legal incidence, no account is taken of the shifting of the rates burden to others in the community. Partial equilibrium analysis takes into account some shifting of the impact of rates in terms of a single market, but it ignores any flow-on effects to other markets.⁷ General equilibrium analysis extends the partial equilibrium framework to all market interactions, and measures changes in incomes after all adjustments have taken place across the economy (Entin 2004; Zodrow 1999).

Analysing the distributional impacts of rates at the local government level using partial and general equilibrium frameworks is difficult for two reasons. First, there are lack of detailed, consolidated data on the legal incidence of rates across type of

⁶ Although there is a clear distinction between the terminology of the incidence of rates and the burden of rates in the economics literature, in this chapter the two definitions are used interchangeably. Fullerton and Metcalf (2002) and Zodrow (1999) provide recent reviews of the literature on tax incidence.

⁷ The actual incidence will be the same as the legal incidence when no forward or backward shifting takes place. If shifting of the burden is possible, then the partial (and general) equilibrium incidence differs from the legal incidence.

households and type of businesses. Second, suitable general equilibrium economic models at the local government level are not available.

The difficulty in estimating the partial or general equilibrium incidence has been acknowledged in the economics literature. As noted by Zodrow (1999, p. 200):

... the incidence of many taxes — especially those on capital income, including corporate income taxes and local property taxes — is still a controversial topic. More generally, there is considerable disagreement about various theoretical issues, including the appropriate market structure for incidence analysis and the extent to which capital is mobile internationally; similarly, there is a lack of consensus on various empirical issues, including the parameter values that should be used in numerical simulations of the theoretical models.

It also has been noted that the results of studies beyond the legal incidence of rates and other taxes:

... depend not upon hard science but upon subjective assumptions — and that the only thing that can be said with certainty is that no one really knows how taxes (particularly those levied on property and business) are shifted (Office of the Comptroller of Texas 2007, p. 44).

Consequently, the empirical analysis presented in this chapter is largely based on the legal incidence of rates, adjusted, where possible, for the tax deductibility of rates payments.

FINDING 7.1

The available data and measurement limitations make it impossible to estimate the distributional impacts of revenue raising within councils.

7.2 Previous studies of the distributional impacts of rates

This section summarises a number of international and Australian studies of the incidence of rates at the local government level. International studies are considered first, in order to gain insight into the distributional impacts of rates from evidence in the United States and the United Kingdom. This is followed by a summary of Australian studies.

International studies of rates incidence

Caution should be exercised in interpreting evidence drawn from international studies. As noted in chapter 2, the roles and functions of local governments vary

significantly across countries. The tax systems are also different. For example, in the United States, property taxes (as well as mortgage interest payments) are a deductible expense for personal income tax purposes. Consequently, part of the burden of property taxes is shifted from households to the US Federal Government.

McIntyre et al. (2003) examined the incidence of state and local property taxes paid by income groups in the United States. The average results for all US States are summarised in table 7.1. The authors noted that ‘property taxes, including both taxes on individuals and business taxes, are usually somewhat regressive’ (McIntyre et al. 2003, p. 4).

Table 7.1 Incidence of state and local taxes in the United States
2002 tax system for 2000 income data, average of 50 US States, per cent^a

<i>Income quartiles</i>	<i>Lowest</i>	<i>2</i>	<i>3</i>	<i>Highest</i>
Property taxes on families	3.0	2.2	2.4	2.4
Other property taxes	0.1	0.1	0.1	0.2

^a Shares of family income for non-elderly taxpayers.

Source: McIntyre et al. (2003).

In another study, Minnesota Revenue (2007) assessed the (economic) incidence of local taxes in relation to taxpayer income in the US State of Minnesota. They found that local residential property taxes, largely consisting of a general property tax, represented a greater share of income for low-income earners than for high-income earners (table 7.2).

Table 7.2 Incidence of local property taxes in the US State of Minnesota
2004, taxes as share of gross income, per cent^{a, b}

<i>Income deciles</i>	<i>Lowest</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>Highest</i>
Residential	3.5	2.9	2.6	2.5	2.3	2.2	2.1	1.9	1.3	0.4
Homeowners	2.5	2.2	2.2	2.1	2.0	1.9	1.9	1.6	1.1	0.4
Renters	0.6	0.4	0.2	0.1	0.1	–	–	–	–	–
Rental property investors	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1
Business	1.1	0.8	0.8	0.6	0.6	0.5	0.5	0.6	0.4	0.3

^a – rounded to zero. ^b Numbers may not add up due to rounding.

Source: Minnesota Revenue (2007).

The UK Office of National Statistics (2007) examines, on an annual basis, the incidence of taxes on households by income groups. The estimates for 2005-06 indicated that council taxes, as a percentage of gross income, decreased as income rose, ranging from 5.2 per cent for the lowest quintile to 1.7 per cent for the highest quintile (table 7.3).

Table 7.3 Incidence of council rates in the United Kingdom

2005-06, percentages of gross income by quintiles

<i>Income quintiles</i>	<i>Lowest</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Highest</i>
Council tax ^a	5.2	3.9	3.2	2.7	1.7

^a Includes Northern Ireland rates and after subtracting discounts, council tax benefits and rates rebates.

Source: UK Office of National Statistics (2007).

Australian studies of rates incidence

Bentley (1973) estimated that rates as a percentage of household income decreased from 6.4 per cent in the lowest income decile to 0.5 per cent in the highest income decile. Bentley, Collins and Drane (1974) observed that the share of rates to total household income ranged from about 4.8 per cent for low-income households to about 1 per cent for households with incomes in the highest decile.

Wood (1999) measured the distributional characteristics of residential property taxes with respect to net personal wealth and gross household income. He found that the incidence of residential property taxes decreased with net personal wealth, falling from 0.9 per cent of net personal wealth in the lowest decile to 0.2 per cent in the highest decile. In terms of gross household income, the incidence followed a similar trend, falling from 4.2 per cent in the lowest income decile to 1.2 per cent in the highest income decile. Wood noted that residential property taxes were a relatively high burden on the net personal wealth of young home-owner households because they have relatively high housing-related debt.

Based on household expenditure and income data for 1996-97, Harding and Warren (1999) examined the incidence of local council rates in Australia. In absolute terms, weekly expenditure on council rates increased between the lowest and highest income quintiles. However, council rates paid as a ratio of gross income decreased from 3.6 per cent in the lowest income quintile to 1.2 per cent in the highest income quintile. One reason for this trend, as mentioned by the authors, was that the elderly were clustered in the lowest and second lowest quintiles of income. Although the elderly had low levels of income, they also tended to have high levels of wealth in the form of land and housing. This illustrates, in part, the '... deficiencies of gross income as a measure of economic resources' (Harding and Warren 1999, p. 11).

The ALGA (2006) reported on the incidence of rates in terms of household disposable income (excluding government benefits). Across Australia, the incidence was estimated at 1.8 per cent in 2005. Rural areas had the highest incidence of

2.4 per cent. The rates incidence in 2005 was broadly unchanged from estimates of the rates incidence for 1991.

The Australian studies cited above are not rates incidence studies *within* council areas. Rather, they are measures of the burden of rates on households *across* councils, either nationally or within a State or region.

FINDING 7.2

Few Australian studies have attempted to measure the distributional impact of rates across households, either nationally or within states or regions. The evidence from studies that have been undertaken, which only assess burdens across councils and not within councils, suggest that residential rates decrease as a share of income as income increases. This is consistent with similar international evidence.

7.3 Indicators of the impacts

Developing indicators that can be used to provide insights into the impacts of rates, and fees and charges on individuals, businesses and organisations has been difficult, given the lack of data sources available at the local government level. In this section, the indicators used are briefly discussed.

Available indicators

It has not been possible to develop indicators of the impacts of rates, and fees and charges on organisations. Some organisations, such as government agencies, charities, educational, sporting and religious bodies, generally are exempt from paying rates. However, there are no detailed and consolidated data about the extent of rates exemptions across councils. As noted by North Sydney Council (sub. 13, p. 5), if these organisations were rateable, the council could expect to receive a significant increase in rates revenue. However, the extent of the potential increase would vary between councils.

Although implicitly included in the analysis of total rates incidence, the incidence of rural rates has not been estimated separately. This is due to income data deficiencies and the difficulty of estimating the shares of personal income and business income sourced from farming activities at the council level.

Consequently, the analysis in the remainder of this chapter focuses on the incidence on individuals (and households) and businesses.

Incidence analysis using the LGA data

As noted earlier in this chapter, the approach to measuring the incidence using the LGA data relies on average indicators at the level of each local government. Personal income data are available only at an aggregate level for different local government areas, not by income or resident classes within areas. The incidence indicators reflect the expenditure decisions (exclusive of grants) by councils rather than their rating and pricing policies.

Indicators of the incidence of rates

The measures of the incidence of rates presented in this chapter are estimated using rates revenue and income data at the local government level. Three indicators are used to provide insights into the incidence of rates using the LGA data.

- Total rates incidence — defined as the ratio of total rates paid by a community in each council area to the estimated total net (after-tax) income in that local government area. This indicator is the same as the measure of the revenue-raising effort (relating to own-source revenue) discussed in chapter 5 and appendix C. It is used here to compare the aggregate, average, incidence of rates across councils. Total rates revenue refers to the rates revenue collected by councils from all types of properties — residential, business, rural and other. Both the personal income and business income data refer to (after-tax) disposable income.
- Residential rates incidence — defined as the ratio of total residential rates paid by a community in each local government area to the estimated personal net (after-tax) income of residents in that local government area. This indicator is used to compare the average incidence of residential rates across councils.
 - In the context of the rates paid on residential property, the tax deductibility of residential rates for property investors has been taken into account using the share of rented properties and an estimate of average marginal tax rates of individuals in each local government area.
 - In the context of net income of individuals, the personal net income data from the ATO take into account deductions made by individuals. By definition, residential rates have been deducted as an expense by eligible individual taxpayers (that is, those personal income taxpayers that derive income from residential property investments). Rental income of personal income taxpayers may be significant for some taxpayers in some councils. According to the ATO (2007), about 14 per cent of personal income taxpayers received

net rent income in 2004-05.⁸

- Business rates incidence — defined as the ratio of total business rates paid in each council area to the estimated net (after-tax) income of businesses in that local government area. This indicator is used to compare the average incidence of business rates across councils. The tax deductibility of business rates has been taken into account using a business (company) tax rate of 30 per cent. Business rates include commercial and industrial rates.

Indicator of the impact of fees and charges

The impact of fees and charges is defined as the ratio of total fees and charges revenue received by each council area to the estimated total net (after-tax) personal and business income of that local government area. This indicator is used to compare the overall ‘impact’ of total fees and charges across councils. It has not been possible to disaggregate the analysis by types of residents (for example, individuals or businesses) or to take into account the tax deductibility of relevant fees and charges.

Also, it has not been possible to identify separately the fees and charges revenue attributable to use of local government services by non-residents. Where these are substantial (for example, in central business districts and where tourist attractions are located), the measured average impact of fees and charges on residents will be significantly overstated.

Caution is required when interpreting the estimates of the impact of fees and charges revenue relative to the income of the community. For example, it has not been possible to distinguish from the available data the number of services for which fees and charges are applied in each local government area that are compulsory or discretionary, fully or partially cost recovered or cross-subsidised from other revenue sources (especially rates). The net distributional impact, taking into account all these considerations, is therefore difficult to measure.

Indicators of effective property rates

As there are some limitations in the measure of income used for the indicators on the incidence of rates using the LGA data, indicators of effective property rates provide an alternative insight into the impacts on the community. That is, the impacts are considered in terms of comparing rates revenue to the valuation of properties. In broad terms, property values are likely to be at least partially

⁸ Some of this net rent income may be sourced from non-residential property investments.

correlated with the (broadly defined) income of individuals. Effective property rates are analysed in appendix E.

Incidence analysis using the HES data

The measure of residential rates incidence is estimated using the 2003-04 ABS Household Expenditure Survey. Rates incidence is defined as the ratio of rates paid by the particular household to household disposable (after-tax) income.

Although it is not possible to distinguish the geographic location of households by local government area, the household incidence indicators are particularly useful as they *match* incomes received and rates paid by particular households. This matching is not possible using LGA data. Another advantage of using the HES data is that the reported income by households includes income from all sources, including pensions and other Centrelink payments. This is particularly useful for the analysis of rates incidence of low-income households. In the case of the LGA data, the income for low-income persons is likely to be under-reported.

However, there are obvious limitations in using survey data such as under or over-statement of particular income and expenditure items by respondents (Harding and Warren 1999). The division of survey data into smaller subsets for distributional analysis might also erode the reliability of estimates derived (Australian Treasury 1998). In addition, the fact that HES respondents come from different (unknown) local government areas means that rates paid by respondents reflect council expenditure decisions as well as rating policies. These limitations further complicate the interpretation of the estimated incidence measures.

7.4 Total rates incidence

In this section, total rates incidence is estimated for residents across councils in Australia. The estimates are then presented in terms of the Australian Classification of Local Government (ACLG) classes, followed by state comparisons of the incidence of rates.

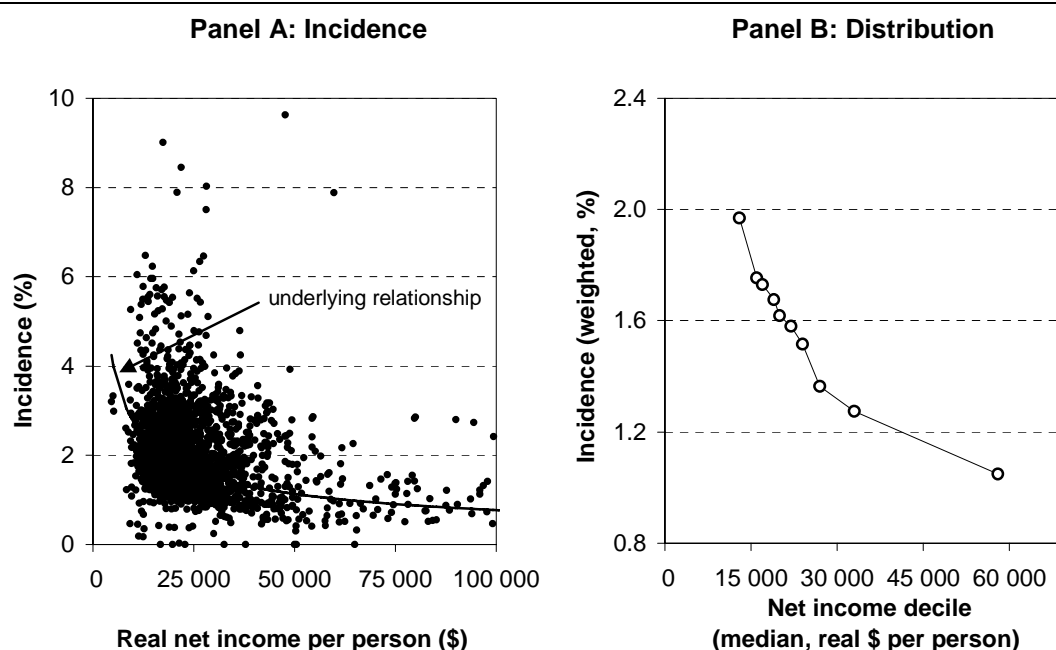
Total rates incidence at the national level

The incidence of total rates revenue, measured by total rates paid per person relative to net income per person across councils, is illustrated in panel A of figure 7.1. There appears to be a significant variation in the incidence of rates across councils whose communities have comparable average levels of income per person. As

discussed in chapter 3, this variation is due to differences in expenditure levels between councils. There is some clustering of councils in the rates incidence range of 1–3 per cent for median net income per person of about \$21 000. For 10 per cent of councils, the incidence of rates is comparatively low, about 1 per cent or less.

A multivariate regression analysis was undertaken to estimate the underlying relationship or incidence function, which is also plotted for comparative purposes in figure 7.1, panel A. The underlying incidence curve, for each local government area, controls for factors such as road length, number of properties and residential population in councils, by setting the values of these variables to their means. The underlying incidence could be interpreted as an indicator of the average propensity to consume local government services.

Figure 7.1 Total rates incidence and distribution in Australia
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by real after-tax average income per person of each LGA. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. Data are based on 2860 observations. In panel B, the incidence for each decile is weighted by the population of councils in each decile.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

In panel B of figure 7.1, the distribution of the total incidence of rates, weighted by the population of councils in each decile, is presented relative to the median net income per capita in each decile. The deciles have been grouped in ascending order by the income per person in each local government area. For example, the median net income per person of the lowest decile was \$13 037 averaged over the period

2000-01 to 2004-05.⁹ Total rates represented about 2 per cent of the after-tax income per person in each council in the lowest income decile over this period, falling to about 1 per cent in the highest income decile.

There appears to be a tight clustering of the incidence of rates between the second and the seventh income deciles (between 1.5 per cent and 1.8 per cent). The incomes per person of the second and the seventh income deciles were about \$16 000 and \$24 000, respectively. That is, for these income deciles, representing about 72 per cent of the population, the rates incidence was broadly similar despite the differences in after-tax income per person.

The incidence of total rates decreases from 1.3 per cent in the ninth income decile to 1 per cent in the tenth income decile. However, the difference in income per person between the ninth and tenth income deciles is significant, at about \$24 000.

FINDING 7.3

In general, as the average income per person (measured at the local government level) increases across councils, the average incidence of rates decreases. For a large proportion of councils, the average rates incidence is between 1.5 and 1.8 per cent of after-tax income.

One factor influencing the relatively higher rates incidence in the lowest income decile is the income measure. Income is likely to be under-estimated in the lower income deciles due to the inability of the ATO income data to capture fully the incomes of recipients of government transfer payments such as the Age Pension, Disability Support Pension and Newstart Allowance. Therefore, considerable caution is required in interpreting the rates incidence estimates for low-income councils.

Total rates incidence by ACLG classes

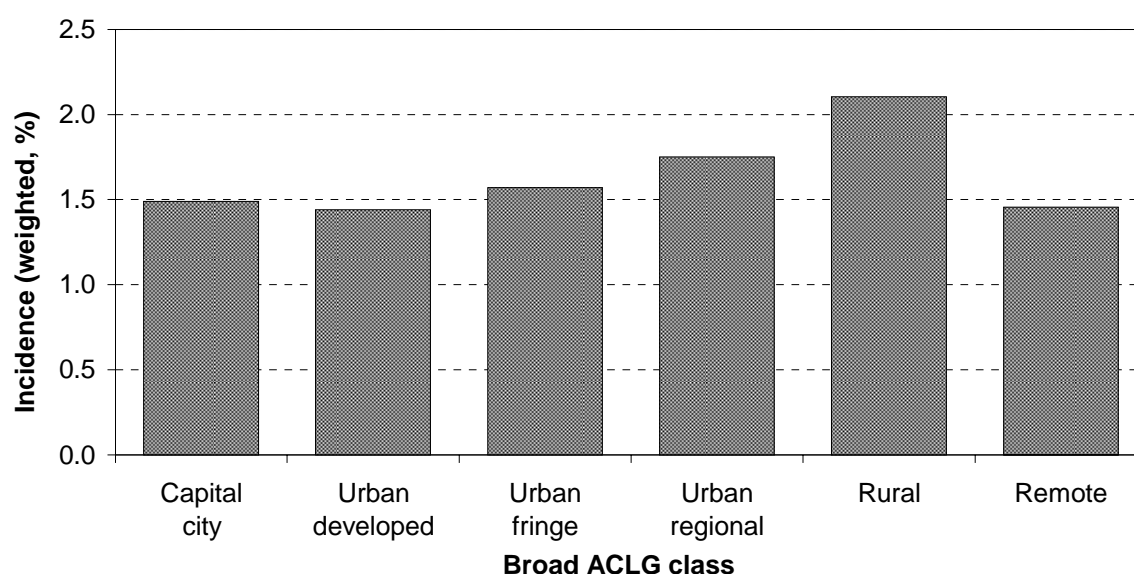
In order to assess the distributional impacts based on the characteristics of local governments, such as the geographic location and population size, the total incidence of rates is presented in terms of broad ACLG classes (figure 7.2).

Generally, rural councils had a slightly higher total incidence of rates relative to other councils, based on a weighted measure of incidence. This is due to the higher expenditure per person in rural councils, for example, on infrastructure services such as provision of local roads. Urban developed councils had the lowest total rates

⁹ The estimates of incidence and other statistics reported in the remainder of this chapter refer to the period 2000-01 to 2004-05, unless otherwise stated.

incidence, at 1.4 per cent. In relative terms, the total rates incidence of remote councils is about the same as urban fringe, urban developed and capital city councils. However, the estimate of rates incidence for remote councils should be treated with particular caution. On average, business income was estimated to be about 78 per cent of total income in remote councils. This reflects the nature of economic activity in remote councils, for example, large mining and energy businesses. Some of these businesses may be rates exempt, which would lower the reported estimate of rates incidence.

Figure 7.2 Total rates incidence by broad ACLG classes — Australia
2000-01 to 2004-05 estimates^a



^a ACLG broad classes as defined in appendix C. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. Data are based on 2860 observations. The incidence for each ACLG class is weighted by the population of councils in that class.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

FINDING 7.4

The evidence suggests that average rates incidence is higher for rural councils than for urban councils.

Total rates incidence at the state level

Total rates incidence and rates per person for each jurisdiction are presented in table 7.4. There is some variation in the incidence of total rates at the state level, especially in terms of the first and third quartiles.

South Australia had the highest median incidence of total rates (at 2 per cent). However, the median rates per person (at \$525) were the highest in Western Australia. The Northern Territory had the lowest median rates incidence (0.9 per cent) and lowest median rates per person (\$269) in Australia. In terms of the first quartile, the rates incidence was the highest for communities in Queensland, at 2.6 per cent.

Table 7.4 Total rates incidence and rates per person — State comparison
2000-01 to 2004-05 estimates^a

<i>Jurisdiction</i>	<i>First quartile (25%)</i>		<i>Median (50%)</i>		<i>Third quartile (75%)</i>	
	Rates incidence	Rates per person	Rates incidence	Rates per person	Rates incidence	Rates per person
	%	\$	%	\$	%	\$
New South Wales	2.2	266	1.7	328	1.3	417
Victoria	2.1	304	1.8	367	1.5	449
Queensland	2.6	299	1.9	387	1.6	617
South Australia	2.3	319	2.0	400	1.7	508
Western Australia	2.4	346	1.7	525	1.2	822
Tasmania	2.2	258	1.9	315	1.6	406
Northern Territory	1.0	191	0.9	269	0.5	333
Australia	2.3	292	1.8	379	1.4	538

^a Data are based on 2860 observations for Australia; 701 observations for New South Wales; 313 observations for Victoria; 621 observations for Queensland; 340 observations for South Australia; 703 observations for Western Australia; 145 observations for Tasmania; and 37 observations for the Northern Territory. The estimated median rates per person may vary from those reported elsewhere in this report. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

In terms of the third quartile, the highest rates incidence was in communities in South Australia (1.7 per cent). However, Western Australia and Queensland had the highest rates per person in the third quartile. In the case of Western Australia, rates per person were about \$284 higher than the national average.

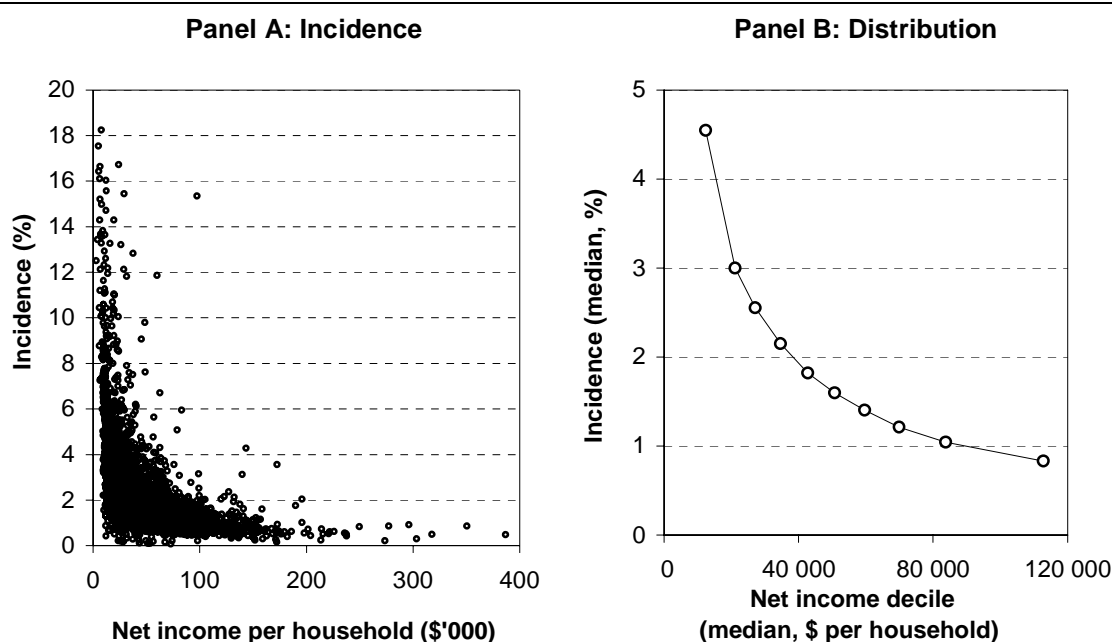
7.5 Residential rates incidence

The incidence of residential rates can be assessed using data for rates paid on residential properties at the local government level and the average personal net income of residents in that council. Household surveys can also be useful in estimating the incidence of council rates. In this section, the household survey data is analysed first, followed by estimates of incidence using the LGA data.

Household residential rates incidence using the HES data

As noted earlier, the HES data are used to compare the incidence of residential rates for households *across* councils. Using the ABS HES data for 2003-04, the relationship between net income per household and their corresponding rates incidence is illustrated in panel A of figure 7.3. For a majority of households, net income is less than \$100 000, with rates incidence varying significantly. The median household net income was about \$46 500 and median rates paid were about \$780 per household. This corresponds to a median rates incidence of about 1.7 per cent. In terms of the distribution of rates incidence by income deciles (panel B), the incidence decreases sharply from about 4.5 per cent in the first income decile. Between the fifth and the ninth income deciles, the median rates incidence falls from 1.8 per cent to 1 per cent. Part of the variability in the rates incidence is due to differences in the level of services provided across local councils.

Figure 7.3 **Household rates incidence**
2003-04 HES data^a



^a Households that have reported rental payments and negative income have been excluded from the data. Data are based on 4090 observations.

Source: ABS (2006b); Productivity Commission calculations.

FINDING 7.5

Using household expenditure survey data across councils, rates decrease relative to disposable income as income increases. For 50 per cent of households, the rates incidence is about 1.7 per cent or less of after-tax income.

Regression analysis using the HES data

To gain insights into the underlying relationship between incidence and income for households, a multivariate regression analysis was undertaken. The results of the analysis are provided in table 7.5.

Consistent with expectations, the regression results show that, on average, as household disposable income increases, so does the amount of rates paid by households. The income elasticity of rates is estimated to be 0.24. This implies that for a 10 per cent increase in the level of income, there is an increase in the level of rates paid by households of 2.4 per cent, holding all other factors constant.

Some of the variation in rates paid by households can be explained by jurisdictional differences (in this instance, the analysis is undertaken relative to Victoria). There is a statistically significant difference between Victoria and New South Wales, Queensland, Tasmania and the Northern Territory and ACT combined. For the same level of income, on average, households in New South Wales, Queensland and Tasmania, but not in the Northern Territory/ACT, pay higher rates per household than households in Victoria. South Australia and Western Australia are not significantly different from Victoria according to the statistical analysis.

Table 7.5 Income elasticity of rates
2003-04 HES data^a

<i>Independent variables</i>	<i>Parameter estimate (Log of rates paid per household)</i>	<i>Significance (p value)</i>
Log of net household income	0.24	0.0001
New South Wales	0.18	0.0001
Queensland	0.16	0.0001
South Australia	-0.03	0.175
Western Australia	-0.04	0.113
Tasmania	0.12	0.021
Northern Territory/ACT	-0.05	0.046
Intercept	4.02	0.0001
Adjusted R-squared	0.15	

^a State dummies are relative to Victoria. Households that have reported rental payments and negative income have been excluded from the data. Data are based on 4090 observations.

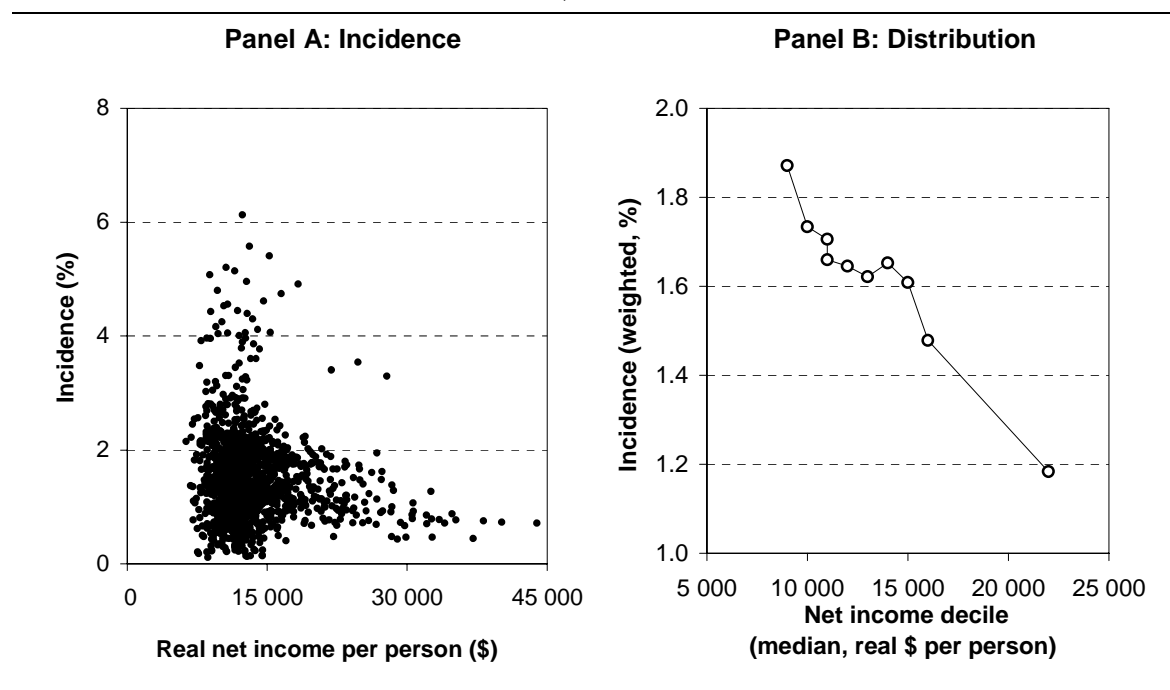
Source: ABS (2006b); Productivity Commission calculations.

Residential rates incidence using the LGA data

The relationship between the incidence of residential rates and the average after-tax personal income of residents in councils in Australia is depicted in figure 7.4, panel A. In a large number of councils with average incomes in the range of

\$10 000 to \$15 000 per person, the incidence of residential rates varies between 1 per cent and 2 per cent. For a relatively small number of councils with high average per person income, the incidence of residential rates is relatively low, at less than 1 per cent.

Figure 7.4 Residential rates incidence and distribution in Australia
2000-01 to 2004-05 estimates, selected States^a



^a Deciles are grouped by real after-tax average personal income per person of each LGA. Data are based on 1406 observations. In panel B, the incidence for each decile is weighted by the population of councils in each decile. Data for New South Wales, Victoria, South Australia and the Northern Territory only. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

The distribution of the residential rates incidence based on income deciles is illustrated in panel B of figure 7.4. Income per person is highly concentrated between the second and eighth income deciles, with the difference in income of about \$4500 per person. Within this decile range, the weighted residential rates incidence varies between 1.6 per cent and 1.7 per cent. There is a considerable decrease in the incidence of residential rates between the eighth and tenth deciles (the incidence decreases to about 1.2 per cent in the tenth income decile, with median income of about \$22 000 per person).

The variation of residential rates incidence is also due to the setting of residential rates on the value of properties, which may not always be directly correlated with

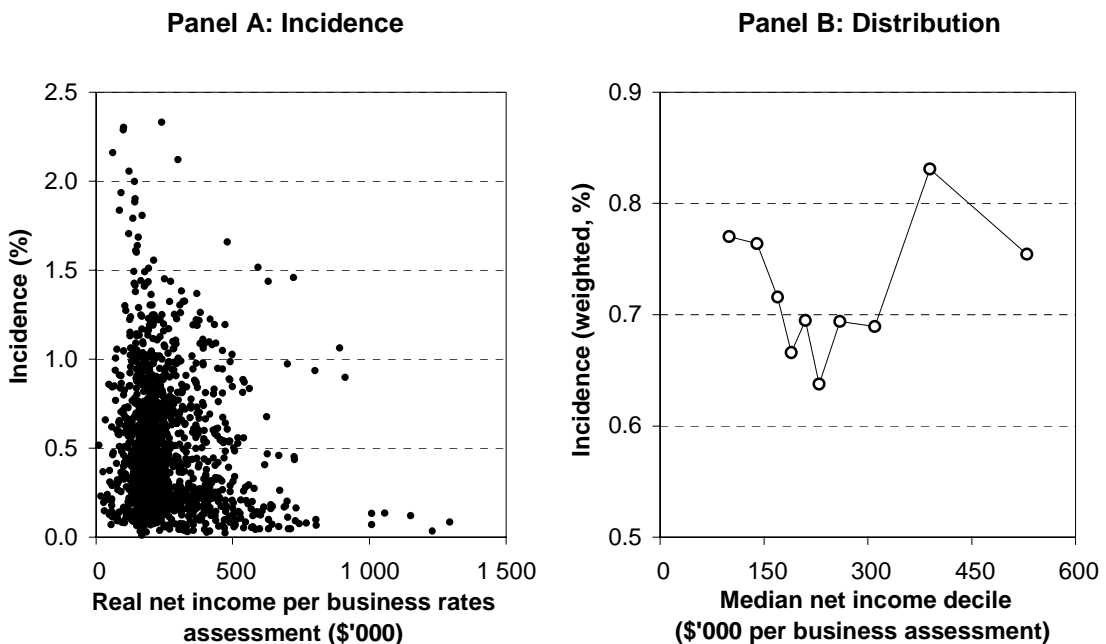
the incomes of property owners.¹⁰ The Australian Chief Executive Officers Group (sub. 18, p. 25) noted:

The tax relates to the value of the property which is not always a good indicator of the ratepayer's current ability to pay. Some ratepayers may be asset rich but have comparatively low incomes, for example, pensioners or super-annuitants living in highly demanded areas whose property values reflect the past income of residents, rather than the current capacity of landholders to pay the tax. To this extent, while the rating system is relatively neutral in its design, the incidence of the tax is particularly regressive.

7.6 Business rates incidence

The average incidence of business rates is measured using business (commercial and industrial) rates paid to councils and the estimated net incomes of businesses, taking into account the tax deductibility of business rates (figure 7.5, panel A).

Figure 7.5 **Business rates incidence and distribution in Australia**
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by real after-tax average income per business assessment in each LGA. Data are based on 1383 observations. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. In panel B, the incidence for each decile is weighted by the number of business assessments in councils in each decile. Incidence estimates take into account tax deductibility of business council rates through the tax system.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

¹⁰ Analysis of rates relative to property values is presented in appendix E.

There is a substantial range in the incidence of business rates across councils. The median net business income is about \$220 000 per business rates assessment and the median business rates incidence is about 0.4 per cent.

The distribution by income deciles is illustrated in panel B of figure 7.5. The weighted incidence of business rates was almost 0.8 per cent in the lowest income decile. The business rates incidence was lowest in the sixth income decile, for which the median net income per business assessment was about \$230 000. The business rates incidence was broadly the same for the lowest and highest income deciles. However, the difference in the net business income was about \$430 000.

7.7 Impact of fees and charges

Appropriately measuring the burden of fees and charges is highly complex and the results of attempting to do so could be potentially misleading. Fees and charges for services might be discretionary or compulsory, fully paid for by users or cross-subsidised from rates when fees and charges are set below cost for equity purposes. There are, moreover, differences between States in the range of services that local governments deliver for which user fees can be applied (most notably with respect to New South Wales, Queensland and Tasmania, where some or all local governments provide water and sewerage services).¹¹ Further, there are differences in the extent to which local governments receive fees and charges revenue from commuting workers, shoppers and visitors as well as from residents. Central business districts and holiday and tourist destinations are likely to receive revenue from fees and charges disproportionately high relative to their residents' incomes. Some of these issues are briefly discussed below followed by estimates of the fees and charges revenue received by local government areas relative to their incomes.

For a large number of local government services, expenditure by individuals, organisations and businesses is discretionary. To the extent this is the case, the benefits of the local services received by users would be expected to be equal to or greater than their expenditure, consistent with the benefit principle (for example, fees paid for use of swimming pools, tennis courts and other recreational facilities). That being the case, it could be regarded as somewhat peculiar to measure the 'burden' of fees and charges when use of services is discretionary.

¹¹ In fact, in the case of Queensland and Tasmania, fees and charges revenue per person is the largest component of local governments' own-source revenue (44 per cent and 47 per cent, respectively, in 2005-06).

However, in circumstances where fees and charges are compulsory (such as with annual charges for garbage collection and disposal), the benefit principle might not necessarily be satisfied. Members of a community cannot signal whether the benefits they receive exceed the charges they are required to pay by opting in or out of the use of the standard level of the service delivered by their local government. Nonetheless, because they are a charge separate from general rates payments, and for a specific service, members of local government communities have a clear basis on which to compare benefits they receive against charges they pay for that service. Also, they have the ability to signal to their local government through the political process any dissatisfaction they may have about the level of the charges, and/or the level or quality of the service they receive. It seems unlikely that compulsory charges could sustainably be far removed from being, in effect, a ‘benefit tax’ for most ratepayers. Again, in that event, to measure the ‘burden’ of these charges might be thought to be somewhat misplaced.

The level of fees and charges actually set by local governments, however, reflects a wide range of influences, not all of which result in the recovery of the full economic costs of provision of the associated services. For example, local governments receive substantial grants from State governments for the supply of library services, which are generally conditional on local governments not imposing book borrowing charges. This appears to reflect an objective of ensuring ‘equity of access’, although the relatively well-off users of library services benefit at least as much as those less well-off. In fact, local governments choose, as a matter of council policy, to charge fees that do not fully cover costs for a wide range of services (for example, the use of swimming pools).

It is generally the case that the costs of subsidising access to local government services for which full cost fees and charges could be applied, are borne through cross-subsidies from rates revenue. The net distributional effect depends importantly on who bears the burden of rates being higher than otherwise as much as on who benefits from the subsidies involved in below-cost fees and charges. The untargeted nature of most subsidies when setting fees and charges (that is, they are typically set below cost for all users) makes it difficult to estimate the net impact of fees and charges relative to the incomes of individuals within the local government area. The use of cross-subsidised services by non-residents further complicates the analysis.

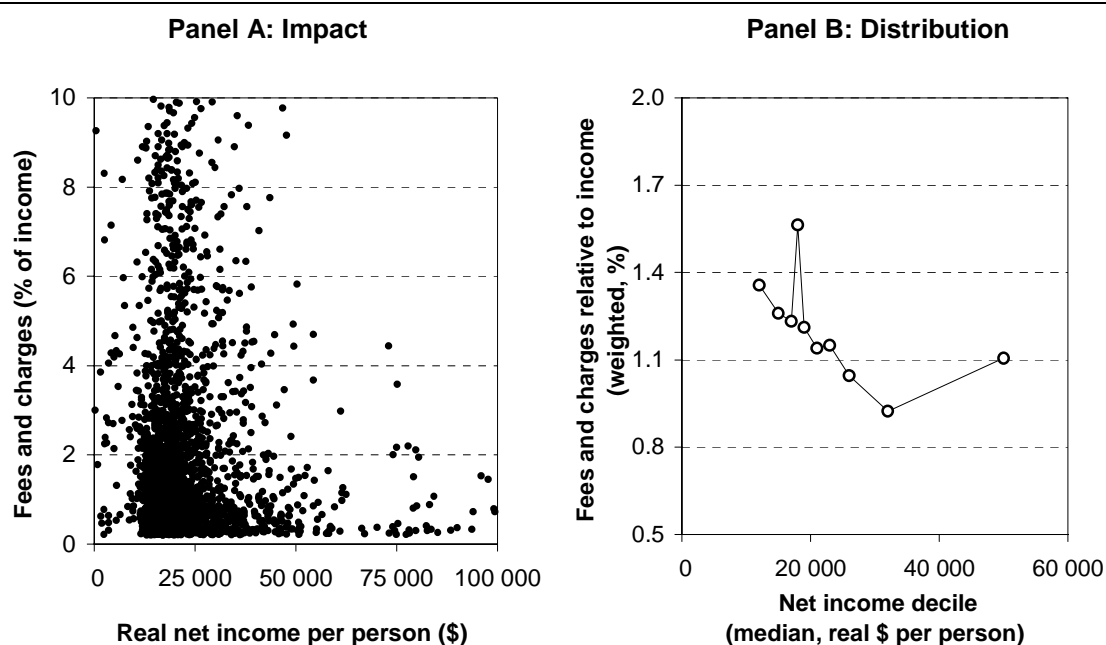
Estimates of fees and charges revenues relative to incomes

In this section, fees and charges revenue received by local governments are considered relative to the average income of each local government area. Given the data limitations, it has not been possible to distinguish between discretionary and

compulsory fees and charges, and the extent to which services for which fees and charges apply are fully or partially cost recovered. Moreover, it was not possible to account for the fees and charges revenues sourced from non-residents for each local government area; nor was it possible to reliably measure the revenues from the provision of water and sewerage services in relevant councils. Therefore, considerable caution is required in interpreting the estimates presented below.

Fees and charges revenues relative to community incomes varied considerably across councils (figure 7.6, panel A). Based on median values, fees and charges revenues relative to incomes were about 1.3 per cent and net income per resident person was about \$20 000. This corresponds to an average across Australia of about \$262 received annually by local governments per resident person from various local government fees and charges.

Figure 7.6 Impact of fees and charges in Australia
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by real after-tax average income per resident person of each LGA. Data are based on 2458 observations. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. In panel B, the ratio of fees and charges relative to income for each decile is weighted by the population of councils in each decile.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

In terms of the income deciles, there was a decreasing trend, in general, in the share of fees and charges revenue to income (figure 7.6, panel B). The ratio of fees and charges revenue to income decreased from 1.4 per cent in the lowest income decile to 1.1 per cent in the highest income decile. However, the ratio of fees and charges

revenue to income was the highest in the fourth income decile (1.6 per cent) and the lowest in the ninth income decile (0.9 per cent). For the middle 50 per cent of councils (the inter-quartile range), the ratio of fees and charges revenue to income was between 0.6 per cent and 3 per cent.

Estimates of fees and charges relative to income for each State suggest that Victoria and Western Australia had lower median fees and charges revenues relative to income than the national median of 1.3 per cent (table 7.6).

Table 7.6 Impact of fees and charges — State comparison
2000-01 to 2004-05 estimates, per cent (fees and charges relative to income)^a

<i>Jurisdiction</i>	<i>First quartile (25%)</i>	<i>Median (50%)</i>	<i>Third quartile (75%)</i>
New South Wales	0.7	2.0	5.0
Victoria	0.5	0.8	1.1
Queensland	0.8	2.1	4.7
South Australia	0.6	1.5	3.9
Western Australia	0.5	0.9	1.8
Tasmania	1.7	2.1	2.6
Northern Territory	0.5	1.5	4.7
Australia	0.6	1.3	3.0

^a Quartiles are grouped by real after-tax average income per person in each LGA. Data are based on 2458 observations for Australia; 672 observations for New South Wales; 305 observations for Victoria; 457 observations for Queensland; 251 observations for South Australia; 554 observations for Western Australia; 145 observations for Tasmania; and 74 observations for the Northern Territory. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

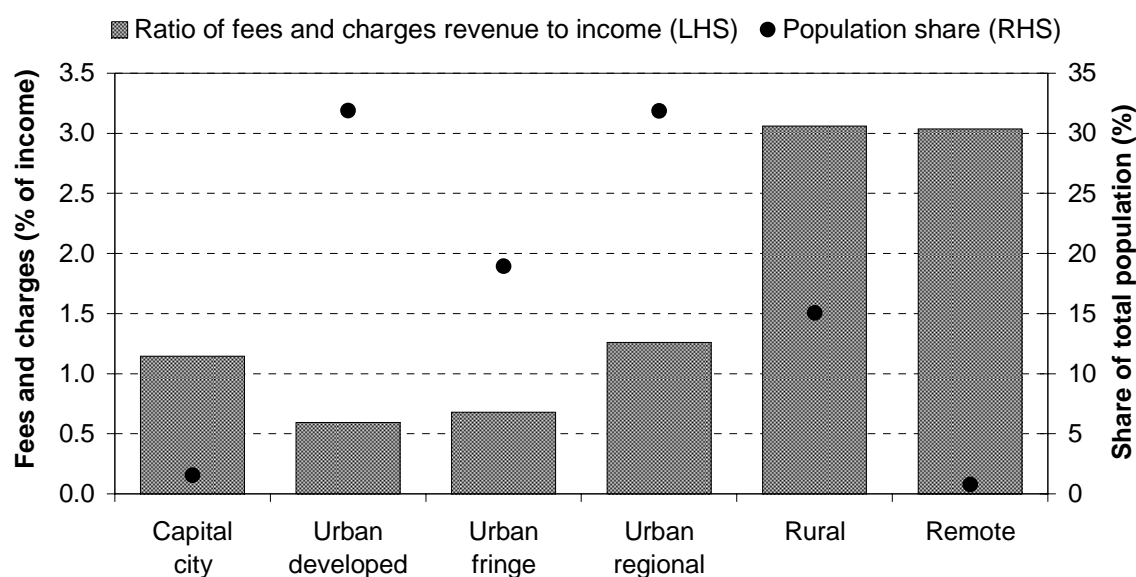
The principal reason for the relatively high fees and charges revenue relative to income in New South Wales, Queensland and Tasmania is likely to be the provision of water and sewerage services at the local government level in these States.

Fees and charges revenue relative to income by broad ACLG classes was the highest for rural and remote councils, at 3.1 per cent and 3 per cent, respectively (figure 7.7). This reflects the higher costs of providing services in rural and remote councils and the level and composition of services provided through fees and charges.

In terms of capital cities, fees and charges revenue relative to income was 1.1 per cent. This ratio partly reflects the share and mix of local government user fee services provided by these councils. For example, capital cities would be expected to derive relatively higher revenue from parking fees, in particular those

sourced from non-residents.¹² Urban developed and urban fringe councils had the lowest fees and charges revenue relative to income, at 0.6 per cent and 0.7 per cent, respectively. This is partly due to the availability of alternative service providers in these council classes, for example, for services such as recreation and health. It also likely reflects that some of the council areas in these ACLG classes are ‘dormitory’ suburbs; commuting workers and shoppers who live in them likely contribute significantly to fees and charges revenues in capital cities (or central business districts more generally).

Figure 7.7 **Impact of fees and charges by broad ACLG classes in Australia**
2000-01 to 2004-05^a



^a ACLG broad classes as defined in appendix C. Data are based on 2455 observations. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. The user fees share to income for capital cities is estimated in reference to their residential population only. The ratio of fees and charges revenue to income for each ACLG class is weighted by the population of councils in that class. Population shares by broad ACLG classes may differ to any published elsewhere as a result of the number of observations used for this figure.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission calculations.

¹² Fees and charges relative to income for capital cities is estimated in reference to their residential population only. As such, the estimates are likely to be overstating the impact on capital city residents.

8 Principles for revenue raising

Key points

- Through open and transparent processes, local governments can improve the well-being of their communities by:
 - ensuring financial sustainability
 - evaluating and setting priorities, including seeking community input
 - identifying core functions and ensuring recognition of full costs
 - undertaking functions effectively and efficiently.
- The implementation of appropriate principles for revenue raising can assist the effective operation of the decision-making processes of local governments.
- These principles can guide decisions about:
 - the appropriate structure of rates, including minimum rates, fixed charges, valuation methods and differential rating
 - the balance between rates, and fees and charges
 - setting fees and charges depending on the nature of the service and the users
 - making appropriate provision for refurbishment and replacement of assets.
- Practical application of such principles requires skills and resources.
- In addition to the current initiatives in a number of jurisdictions, some local governments will need further assistance in applying the principles.

The terms of reference for this study require the Commission to focus on assessing the revenue-raising capacity of councils. The Commission has presented evidence in chapter 5 that, when each council is compared to all others, adjusting for the key factors that explain differences between them, councils have some capacity to raise additional revenue. However, this does not imply that councils *should* exploit that capacity. This is a matter for their communities to decide.

Local government's revenue raising should be considered in the overarching context of promoting the well-being of its community as effectively and efficiently as possible. In accordance with its charter and operating principles, the Commission has sought to take a wider perspective than just focussing on the revenue-raising capacity of councils. In this chapter, a number of principles are set out which can help guide the revenue-raising decisions of local governments. The principles

provide a framework through which councils can discover whether they can and should increase (or potentially decrease) their own-source revenue and how this might best be achieved.

Conventional wisdom has it that the closeness of local governments to the people means that they are more likely to respond effectively to their residents' preferences than higher levels of government. Local government rates, fees and charges are highly visible from the perspective of local communities. If they are not convinced they are getting value for money, they are unlikely to be willing to:

- approve rate increases, through the political and decision-making processes of local governments
- pay fees and charges to use the services being offered.

On the other hand, local governments are making claims that their existing levels of revenue are inadequate to meet:

- increasing demands for services placed on them by their communities
- the costs of maintaining and upgrading infrastructure assets
- the costs of additional services being provided to their communities by councils on behalf of other spheres of government (chapter 2)
- rising input costs due to, for example, labour and skills shortages (Australian Chief Executive Officers Group, sub. 18).

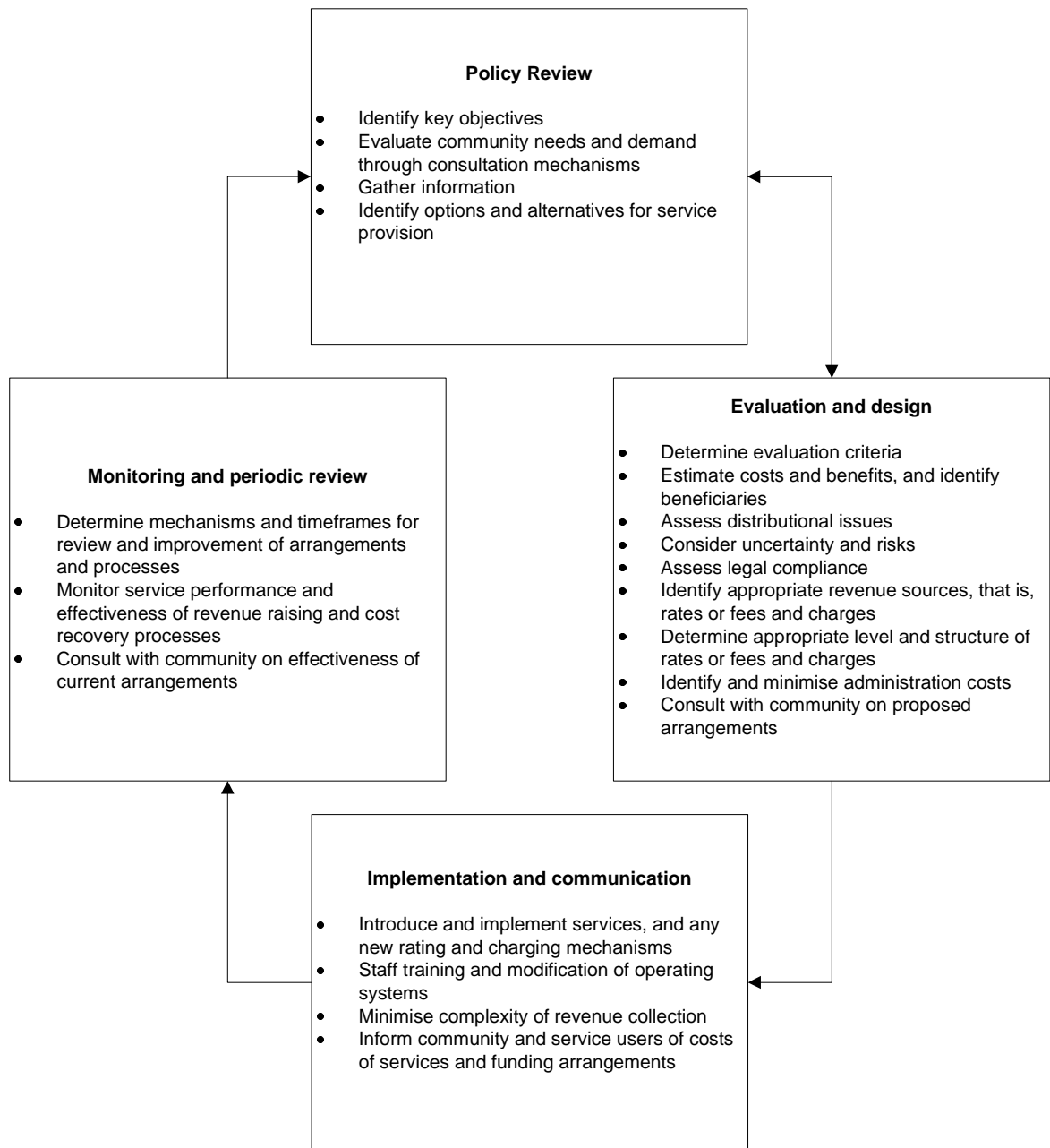
The system of local government is inherently a political one. As such, many considerations (social, political, institutional and governance) are as relevant as economic considerations. This means that there are invariably trade-offs between economic and other objectives, such as equity and administrative simplicity. Further, although the system might be an appropriate one to deliver local public goods and services, it can still have limitations, as alluded to in chapter 4.

The application of some economic principles can play a useful role in guiding the revenue-raising (and expenditure) decisions of local government. This is because the economic principles are consistent with, and indeed help support, the effective operation of the democratic and decision-making processes of local governments.

Overview of the local government decision-making process

In simple terms, a local government's revenue raising is determined through a process involving policy decisions, budgeting and cost recovery, as illustrated in figure 8.1. The various stages raise a number of issues which are explored in the discussion of revenue-raising principles through the remainder of the chapter.

Figure 8.1 Local government decision-making process



8.1 Principles to guide effective revenue raising

The principles set out below have been synthesised from a number of sources. In particular, they are based mainly on work published by Abelson (2003), Bailey (1999), Bird (1999), Groenewegen (1990), the Productivity Commission (2001) and the South Australian Centre for Economic Studies (2002). Use is also made of long established principles in the public finance and economics literature,

as well some of the principles outlined in the recent financial sustainability reports commissioned by several local government associations.

The principles set out in this chapter relate to:

- sustainable financial management
- evaluating and setting priorities
- core functions
- identifying costs of service delivery
- least cost of supply
- rate setting and pricing of services
- prudent borrowings for infrastructure
- responsibility and accountability
- openness and transparency
- providing services on behalf of other spheres of government.

Sustainable financial management

A key responsibility for councils is to conduct the business of local government in a financially sustainable manner. That is, the own-source revenue raised by councils, plus that received from grants, needs to be sufficient to cover the aggregate long-run costs of delivering the services provided on an accrual accounting basis. The aggregate cost to councils includes:

- operating expenses — such as labour, energy, materials and purchased services (including contracted-out services)
- depreciation on all long-lived assets — such as roads, buildings, pavements, bridges and water supply and drainage assets
- a return on the opportunity cost of holding assets — based on an appropriate rate of return on the investment in assets and appropriate valuation of assets that the council intends to operate over the long term
- taxes paid to other spheres of government, where applicable (for example, where councils undertake commercial operations).

The need to improve financial management systems and processes, particularly in regard to long-lived assets, was identified as a priority for councils to improve their

financial performance in recent financial sustainability reports.¹ Sustainable financial management requires the application of a multi-year framework to financial management, asset management and planning, and spending and revenue-raising decisions.

Accrual accounting requires that revenues and expenses be reported when they are incurred, rather than when a cash flow actually occurs. Under an accrual-based system, depreciation costs are included in the operating statement and employee entitlements are accounted for when accrued (for example, long service leave and superannuation accruals). Such an approach increases the accuracy in attributing costs to particular outputs or services that the council provides, thereby improving the information available to local government managers for their decision-making.

Evaluating and setting priorities

As noted elsewhere in this study, councils are facing increasing community pressure to expand the range of services provided. It is important that both the community and their council understand the costs of providing these services and how they are funded. The processes of identifying and making decisions about priorities are made more effective where:

- councils are aware of, and have regard to, the views of their communities about the priority areas for local government services
- councils heighten their communities' awareness of the benefits to them associated with the priority areas for services and discretionary expenditure
- councils heighten their communities' awareness of the short and long-term financial implications of potential service priorities and key decisions, including any trade-offs between priorities and risks associated with successfully delivering the services
- councils heighten their communities' awareness of the sources of revenue raised to pay for the priority areas for services.

¹ These reports are listed in chapter 1.

In the recent sustainability reports, it was suggested that councils might need to reassess their priorities. The establishment of long-term service plans has been identified as an action item for local governments. It has been suggested that councils should use service plans to set out:

- the services a council will provide
- how services will be delivered
- how services will be funded.

Rating and pricing principles, as discussed later, can help determine how to effectively raise the revenue required to pay for various types of goods and services provided by local governments. These principles extend to the provision of services on behalf of other spheres of government, either voluntarily or involuntarily.

Core functions

As noted in chapter 2, local governments have a variety of roles and functions and deliver a wide range of services. They are able to take on roles not precluded by other legislation and are designated as responsible authorities for the purpose of undertaking functions and providing services on behalf of other spheres of government. The main roles of local governments include governance and advocacy, planning and community development, regulation, provision of infrastructure and service delivery (DOTARS 2007).

A major function of local governments is the provision of goods and services that can be categorised as:

- public goods such as local roads, water drainage, local street lighting, parks and gardens
- natural monopoly goods and services, such as local roads and bridges
- services with associated externalities, such as some health, library and land use services.

There is general acceptance that it is appropriate for local governments to be providing these core types of services. The benefits are likely to accrue to the local community and the private sector is unlikely to provide the optimal level of these services.

Councils often choose to provide a broader range of services within their local government area. As noted in chapter 2, there has been a trend of local governments broadening the range of services they provide. Over time, councils have been increasing their involvement in areas of non-traditional social services, including health and welfare services, community housing, and recreational and sporting facilities. Some of these services appear more like those provided in private sector markets. In such situations, the case for provision by local government is less convincing.

However, where councils do engage in the provision of goods and services that resemble those of private sector markets, it is preferable for councils to approach service provision in a way that seeks to emulate that of private markets. In these situations, it is preferable to rely on user fees to recover the costs of providing these services and reveal the willingness to pay of users. Local governments should avoid under-charging for these services as it encourages over consumption and requires some subsidisation from other revenue sources. Moreover, the application of competitive neutrality principles requires that local governments aim to recover the full costs of significant business activities, including all direct costs of providing goods and services, rate and tax equivalent payments and a commercial rate of return on investments (appendix B).

Identifying costs of service delivery

Before a council can set its rates, fees and charges appropriately, it first needs to identify the costs of delivering its various goods and services. This information is essential in deciding how to set both the levels and the structures of rates and charges in an efficient manner, taking into account the distinction between private and public goods. Some definitions of the basic categories of costs are outlined in box 8.1.

Box 8.1 Cost definitions

Direct costs are costs that can be directly and unequivocally attributed to an activity or product. They include labour (and labour on-costs) and materials used to deliver products.

Indirect costs are costs that are not directly attributable to an activity or product and are often referred to as overheads, joint or common costs. They can include 'corporate service costs, such as those of the chief executive officer's salary, financial services, human resources, records management and information technology.

Capital costs comprise the user cost of capital and depreciation. The user cost of capital represents the opportunity cost of funds tied up in the capital used to deliver activities or products. It is the rate of return that must be earned to justify retaining the assets in the medium to long term. Depreciation reflects the decrease in the value of the asset over time, reflecting the decrease in its service life arising from wear and tear and obsolescence.

Fixed costs are costs that do not vary with the amount of activity or product. Rent and capital costs are usually fixed costs in the short run.

Variable costs vary with the volume of activity or product and typically include direct labour and materials.

Marginal costs is the change in total cost that arises when the quantity produced changes by one unit.

Source: CCNCO (1998).

Marginal and incremental cost

Conceptually, marginal cost provides the relevant basis for measuring the costs of an increase in supply of a service because it reflects the opportunity cost of extra units of resources required. A proxy for marginal cost is incremental cost. This is the increase in a local government's total cost attributable to the supply of a specific service. Marginal cost differs from average cost, which is the total cost of supplying a good divided by the number of units supplied. A distinction is made between short-run and long-run incremental cost. Long-run incremental cost includes operating and maintenance costs, incremental capital costs (that is, a return on the additional assets required) and incremental indirect costs (CCNCO 1998).

Long-run incremental cost is the appropriate measure of cost in situations where councils are committed to providing a service into the future (such as roads). Short-run incremental cost is preferred when a service could be discontinued or when there is excess capacity that will persist for some time.

Some costs incurred by councils are joint or common costs. These costs are not attributable to the incremental supply of services. In the case of local governments, where the beneficiaries of particular services are not easily identifiable, it is probably best to recover these through rates, for reasons explained later.

Capital costs

Pricing of services based only on direct costs without inclusion of all capital costs can result in distorted price signals. It can also lead to mis-specification of any inherent subsidy in providing a service (Carnegie and Baxter 2006). Asset management benefits from the inclusion of all relevant capital costs in the costs of a product or service. This creates an incentive to dispose of surplus assets and to use an efficient mix of assets (PC 2004).

Full capital costs include both the return on capital and depreciation (or appreciation). The first component reflects the opportunity cost of capital (the benefits of alternative uses of funds, such as retiring debt). The return on capital can be measured by applying an appropriate rate of return to the value of the asset. This can be achieved using a number of methods, including the application of a uniform rate of return across all local government services or, alternatively, using differentiated rates of return for various products and services to reflect differences in the risk profile of projects. There are trade-offs in terms of complexity and costs associated with systems and processes required to use various methods.

Depreciation costs are based on how the economic value of assets is reduced over time as they are used to provide services. Asset valuation methods can be cost-based (such as historic cost or replacement cost) or value-based (such as fair market value, net present value or optimal deprival value) or a combination of these methods. Again, there are trade-offs between the complexity and costs of implementing and using particular methods and the extent to which particular methods accurately estimate the future economic benefits of the asset, thereby encouraging its most efficient use. Historic cost accounting is usually relatively simple to administer, but only reflects asset values at a particular point in time. Such methods do not necessarily reflect the real opportunity costs of using assets. The appropriate asset valuation method will depend on asset characteristics; for example, whether the asset is short-lived or long-lived, or whether its market value changes significantly over time.

The rate of return establishes goals and benchmarks for performance assessment and provides a basis for making investment decisions (Abelson 2003). Accounting rates of return can provide an indication of the financial obligations of an entity but can have limitations for the purpose of performance assessment. Accounting profit

can be subject to strategic manipulation depending on the method used to revalue assets. The accounting rate of return is often poorly correlated with a market-based measure of return (SCNPMGTE 1996). An alternative, the economic rate of return, is a market-based measure of performance based on all relevant income, including both net cash flows and changes in capital value. It is measured as the income derived from an asset (including any change in its value) as a proportion of its market value at the start of the period. The economic rate of return provides an unbiased measure of performance that is comparable with the cost of capital and relevant to decision making.

The economic framework for assessing financial performance developed by the Steering Committee on National Performance Monitoring of Government Trading Enterprises (SCNPMGTE 1996) provides some guidance for local governments. The Committee also produced guidelines on accounting policy for valuation of assets using current valuation methods.

Least cost of supply

The revenue required to be raised by local governments should reflect the lowest achievable cost of supplying the services they provide. Councils need to search for ways to ensure that they are delivering services at lowest possible costs consistent with the desired quality and standard of service offered. Examining ways of reducing the internal operating costs of providing services is important. Benchmarking and efficiency studies can be useful tools in identifying the scope to reduce costs.

Councils might be able to improve the cost-effectiveness of providing services by entering into purchaser-provider arrangements with private sector suppliers and putting the provision of services out to competitive tender. Road construction and maintenance, and the operation of sports and leisure centres, are some common examples of where these arrangements have proven to be useful.

Commercial arrangements with private sector businesses and others for the provision of services should be in accordance with best practice in the private sector. Competitive tendering for the delivery of services should be undertaken for specialised work or for contracts that can be clearly specified and monitored (Abelson 2003).

Where there are potential scale and scope economies across councils, options for reducing costs include:

- shared service provision by creating separate entities (such as regional councils or special purpose joint venture corporations to provide services)

-
- administrative arrangements and agreements between councils, including joint purchasing
 - knowledge sharing, benchmarking and adopting best practices across councils
 - council amalgamations (PwC 2006).

Councils should make their local communities aware of the options that have scope to lower the cost of service delivery and improve the cost-effectiveness of service delivery, as well as their consequences for revenue raised by the council.

Rate setting and pricing of services

The appropriate setting of rates and prices for goods and services is essential for the efficient recovery of the costs of providing council services. Councils have a choice about using rates, or user fees and charges, to recover these costs. The principles outlined in this section provide a guide to the way that local governments should appropriately set both the structure and levels of their rates, fees and charges.

Generally, cost recovery can be regarded as an attempt to charge users more directly for the local government services they consume. By requiring a payment for services supplied, users recognise the costs of the resources involved and have an incentive to adjust their consumption in line with their willingness to pay.

For each main category of good or service provided, councils need to determine whether it is a public good, private good, or likely to result in some kind of externality. This is important for attributing costs to users (box 8.2). This determination helps to guide the extent to which the costs of providing services are recovered through rates, user fees and charges, or a combination of both.

The appropriate spatial allocation of asset costs depends on the extent to which infrastructure provides services to those in a particular location or development. Community infrastructure benefits a wide group (usually over a substantial period of time) and, therefore, might require allocation of costs across dispersed beneficiaries. If the beneficiaries are not easily identifiable there may be a case for funding from rates rather than from user charges. In the case where infrastructure costs are directly attributable to individual property owners it might be equitable to recover these costs via developer charges or contributions (which are usually capitalised in the value of the property) or via the fixed charge component of a multi-part tariff.

Box 8.2 Guidelines for attributing costs

The Wellington City Council (New Zealand) applies the following cost attribution rules to its services and activities:

- If a service (or activity) benefits identifiable individuals or groups the cost should be allocated to those individuals or groups (user pays), for example, swimming pools.
- If those that benefit directly cannot be identified or if those that benefit directly cannot be excluded from using the service, the costs should be allocated to the community (public good), for example, footpaths.
- If there are indirect or 'flow-on' benefits and those that receive these benefits cannot be identified, the costs should be allocated to the community (positive externality), for example, libraries.
- If the service prevents the negative effects of the actions of identifiable people the costs should be allocated to those people (polluter or exacerbator pays), for example, parking fines.
- If the service will benefit future generations, costs should be allocated to reflect the distribution of benefits over time (intergenerational equity), for example, where council capital expenditure is funded through borrowings.

Source: SACES (2002).

These principles are important for achieving efficiency in service delivery and revenue raising. They play a role in helping councils to coordinate the demand for, and supply of, the goods and services they provide. In this way, the principles help guide what councils do for their communities. By choosing the appropriate instrument (rates, fees or charges), councils can get a better indication of user's willingness to pay for services and minimise some of the economic distortions that can arise when an inappropriate instrument is used.

The pricing of local government services can have an impact on the roles and functions of government. If local governments provide products free of charge, users are likely to demand more than they would otherwise. As Bird (1976, p. 35) states:

An important advantage of pricing is thus to curb the demand for expanded public sector activities by making their real costs apparent to the prospective beneficiaries in a meaningful fashion. Correct pricing can alleviate ... the pressures to expand government. ... If beneficiaries are not willing to pay what the expansion of a service will cost, then it should not be expanded; if they are, it should be.

Getting the mix of revenue instruments right is a matter for each individual council. As pointed out by SACES (2002), most councils have the flexibility to change the balance of rates and user charges, if they choose to do so. There might be a case for

greater use of user charges or special rates. Where these user pays mechanisms are not used, the role of general rates in funding particular goods and services will be higher.

However, it needs to be borne in mind that economic efficiency is not the only criterion used when setting rates and prices. The other criteria commonly cited include equity, administrative simplicity, and transparency and accountability (Abelson 2006).

Equity implies an appropriate balance between the benefit and ability to pay principles. Equity considerations often result in prices for some services or user groups being subsidised, with the subsidy funded by higher prices charged for other services or groups, or from rates revenue. Where this is the case, correct identification and transparency in the level of the subsidy is important to enhance accountability and avoid poor pricing decisions.

Local governments might seek to minimise the transaction costs associated with imposing rates, fees and charges by making them easy to administer and understand and reasonably constant over time. Carnegie and Baxter (2006) consider that while price setting based on full costs is important, unduly complicated cost allocation processes to service delivery are more than likely to fail on the basis of the associated costs outweighing the benefits.

In practice, there are always trade-offs made in setting rates, user fees and charges. It might be reasonable for local governments to make trade-offs at a disaggregated level, that is, choices about funding individual services. However costs in aggregate need to be recovered in full.

Rates

Rates on land values are generally considered to be an efficient form of taxation in that they do not significantly distort economic activity and resource allocation — that is, choices about how to use the land. Even though rates can be levied on the capital improved value of land in some jurisdictions, and are therefore a tax (in part) on capital improvements, the general consensus is that the distortions and efficiency costs are small. For this reason, rates are seen as an efficient way to raise revenue for the provision of public goods and to raise revenue to subsidise services with externalities, or for other reasons, such as to achieve equity objectives.

Overall, property rates represent an attractive method of financing many forms of local government expenditure, partly because they are predictable and stable (Bailey 1999). Many local public goods cannot feasibly be financed using fees and charges because the cost of excluding non-paying users is prohibitive (for example,

users of local roads). As a result, rates represent an appropriate means of financing local public goods (excluding the annual charges elements which relate to specific services where beneficiaries are identifiable, such as rubbish collection).

For goods and services where positive externalities arise, rates can be used to partly subsidise the service. The extent of the subsidy should be guided by the assessed monetary value of the positive externality.

In practice, the distribution of the rates burden on ratepayers probably reflects a combination of the benefit principle and the ability to pay principle. Under the benefit principle, the rates burden would be allocated to ratepayers based on some notion of the benefits that are derived from the goods and services provided by local governments. Under the ability to pay principle, the rates burden would be based on some notion of the ability of ratepayers to pay, such as income. Rates setting might reflect a combination of both principles where, for example, it includes a minimum charge and an ad valorem component. In this case, the minimum charge would reflect the fact that all users benefit from a particular service and the ad valorem component would vary according to the ratepayers ability to pay (based on property values).

Local governments have capacity to set different rates in the dollar for different land uses and specific activities. Most local governments can use differential, separate, service or special rates, depending on what is permitted under State legislation. However, there might be scope to increase and improve the use of such mechanisms. The range of differential rates introduced by some Queensland councils are examples of targeted differential rates that are intended to recover more efficiently council costs as well increase revenue-raising capacity (box 8.3).

Box 8.3 Rating strategies of Queensland councils

The legislative framework in Queensland provides local governments with reasonably flexible powers in setting rates, particularly the use of differential and special rates.

The various rating strategies employed by some Queensland councils have enabled them to access better their revenue-raising capacity, through introducing innovative ways to categorise commercial and industrial rateable properties. Differential rates are determined in a manner that allows councils more efficiently to recover costs associated with properties and to ensure a more equitable distribution of rates. Some examples of rating strategies include:

- Residential single dwelling — categories are based on valuation ranges. This has enabled some councils to align better rates relative to the benefits obtained or costs imposed. This has reduced rates on higher-valued residential property, for example, canal frontage, where service levels or benefits do not increase at the same rate as the increase in land valuation.
- Residential units — categories are based on the height of the block of units (for example, greater or less than four levels). This has been used for high density units that have a high capital value relative to a low unimproved capital value and were previously paying only the minimum rate.
- Shopping centres — categories are based on gross floor area or the number of on-site car parks provided. The rationale for this is that some larger shopping centres built on the edge of towns have lower valuations than smaller centres closer to the central business district. Yet, these larger centres have greater impacts, for example, on traffic, roads and the environment. They also are the beneficiaries of the infrastructure required to address these impacts.
- Major industries — categories are based on the number of employees or other indicators of activity for large or noxious industries (for example, food processing, tanneries and sugar mills). These properties might be located on land with comparatively low value relative to the cost of providing council services to the site.
- Mining — categories based on bands of employment for mines with a relatively low valuation of mining leases, which tends to reflect the value of the land for rural uses.

Other examples of types of properties subject to differential rates include feedlots, intensive agriculture, major accommodation providers, power stations, and oil and gas processing plants.

Source: LGAQ (sub. 11).

Fees and charges

Fees and charges should be used as far as practical to raise revenue for the provision of goods and services that are not pure public goods. To the extent possible, the community should be given choices about the amount of local government services

they consume, based on the fees and charges for those services.

Efficient pricing ensures that goods and services provided by local governments are supplied to those that are willing to pay the opportunity cost of supply. In this way, the value that consumers attach to goods and services and the relative costs of production of suppliers are revealed.

There are various forms of price structures that can be used to achieve efficient pricing of goods and services, including:

- Multi-part tariffs — where a fixed charge is imposed in addition to a variable charge related to the amount of the good or service consumed. An example of this could be where a fixed charge is imposed for standard garbage collection services and a variable charge levied on additional waste collected over a threshold amount. Increasing (or decreasing) block-rate pricing is a form of multi-part tariffs. This consists of a flat or fixed charge combined with a volumetric rate that increases (or decreases) in various stages as consumption rises.
- Variable block pricing — this can include lower unit charges imposed on more frequent users or consumers of goods and services (for example, commuters, park visitors) or higher unit charges imposed during periods of peak demand or congestion (for example, recreational facilities such as swimming pools).

Pricing for private goods with positive externalities, such as various health and welfare services, involves taking external benefits into account in setting user charges. This requires estimating the size of the marginal external benefit provided by the service, and then setting the price equal to marginal cost less this external benefit (Bird 1999).² However, it is recognised that measuring external benefits, both conceptually and in monetary terms, can be challenging.

In a number of areas, local governments are statutory monopolies, so they have the potential to charge prices above competitive levels. An example could be that local governments have the sole responsibility for approving development applications in their area. Monopoly provision can lead to over-recovery of costs and the mis-allocation of resources. It could also create poor incentives for agencies to control their cost base. Investing in facilities of an unnecessarily high standard (sometimes called ‘gold plating’), or cost padding, might result (PC 2001). Local government monopolies should set prices as though they operate in a competitive market. Yet, in practice determining the level of such charges and implementing them is not straightforward. A number of approaches, such as State Governments’

² The marginal external benefit is defined as the value of the benefit to the community from supplying an additional unit of the good or service.

regulating council fees and charges, are sometimes used to prevent monopoly power from being exercised.

Compliance and administration costs

In applying the rate setting and pricing principles, the number of categories of rates and fees and charges would be determined, in part, by the size of the administration costs relative to the total cost of providing the service. This principle recognises that there is a trade-off between the benefits arising from efficient pricing and the costs associated with its implementation.

Tax systems should be as simple as possible to minimise assessment and collection costs not only for local governments but also for individual taxpayers (Groenewegen 1990). This includes minimising administration, enforcement and compliance costs. Although the costs to local governments of assessing and collecting rates revenue should, to the extent possible, be kept to a minimum, this can result in a trade-off between achieving equity and efficiency of rates on one hand, and administrative efficiency on the other.

Study participants have commented that the impracticality of revenue collections and administration costs, as well as a lack of reliable cost data, can preclude some councils from setting efficient prices (Australian Chief Executive Officers Group, sub. 18).

Prudent borrowings for infrastructure assets

If local governments decide to provide infrastructure assets, there are broadly two financing options available:

- ‘pay-as-you-go’ — funding out of current revenue or accumulated savings of councils
- capital market financing — based on borrowings or non-refundable capital contributions, such as developer charges (either in kind or as lump sum payments).

The preferred method for meeting the up-front costs of an infrastructure asset depends on the characteristics of the asset, that is, whether it has a short or long-life span or payback period (Ploeg 2006).

Borrowings, when undertaken prudently, are an appropriate means for local governments to finance long-lived infrastructure assets — the costs of which are often large or ‘lumpy’ and might be delayed in the absence of borrowing. The

servicing of debt through rates or user charges (where appropriate) enables the cost of the asset to be matched with the benefits from consumption of the services over the life of the asset, thereby promoting inter-generational equity. As noted by Dollery, Crase and Johnson (2006, p. 281):

This method ensures intergenerational equity, since those who benefit from the infrastructure contribute to its cost. Funding the asset with a one-off allocation from recurrent revenue means that it is paid for by current taxpayers, but provides a benefit to future taxpayers over the life of the asset.

The inter-temporal distribution of benefits across users and hence the inter-temporal allocation of costs can influence the timing of any infrastructure charges.

Infrastructure financing decisions require local governments to weigh up the benefits and costs of borrowing, including cost of capital and risks associated with infrastructure projects. The powers of local governments to borrow under State legislative and regulatory frameworks are outlined in appendix B.

Responsibility and accountability

Responsibility and accountability are important to linking the democratic and other participatory avenues available to local residents and businesses to the decision-making processes of local governments. It can help link the willingness of a community to pay for goods and services provided by their council to its revenue-raising and expenditure decisions. It also strengthens the incentives for councillors, council management and staff to use efficiently and effectively the resources available to them in the interests of the community they serve.

In general, the revenue-raising and expenditure decisions of local government are likely to be more effective if councillors and managers are held accountable and responsible for their decisions. This includes:

- policy decisions about the services that councils provide
- the expenditure on, and delivery of, services provided
- the way services are funded and paid for by the community.

As local governments are created under State constitutional powers, State Governments have a role in setting up the institutional and governance arrangements to ensure local governments carry out these responsibilities and accountabilities effectively.

Promoting responsibility and accountability can be achieved through:

- separating activities according to responsibilities (whereby councillors make

decisions about outcomes and funding these outcomes, and councillors and managers are held responsible for producing these outcomes)

- separating local government activities according to function (whereby there is clear identification and separation of the major activities of local government — revenue raising, purchasing of services, delivery of services and regulation)
- decentralising the provision of services within councils (whereby decision making is delegated as far as practical to those responsible for delivering services, thus shortening communication channels with the public and allowing councillors and council staff to be more informed about local preferences)
- implementing performance monitoring and independent audit processes, to facilitate public scrutiny of the performance of local government against objectives determined in consultation with the community (Abelson 2003).

Openness and transparency

Access to information can facilitate accountability. Open and transparent processes for decision making of councils are important. Such processes include making information openly available to people in the local community and seeking active participation by the community about choices regarding the services provided and how they are funded. Active consultation with the local community can be an important way of getting individuals and groups in the community to reveal their views about the services they want and their willingness to pay for them.

Local governments should have clearly defined objectives regarding their activities, programs and services, and these should be accompanied by quantifiable or measurable outcomes. Where local governments provide subsidies to consumers, these should be explicitly identified and costed and the sources of revenue to pay for them clearly identified (Abelson 2003). This improves transparency and allows the community to better assess the provision of subsidies by local governments.

In some of the recent financial sustainability reports, it has been suggested that establishing internal structures to provide for independent review of processes and decision making could assist councillors to be more accountable to ratepayers and the community.

Although accountability and transparency measures are part of an effective and democratic local government system, they are not costless. It has been estimated that such measures could potentially absorb some 2 per cent of revenue for some councils (SACES 2002).

Providing services on behalf of other spheres of government

Local governments are often involved in the provision of services on behalf of other spheres of government. Where appropriate, local governments should enter into purchaser-provider arrangements with other spheres of government. This occurs to some extent already. An example is concessions, whereby local governments provide rates concessions to particular groups in the community, such as pensioners. These are reimbursed by State Governments (in full in most jurisdictions but not in New South Wales).

Where local governments enter into the delivery of services on behalf of other spheres of government, the supply of these services should be delivered on commercial terms based on the incremental costs to the council. In situations where councils decide for their own reasons to provide subsidies for the delivery of their services, they should make the costs transparent and inform their communities about the purpose and amount of the subsidy, and how it is to be funded.

Some of the principles relevant to providing services on behalf of other spheres of government have been set out in the Inter-Governmental Agreement Establishing Principles to Guide Inter-Governmental Relations on Local Government Matters (Australian, State and Territory governments and ALGA 2006).

Effective interaction between local government and other spheres of government is important to ensure delivery of some essential services to the community. As commented by SACES (2002, p.18):

Such interaction is easiest where there is an agreed view about the respective roles of different levels of government and a willingness on the part of those levels of government to provide the resources required to carry out their own roles.

8.2 Application of the principles

The framework outlined in this chapter might raise practical challenges for some local governments. One particular issue is whether smaller regional and remote councils can practically implement the principles. Do the elected councillors and administrative staff have the skills required to implement the framework? Are the resources available to councils adequate for such a task? As noted by PricewaterhouseCoopers (2006, p. 5):

... individual councils have had mixed success in managing and funding community demands for more services whilst retaining a healthy financial position.

The principles discussed in this chapter can serve as a guide to assist and improve the decision making of local governments, particularly in the context of effective

revenue raising and financial sustainability. The emphasis in setting out the principles is about providing high-level guidance. This recognises that, in implementing these principles, councils and the communities they serve have to make practical decisions using incomplete information within the democratic framework in which councils operate. Councils and their communities invariably confront trade-offs and the principles are designed to provide guidance on how to improve the quality of decision making in this environment.

In practice, there are difficulties and complexities in applying the principles outlined. A number of these limitations have been discussed throughout the chapter. In implementing the principles outlined, councils need to take into account their own circumstances and the diversity of goods and services they provide.

Many councils are likely to be applying some of the principles outlined in this chapter already, to varying degrees. This is illustrated by the City of Boroondara's financial strategy principles which provide the framework for the development of the Council's long-term financial strategy and annual budget (sub. DR71). State government legislation governing the operation of local governments and associated administrative policies, procedures and processes often include, or implicitly have, some of these principles embedded within them. The NSW Government provides a council rating and revenue-raising manual and asset management planning guidelines to assist councils. The SA Government and the local government association signed an agreement in 2006 to improve consultation arrangements in order to better coordinate services and infrastructure and promote accountable government and transparent processes. Some examples of current local government initiatives are provided in box 8.4.

Box 8.4 Local government sector initiatives

There are many examples of current reforms and initiatives in the local government sector that reflect one or more of the principles discussed in this chapter.

The Systemic Sustainability Study (SSS) Taskforce was established through WALGA to engage with the local government sector and industry on consideration and implementation of the recommendations made by the SSS panel. The recommendations, among other things, encompass a range of best-practice reforms including:

- promoting local government roles as representing their community's interests and ensuring effective and efficient delivery of services and infrastructure
- increasing the focus by government and industry on new models for efficient service delivery at regional and zone levels
- strengthening financial and planning disciplines using a best-practice approach
- promoting local governments' use of output-based reporting frameworks to clearly enumerate the cost and benefits of local government services
- developing guidelines for debt funding of infrastructure and whole-of-life costing of assets.

The Best Value Policy implemented by the Victorian Government incorporates principles which promote accountability and responsiveness, regular community consultation on performance and efficient service delivery. A framework is currently being developed to promote better local governance and address councillor conduct.

In most States, joint purchasing arrangements and knowledge sharing are accessible to local governments. A number of local government associations — NSW LGSA and LGAQ for example — have established procurement service companies to achieve cost savings for local government through bulk supply arrangements and assist in promoting best practice in the procurement process. LG Infrastructure Services Queensland, a joint initiative of LGAQ and the Queensland Treasury Corporation, provides assistance to local governments in evaluating and delivering infrastructure in a cost effective manner.

The local government associations in most States provide workers compensation and public liability insurance services to councils as well as services related to industrial and workplace relations and occupational health and safety.

Source: Various local government associations, LGV (2008).

Some of the principles are alluded to in the recent sustainability reports. The reports highlight a number of deficiencies in the operation of some local governments and have identified potential areas for improvement, such as:

- establishing long-term service plans setting out what councils will provide and how services are to be delivered and funded

-
- establishing internal structures that provide for independent review of processes and decision making to assist councillors to meet their accountability to ratepayers and the community
 - improving council efficiency and effectiveness — mainly by reducing costs through increased scale, outsourcing, shared service provision, financial management and asset management, and by embedding spending and revenue decisions in a multi-year framework against a background of long-term financial rules
 - generating additional resources from revenue measures, operational cost savings, reordering of spending priorities, asset leases and increased borrowings.

There may be a need for further assistance and guidance for some local governments from the State Governments and/or the local government associations, beyond that which currently takes place. Some examples of how this might be achieved are provided in box 8.5.

Box 8.5 Assistance for local governments

The Local Government Managers Association developed the good practice toolkit to identify and build capacity within local governments by sharing expertise as well as to minimise risk. The toolkit is a web-based program available to all local authorities in New South Wales that acts as a potential single source for all information required by councillors and staff. It includes information relating to good practice processes and quality assurance, benchmarking and legal compliance.

The Local Government Association of the Northern Territory (LGANT) aims to promote best practice and improve the efficiency and responsiveness of local governments by providing a range of administrative and technical services to its member councils. These services are provided through individual contracts with member councils or under contract with the Australian Government and/or the NT Government. They include:

- financial management and reporting
- information and communications technology
- human resources services
- administration of transport and infrastructure contracts (including management of the Roads to Recovery Program and other Australian and NT Government programs)
- elected member and staff training (to support best practice in governance, legal responsibilities, ethics and conduct).

Source: LGANT (2006), LGMA (2008).

The effectiveness of applying revenue-raising principles and frameworks on a nationally consistent basis might be improved if advocated through a national peak body or representative group. One such group is the Local Government and Planning Ministers' Council (LGPMC) established by the Council of Australian Governments. The LGPMC have endorsed a series of nationally consistent frameworks for each of the State and Territory Governments to apply in the context of their relationships with their local government sectors. The frameworks provide guidance on:

- assessing local government financial sustainability
- asset planning and management
- financial planning and reporting.

The wider and more rigorous application of the principles outlined in this chapter offers councils a way to determine more effectively which services local communities really want and value, and how much they are prepared to pay for them. In this way, local governments can more effectively promote the well-being of their communities.

FINDING 8.1

The application of a set of principles to guide revenue-raising and expenditure decisions of councils can assist them in improving the well-being of their communities.

FINDING 8.2

There is scope to utilise further the existing institutional arrangements between Australian and State Governments, local government associations and local governments to promote best practice in all aspects of revenue and expenditure decisions by local governments.

A Submissions, visits and roundtables

Table A.1 List of submissions

<i>Individual or organisation^a</i>	<i>Submission number</i>
ACCI	62
ACT Government	59
Australian Chief Executive Officers Group	18
Australian Local Government Association	50, DR79
Australian Services Union	27, DR94
Ballina Shire Council	20
Bankstown City Council	41
Baulkham Hills Shire Council	28
Beale, James #	9, DR69
Chamber of Commerce and Industry of WA #	44
City of Boroondara #	24, DR71
City of Gosnells	12
City of Mandurah	36, DR73
City of Ryde	45
City of Stonnington	DR87
Crisp, Gordon #*	3
Department of Local Government	DR92
Department of Local Government and Regional Development	65, DR89
Department of Transport and Regional Services	38
Department of Treasury and Finance	65
Dollery, Brian	5, DR68
Economic Planning Advocacy #	14, DR67
Evans, Bruce and Ingram, Craig MP	6
Fitton, Leigh	26
Glen Eira City Council #	1
Gosford City Council	DR90
Government of South Australia #	64
Guyra Shire Council	23
Hornsby Shire Council	40
Housing Industry Association	47
Hume City Council	DR72
Ingram, Craig MP and Evans, Bruce	6
Insurance Council of Australia	29
Lane Cove Council	16
Launceston Municipal Ratepayers & Residents Association	10
Launceston Ratepayers Association Inc #	DR84

Continued next page

Table A.1 (continued)

<i>Individual or organisation^a</i>	<i>Submission number</i>
Local Government & Shires Associations of NSW	52
Local Government Association of Queensland	11
Local Government Association of South Australia #	53, DR86
Local Government Association of Tasmania	42
Local Government Association of the Northern Territory #	46, DR96
Local Government Managers Australia	61
Local Government Managers Australia – NSW	17
Manningham City Council #	37
Maroondah City Council	DR 93
Master Builders Australia	48
Moira Shire Council	DR95
Mosman Municipal Council	60
Municipal Association of Victoria	22, DR81
Murray Regional Organisation of Councils and Riverina Regional Organisation of Councils	57
Neale, Anton	33
North Sydney Council	13
NSW Farmers Association	43
NSW Farmers Federation	DR75
NSW Government	54
NSW Inland Forum	DR88
Orion Consulting Network Pty Ltd	21
Penrith City Council	19
Pilbarra Regional Council	DR76
Queensland Government	63
Shire of Collie	55
Shire of Laverton	2
Shire of Yarra Ranges	15
Shoalhaven City Council	25
Spillane, Chris	4
Strange, Norman Francis	32
Strathbogie Shire Council *	58, DR80
Surf Coast Shire	DR83
Sutherland Shire Council	39
Tamworth Regional Council	DR85
Tasmanian Government	56
Tumbarumba Shire Council	8
Tweed Economic Development Corporation Ltd	DR70
Vaucluse Progress Association #	7, DR66
Victorian Farmers Federation	31, DR82
Victorian Farmers Federation – Gippsland	34
Victorian Farmers Federation – Rutherglen	35
Victorian Farmers Federation – Whittlesea	49
Victorian Government	DR91

Continued next page

Table A.1 (continued)

<i>Individual or organisation^a</i>	<i>Submission number</i>
WA Local Government Association	51, DR78
Wellington Shire Council	DR74
Willoughby City Council	30
Wyong Shire Council	DR77

^a An asterisk (*) indicates that the submission contains confidential material NOT available to the public. A hash (#) indicates that the submission includes attachments. DR indicates a submission received after preparation of the draft report.

Table A.2 **List of visits**

Location/Interested parties

Canberra

ACCI
ACT Treasury
Australian Local Government Association
Commonwealth Grants Commission
Department of Transport and Regional Services
Department of Treasury

Hobart

Department of Treasury and Finance
Local Government Association of Tasmania
Local Government Office
State Grants Commission

Darwin

Department of Local Government Housing and Sport
Department of the Chief Minister
Local Government Association of the Northern Territory
Northern Territory Grants Commission

Melbourne

Department for Victorian Communities
Department of Premier and Cabinet
Department of Treasury and Finance
Local Government Victoria
Municipal Association of Victoria
Victoria Grants Commission

Adelaide

Department of the Premier and Cabinet
Department of Treasury and Finance
Local Government Association of South Australia

Continued next page

Table A.2 (continued)

Adelaide

Office for State/Local Government Relations
SA Local Government Grants Commission

Perth

Department of Local Government and Regional Development
Department of Premier and Cabinet
Department of Treasury and Finance
WA Local Government Grants Commission

NSW

Department of Local Government
Department of Premier and Cabinet
Local Government and Shires Association of NSW
New South Wales Treasury

Brisbane

Department of Local Government, Planning, Sport and Recreation
Department of Premier and Cabinet
Local Government Association of Queensland
Queensland Local Government Grants Commission

Table A.3 **Attendees at the roundtables**

Melbourne – Friday 13 July 2007

Abelson, Peter
Cruse, Lin
Dollery, Brian
Freebairn, John
Morton, Allen
O'Neill, Barry
Worthington, Andrew

Perth – Friday 3 August 2007

Bouwer, Ron
Brockman, Slade
Colyer, Ray
Craig, Lynette
Defrenne, Geoff
Downing, Stuart
Hadlow, Ray

Continued next page

Table A.3 (continued)

Perth – Friday 3 August 2007

Hartley, Neil
Jackson, Chris
Kyron, Arthur
Mianich, Robert
Mickel, Ian
Newman, Mark
Pearson, John
Reynolds, Linton
Roberts, Carolyn
Seabrook, Tony
Snell, Brad
Taylor, Nathan
Thompson, Barrye
Trevaskis, Greg

Tamworth – Tuesday 7 August 2007

Beaton, David
Braybrooks, Paul
Clark, Richard
Darcy, Emma
Holloway, Penny
Hunt, Robert
Johnson, Andrew
Johnston, Barry
Rankin, Kathy
Smith, Allan
Stubbs, Ray
Treloar, James
Truman, John

Melbourne – Wednesday 27 February 2008

Appleyard, Glen
Beresford-Wylie, Adrian
Davis, Jack
Duncan, Ian
Evans, Bruce
Ford, Graeme
Harris, Des
Kent, Natalie
Koops, Trevor
Main, Andrew
Mannion, Ross
McBride, Shaun
O'Neill, Barry
Pahlow, Michael

Continued next page

Table A.3 (continued)

Melbourne – Wednesday 27 February 2008

Neill, Anton
Pahlow, Michael
Rankin, Kathy
Ravlic, John
Russell, Chris
Russell, Peter
Spencer, Nancy
Spokes, David
Stephenson, Katrena
Tapsell, Tony
Watson, John
Woodward, Ross

Melbourne – Thursday 28 February 2008

Brady, Mark
Conran, David
Davidson-Park, Beth
DiGiallonardo, Marianne
Hannagan, Kevin
Irvine, Darlene
Jenkins, Paul
Kearney, Marilyn
Lanyon, Helen
Ley, Austin
Malouf, Mona
McSporran, Ian
Muller, Greg
Robb, Adrian
Rowan, Bruce
Searle, Mark
Sutton, Paul

A.1 Consultations

Three roundtables were held prior to the release of this draft report. The first, held in Melbourne, provided a forum for the Commission to explore its approach to the study with academics and others with substantial experience and knowledge about local government.

The second and third roundtables were held in Perth and Tamworth. These provided an opportunity for councillors, local government managers, business and ratepayer representatives to discuss the key issues relevant to the study.

Following the release of the draft report on 18 December 2007, further roundtable discussions were held in Melbourne on 27 and 28 February 2008. These roundtables provided local government associations from around Australia, and some individual councils and government departments, with an opportunity to provide feedback on the draft report.

Members of staff also held meetings with members of the independent reference panel established to review and report on the modelling undertaken for this study. Professor Peter Abelson (Applied Economics) and Associate Professor Joe Hirschberg (Department of Economics, University of Melbourne) attended these meetings, held in Melbourne.

B Local government revenue-raising powers

The powers of local governments to raise various types of own-source revenue, as defined in State legislation are set out in this appendix. The legislative provisions relating to rates and property charges are described in section B.1. The powers of local governments to set fees and charges in each jurisdiction are detailed in section B.2. Local government powers to raise other revenue and to borrow are summarised in sections B.3 and B.4. Local governing bodies are defined in section B.5.

B.1 Rates and property charges

Rate structure

Local governments are permitted to impose rates on property. These rates can include general or ordinary, differential, separate, service and special rates. Local governments can change the composition of rates revenue by altering the:

- rate in the dollar applied to the value of rateable land
- structure of rates (for example, imposing fixed and variable components, tiered or differential rates)
- categorisation of land for the purpose of applying differential rates (for example, residential, commercial or farmland)
- valuation method applied to each category of land (where councils can choose between methods).

The composition of rates revenue is influenced by State government legislation. The methods for rate setting and land value assessments vary across States. Generally, local governments have some degree of autonomy in rate setting, including discretion in determining the structure of rates and setting differential rates. They are typically permitted to levy rates based on a flat rate or a combination of a fixed minimum charge and an *ad valorem* component. The provisions relating to rates and property charges across jurisdictions are compared in table B.1.

Table B.1 Local government rates and property charges

<i>State</i>	<i>Principal legislation</i>	<i>Type of rate</i>	<i>Type of charge</i>	<i>Rate structure</i>	<i>Land valuation method</i>	<i>Rate pegging</i>
NSW	<i>Local Government Act 1993</i>	Ordinary (s. 492), special (s. 492)	Annual charges for domestic waste management, other annual charges (s. 496)	Wholly <i>ad valorem</i> or base amount plus <i>ad valorem</i> (ss. 497–499). Categories of rateable land include farmland (s. 515), residential (s. 516), mining (s. 517), business (s. 518). Optional sub-categories (s. 529).	Land value (LV) (s.498(2), <i>Valuation of Land Act 1916</i> , s.6A,).	Yes
Victoria	<i>Local Government Act 1989</i>	General (s. 158), service (s. 162) or special (s. 163)	Municipal charges (s. 159), service charges (s. 162) and special charges (s. 163)	Uniform rates (s. 160), differential rates where CIV is used (s. 161) or limited differential rates where CIV is not used (s. 161A). Limited differential rates include urban farm rates, farm rates or residential use rates (s. 161A).	Site value (SV), net annual value (NAV) or the capital improved value (CIV) (s. 157; s. 13DC <i>Valuation of Land Act 1960</i>).	No (current) Yes (fixed period in 1990s)
Queensland	<i>Local Government Act 1993</i>	General, separate or special (s. 963)	Separate charges (s. 972), special charges (s. 971) and utility charges (s. 973)	Minimum general rate levy (s. 967). Special rates may include a minimum amount (s. 971(2a)). Councils may decide by resolution the categories of land for the purpose of levying differential general rates (s. 977).	Unimproved value (UV) (schedule 2; Part 3 <i>Valuation of Land Act 1944</i>).	No
SA	<i>Local Government Act 1999</i>	General, separate or service rates (s. 146)	Annual service charges (s. 155)	General rates may be based on land value, a fixed charge or a combination of both (s. 151(1)). Differential rates may vary according to the use of the land, the locality of the land or both, or some other basis determined by the Council (s. 156).	Capital value (CV) (s. 151(2)) and under some circumstances SV or annual value (AV) (s. 151(3)).	No (current) Yes (fixed period in 1990s)
WA	<i>Local Government Act 1995</i>	General, specified area (s. 6.37)	Service charges (s. 6.38)	Uniform or differential (s. 6.32(1)(a)). Specified area rates or minimum charges (s. 6.32(2)(b)). Differential rates may be imposed based on the purpose of the land, whether it is vacant or other characteristics (s. 6.33).	<i>Rural</i> : Unimproved value (UV) (s. 6.28(2)(a)). <i>Non-rural</i> : Gross rental value (GRV) (s. 6.28(2)(b)).	No
Tasmania	<i>Local Government Act 1993</i>	General (s. 90), service (s. 93)	Service charges (s. 94) or separate charges (s. 100)	General rates may include a land value and a fixed charge component (s. 91). Variation in rates according to any of the factors under s. 107.	LV, CV or assessed annual value (AAV) (s. 90).	No
NT	<i>Local Government Act 2005</i>	General (s. 66), local (s. 67), special (s. 69)	Charges for services in relation to land (s. 74)	Flat rate per parcel of land, uniform rate or differential rates with or without minimum payments (s. 64).	UCV, AV or improved capital value (CIV) (s. 65).	No (pre 2007) Yes (post 2007)
ACT	<i>Rates Act 2004</i>	General rates	na	Fixed charge (not imposed on rural properties) plus a rate charged on the amount that the average UCV exceeds a rate-free threshold (s. 14). Differential rates for residential, commercial and rural properties.	UCV averaged over the previous three years (s. 6).	No

Source: State government legislation various; DOTARS (2007).

Property charges

Generally, local governments are able to impose property charges in addition to or in combination with rates. These include service, utility, separate and special charges. Service and utility charges are typically used to provide services such as water, sewerage and waste management. Such charges are often determined and recovered on an annual basis similar to rates.

For example, in Queensland, councils are permitted to levy separate and special charges.

- *Separate* charges must be levied equally on all rateable land within the local government area to fund a particular service, facility, or activity that benefits the entire community, for example, environmental levies.
- *Special* charges may be levied on specific land that benefits from the provision of a particular service, for example, road maintenance.

Local governments in all jurisdictions are permitted to declare one type, or a combination of, service, separate or special charges for similar purposes. The Local Government Acts generally contain provisions that provide for councils to set both rates and property charges. The powers of local governments across jurisdictions to set and recover property charges is covered in more detail in section B.2.

The ability of local governments to raise rates revenue can be subject to regulatory limits, such as provisions which prescribe the method for assessing land value, rate pegging (currently in New South Wales only) rate exemptions and rate concessions.

Land valuation

The valuation methods used for assessing rateable land vary across jurisdictions (table B.1). In Victoria, South Australia, Tasmania and the Northern Territory, councils may choose to levy rates on the unimproved capital value (UCV), the capital improved value (CIV) or the annual value of rateable land.¹ In Western Australia, either the unimproved value or the gross rental value is used depending

¹ The legislative term used is 'annual value'. Although annual value is defined differently in each jurisdiction, it usually implies the gross rental value. In Victoria, it is defined as the rent at which the land might reasonably be expected to be let from year to year, less land tax, average insurance cost and other expenses necessary to maintain rental land. In South Australia, it may be computed as three quarters of the gross rental value or 5 per cent of the capital value (where gross rental value cannot be calculated).

on whether the land is used for rural or non-rural purposes, respectively. New South Wales councils may only use land value. In Queensland and the ACT, councils may only use the unimproved capital value.

In New South Wales, Victoria and the ACT, State legislation prescribes a number of categories of rateable land for the purpose of levying differential rates. These typically include residential, commercial and rural or farming land. In Queensland, South Australia and Western Australia, councils may determine the categories of land to be rated (usually by resolution), according to the purpose or locality of the land or based on some other characteristics. In addition, councils can use sub-categories of land to be valued and rated.

Restrictions on rates increases

New South Wales is the only jurisdiction in which the State Government currently enforces formal restrictions on the percentage by which local governments may increase rates. The *Local Government Act 1993* (NSW) provides for the Minister to determine the maximum percentage by which general income from rates and charges may vary from the previous year (s. 509). ‘General income’ is defined in section 505(a) of the Act to mean income from ordinary rates, special rates and annual charges other than:

- special rates for water supply and sewerage services
- charges for water supply and sewerage services
- annual charges for stormwater and waste management services
- annual charges referred to in section 611.

The statutory limit on general income effectively caps or ‘pegs’ increases in councils’ rates revenue. The limit for 2006-07 was set at 3.4 per cent (DLG 2007d). Councils can apply to the Minister for a variation to exceed this limit (s. 508(2) and s. 508A).

In Victoria and South Australia, temporary rate pegging policies were introduced in the 1990s during amalgamation processes, with the intention of ensuring that any costs savings that resulted were passed onto ratepayers.

Rate exemptions

All land in a council area is rateable except for that which is specified as exempt in legislation. Some land may be exempt from rating but liable for charges for use of a service such as supply of water. Rate exemptions are listed in table B.2.

Table B.2 Rate exemptions

<i>State or Territory</i>	<i>Rate exemptions specified in State legislation</i>
New South Wales	Land owned by the Crown, held in trust or subject to a conservation agreement, owned by a State water corporation or used for water supply works, used in connection with a religious purpose, public place, mines rescue stations, school or rail infrastructure facilities, public benevolent or charitable institutions, the Sydney Cricket and Sports Ground Trust, Zoological Parks Trust, land vested in Aboriginal land councils (<i>Local Government Act 1993</i> , s. 555).
Victoria	Land owned by the Crown, a Minister, a council or public statutory body, land used for public, charitable, religious or mining purposes or land held in trust for memorial of war veterans (<i>Local Government Act 1989</i> , s. 154).
Queensland	Land owned by the State or a government entity (other than non-exempt government-owned corporations), land in a State forest or timber reserve, Aboriginal land, land used to facilitate specific transport infrastructure, land used for religious, charitable, educational or public purposes (<i>Local Government Act 1993</i> , s. 957).
South Australia	Land owned by the Crown, occupied by councils, universities or emergency services organisations, land exempt under the <i>Recreation Ground Rates and Taxes Exemption Act 1981</i> , land subject to a mining lease, land subject to division under the <i>Community Titles Act 1996</i> (s. 147).
Western Australia	Land owned by the Crown or a local government, land used for the public, religious, charitable, agricultural purposes, non-government schools (<i>Local Government Act 1995</i> , s. 6.26).
Tasmania	Land owned by the Commonwealth, Crown-owned land used for conservation and nature recreation purposes, the Hydro-Electric Corporation, Aboriginal land or land used for charitable purposes (<i>Local Government Act 1993</i> , s. 87).
Northern Territory	Crown land occupied by the Territory or the Commonwealth, public land, land used for religious, educational or charitable purposes, public hospitals (<i>Local Government Act 2005</i> , s. 58). Councils can exempt classes of land or persons (s. 98), including Indigenous land holders.
ACT	Land used for public parks and reserves, cemeteries, public hospitals, benevolent institutions, land used for religious purposes, public libraries, land leased by the Commonwealth which is occupied by school, Commonwealth unoccupied land (s. 8).

Source: State government legislation, various.

The exemptions prescribed under State legislation typically include:

- land owned by the Crown
- land used for religious or educational purposes (for example, churches and schools)
- aged care facilities, charitable or benevolent institutions
- public parks, land used for conservation and nature recreation
- Aboriginal land (other than land used for residential or commercial purposes)
- some mining and agricultural land.

In all jurisdictions, rate exemptions apply to some Commonwealth land, State government land and State government enterprises. This includes defence land and national parks. In New South Wales, Crown lands, national parks and State forests are not subject to rates on land holdings other than those occupied by commercial premises (IIFS 2006).

To meet the competitive neutrality requirements of the National Competition Policy principles, government trading enterprises in these jurisdictions are required to make tax-equivalent payments to their State Governments. However, these payments are often not passed onto the local governments themselves.

State Agreement Acts in Western Australia can limit the rating powers of councils in relation to land leased for mining or resource development purposes. The State Agreements are typically long-term contracts between the WA Government and developers of resource projects including the North West Shelf natural gas processing projects, the Pilbara iron ore projects, timber processing, coal and other resource development projects. There are currently 72 State Agreements including the *Government Agreements Act 1979* (DOIR 2007). The State Agreement Acts typically specify that the unimproved value of land, which is subject to leases or easements as part of resource development projects, can be rated. The *Local Government Act 1995* (WA) states that

‘... the owner of any land —

(a) held or granted pursuant to a Government agreement, which agreement provides that for the purposes of imposing rates under this Act, the land is to be assessed on the unimproved value thereof; or

(b) held under a production licence for petroleum granted under the *Petroleum Act 1967*,

and to whom this section applies by virtue of the operation of section 533AA of the *Local Government Act 1960* as in force before the commencement of this Act is to have the land valued for the purpose of imposing rates under this Act on the following basis —

\$1.00 per 4 000 square metres for each of the first 40 000 hectares or part thereof;

\$0.75 per 4 000 square metres for each of the second 40 000 hectares of part thereof;

\$0.50 per 4 000 square metres for each of the third and fourth 40 000 hectares or part thereof;

\$0.25 for each 4 000 square metres in excess of 160 000 hectares.’ (s. 6.3)

These prescribed levels of rates are not set relative to the level of economic activity on such land. Land utilised for residential or non-rural purposes is rateable based on the gross rental value. Land covered by State Agreements is generally not subject to discriminatory rates. However, this may not necessarily prevent the use of

differential rates, provided that the differential rate is applied to all mining tenements or resource land (not just those covered under a State Agreement) (Hadlow, R., pers. comm., 30 August 2007).

Rate concessions

Concessions on annual rates and service charges are granted to persons on the grounds of financial hardship. Eligible persons generally include pensioners and persons in receipt of particular allowances, such as veterans allowances or social welfare payments. Concessions are usually granted as a partial reduction in the rates payable by a land holder. Concessions can also be granted to specified land or buildings for the purposes of preserving buildings or places of historical importance or encouraging proper development. The provisions relating to rate concessions are contained in each of the Local Government Acts (table B.3).

Table B.3 Rates (and other) concessions

<i>State or Territory</i>	<i>Rate (and other) waivers, concessions, discounts and rebates specified in State legislation^a</i>
New South Wales	<i>Local Government Act 1993 (s. 565, 582, 601, 610E)</i>
Victoria	<i>Local Government Act 1989 (s. 142, 171, 171A, 243)</i>
Queensland	<i>Local Government Act 1993 (1031–1035, 1035A)</i>
South Australia	<i>Local Government Act 1995 (s. 166, 181-2, 188)</i>
Western Australia	<i>Local Government Act 1995 (s. 6.12, 6.47-48, 6.50)</i>
Tasmania	<i>Local Government Act 1993 (s. 92, 99, 106A)</i>
Northern Territory	<i>Local Government Act 1993 (s. 81, 86-87, 89)</i>

^a 'Other' indicates that some waivers, concessions discounts and rebates relate to fees and charges.

Source: State government legislation various.

The majority of the States compensate local governments in part or in full for mandatory concessions. The NSW Government is only required to reimburse 55 per cent of the value of concessions granted by local governments to eligible pensioners (*Local Government Act 1993 (s. 581)*).

B.2 Fees and charges

The powers of local governments to impose fees and charges are defined in the principal legislation (Local Government Acts), Regulations and other Acts such as environment and planning legislation. The requirements of National Competition Policy (NCP) might also affect the powers of local governments in determining the level of fees and charges for local government services in situations where NCP principles require fees and charges to be set at full cost recovery or where prices are

subject to monitoring (box B.1).

Box B.1 National Competition Policy and local government

Local governments are not formally parties to the Competition Principles under NCP. However, each State and Territory Government (with the exception of the ACT) accepted reform obligations on behalf of local governments within their jurisdiction. State and Territory Governments are committed to apply competitive neutrality principles to significant local government business activities only where the benefits outweigh the costs.

Competitive neutrality requires that privately-owned businesses be able to compete on an equal footing with local governments for the delivery of services. For example, a childcare centre operated by a local government could be in contravention of competitive neutrality principles where it is able to offer lower prices for childcare than other providers, due to competitive advantages as a result of it being government owned (such as exemptions from paying rates or cross subsidisation from rates).

The application of competitive neutrality principles means that the prices charged by local government businesses should aim to recover the full costs of a business activity. Full costs include:

- the direct cost of providing the goods or services and an appropriate proportion of indirect costs (such as rent, payroll and personnel costs)
- all relevant taxes or tax equivalent payments
- a commercial level of interest payments
- a commercial rate of return (over a reasonable period).

In addition, NCP might require price monitoring of significant local government businesses that have a market monopoly, such as some water and sewerage services and garbage collection. For example, in New South Wales, the Independent Pricing and Regulatory Tribunal conducts investigations and makes reports to the Minister on the determination of pricing for monopoly services supplied by some local governments.

Source: NCC (2000).

Fees and charges provisions across jurisdictions

The following section summarises the provisions in each jurisdiction relating to fees and charges that local governments are permitted to collect under the legislation (table B.4).

Table B.4 Statutory setting of fees and charges^a

S/T	<i>Legislation, regulation or other mandatory stipulation</i>
NSW	<p><i>Local Government Act 1993</i></p> <p>Under section 501, local governments (LGs) may make and levy charges for the provision of water, sewerage, drainage, waste management and any other services prescribed by State legislation. Charges can be imposed on an annual basis or based on the level of usage of the service. The level of charges may be set to achieve partial or full cost recovery.</p> <p>LGs may impose and recover an approved fee for any other service they provide, whether the service is provided under the Local Government Act 1993 or any other Act or Regulation.</p> <p>Section 608 LGs may charge and recover an approved fee for any service it provides, other than a service provided, or proposed to be provided, on an annual basis for which it is authorised or required to make an annual charge under section 496 or 501. This includes supplying a service, product or commodity, giving information, providing a service in connection with the exercise of the council's regulatory functions—including receiving an application for approval, granting an approval, making an inspection and issuing a certificate, allowing admission to any building or enclosure.</p> <p>Under section 510(1), the maximum annual charge for domestic waste management services must not exceed the annual charge for the parcel for the previous year as varied by the percentage (if any) applicable to the council under section 507, 508 (2) or 508A for the year for which the charge is made.</p> <p>Under section 510A, the maximum annual charge for stormwater management services must not exceed the maximum annual charge prescribed by regulation under subsection (1).</p> <p><i>Environmental Planning and Assessment Act 1979</i></p> <p>Under section 94, councils can grant consent for developments conditional upon a developer contributing land free of cost, making a monetary contribution, or both. Division 1 of Environmental Planning and Assessment Regulation 2000 sets the maximum fees for various building developments. Dollar amounts are specified.</p>
Vic	<p><i>Local Government Act 1989</i></p> <p>Under section 162, LGs may declare a service rate or service charge, or a combination of both, for the provision of waste disposal, sewage or other prescribed services.</p> <p>Under section 113(2), LGs may make local laws that provide for the determination of fees and charges for goods and services, including setting maximum and minimum fees.</p> <p>Under section 159(1), LGs may raise municipal charges to cover some local government administrative costs. These charges may be declared on the basis of any criteria specified by the council.</p> <p><i>Planning and Environment Act 1987</i></p> <p>LGs may impose either a development infrastructure levy or a community infrastructure levy in accordance with a developer contributions plan. Section 46k(2) prescribes a maximum amount of community infrastructure levies.</p>
Qld	<p><i>Local Government Act 1993</i></p> <p>Under section 1071(B), LGs may set regulatory fees for functions such as processing of applications, recording changes in land ownership and providing information. Regulatory fees generally must not exceed cost recovery levels. However, Regulations made under the Act can prescribe circumstances in which a regulatory fee may include a tax component.</p> <p><i>Integrated Planning Act 1997</i></p> <p>Regulates the charge for the supply of trunk infrastructure and also the development for which the charge may be levied.</p>

(Continued next page)

Table B.4 (continued)

<i>S/T</i>	<i>Legislation, regulation or other mandatory stipulation</i>
WA	<p><i>Local Government Act 1995</i></p> <p>LGs may levy fees and charges. Statutorily imposed fees and charges are limited to cost recovery. LGs may impose service charges on owners or occupiers of land to meet the cost of providing a prescribed service in relation to the land (includes rubbish collection and provision of surveillance and security services).</p> <p>Under section 6.16, LGs may impose a fee or charge for goods or services other than those for which a service charge is statutorily imposed. Section 6.16(3) Fees and charges are to be imposed in accordance with an annual budget but can be imposed during the financial year and amended from time to time.</p> <p>Under section 6.17(1), LGs may determine the amount of a charge but are required to consider the costs of providing the service, its importance to the community and the price at which it can be provided by an alternative supplier.</p> <p>Regulations made under the Act may, in prescribed circumstances, prohibit a local government from imposing, or limit the amount of, a fee or charge.</p>
SA	<p><i>Local Government Act 1999</i></p> <p>Under section 155, LGs may impose service rates and service charges to recover the cost of any prescribed service in relation to the land. This includes treatment or disposal of waste.</p> <p>Under section 188, fees and charges may be fixed, varied or revoked by by-law or by decision of council. Fees and charges for use of council property or facilities, or services carried out at a person's request, do not have to be fixed at cost recovery levels (s. 188(2)). Fees and charges for providing information, materials or copies of councils records must not exceed reasonable estimates of costs to the council of providing the information (s. 188(2a)).</p> <p>The State Government regulates some fees and charges imposed by councils including development assessment application fees, waste inspection and control fees and public notification fees (IIFS 2006).</p>
Tas	<p><i>Local Government Act 1993</i></p> <p>Under section 93, service charges can be imposed in addition to a service rate for water supply, sewerage removal, waste management, fire protection and any other prescribed service. Service charges for the supply of water must be calculated in volumetric terms (s. 94A).</p> <p>Under section 100, LGs may impose separate rates and charges for activities that benefit landholders.</p> <p>Under section 97-98, construction rates and charges may be levied for constructing water supply and sewerage infrastructure. These rates and charges must not exceed one-half of the service rate and charge, and must not be levied for longer than five years.</p> <p>Under section 205(1), LGs may issue fees and charges for the use of a council facility, services supplied or for carrying out work at a person's request, providing information, approving applications, registrations and authorisations and any other prescribed matter. Fees do not have to be set in reference to the cost of the council (s. 205(3)). Fees and charges cannot be imposed in relation to a matter if fees or charges are otherwise prescribed or where that particular matter is specifically exempt under legislation (LGAT sub. 42).</p>
NT	<p><i>Local Government Act 2005</i></p> <p>Under section 74, LGs may charge for services in relation to land but specifies only those services relating to the functions of environmental control, sanitation and garbage, and litter control.</p> <p>Under section 115, LGs may levy charges, fees, rents and recover amounts payable for the provision of other services not referred to in s. 74, including grants, registrations and issue of permits and licences.</p> <p>Under section 203, by-laws may prescribe that LGs can, by resolution, regulate or determine charges, dues, fares, fees and rents in relation to a property, undertaking, service, matter or thing.</p>

^a The table includes detail covering the majority of fees and charges that might be charged by local governments in Australia, as distinct from an exhaustive list of statutory arrangements.

Source: State government legislation various.

New South Wales

Local governments in New South Wales are permitted to collect charges to recover the costs of specific services. Section 501 of the *Local Government Act 1993* permits councils to make and levy charges for the provision of water, sewerage, drainage, waste management and any other services prescribed by State legislation. Charges can be imposed on an annual basis or based on the level of usage of the service. The level of charges can be set to achieve partial or full cost recovery. Councils can differentiate the level of charges but must have regard to the factors set out in s. 539:

- the purpose for which the service is provided
- the nature, extent and frequency of the service
- the cost of providing the service
- the categorisation for rating purposes of the land to which the service is provided
- the nature and use of premises to which the service is provided
- the area of land to which the service is provided
- in the case of water supply services — the quantity of water supplied.

Charges need not be limited to cost recovery levels except for domestic waste management charges which must be set so as not to exceed the reasonable costs to the council of providing the service (DLG 2007a). Limits on annual charges for domestic waste and stormwater management services are specified under s. 510 and s. 510A.

Further, local governments are permitted to impose and recover an approved fee for any other service they provide, whether the service is provided under the *Local Government Act 1993* or any other Act or Regulation (unless otherwise precluded by the Act). This includes those fees in connection with the exercise of regulatory functions such as applications for approval, inspections and certificates in relation to, for example, building or environmental and planning assessment regulation.

There are 107 Local Water Utilities (LWUs) responsible for providing water supply and sewerage services, mostly in non-metropolitan areas. The NSW Government undertakes performance monitoring and benchmarking of all NSW LWUs as required under NCP and the National Water Initiative. This includes monitoring of social, environmental and economic indicators including revenue, prices and costs of water supply and sewerage businesses. LWUs are required to comply with best practice management guidelines developed by the NSW Government (DWE 2007). The Independent Pricing and Regulatory Tribunal (IPART) also conducts investigations and makes reports to the Minister on the determination of pricing for monopoly services supplied by NSW Government entities. IPART's role includes

setting the maximum prices that can be charged for metropolitan water supply, wastewater and stormwater services provided by the Gosford City Council and the Wyong Shire Council (IPART 2006).

Victoria

In Victoria, councils have the power to make local laws that provide for the determination of fees and charges for goods and services, including setting maximum and minimum fees (*Local Government Act 1989* s. 113(2)).

Victorian councils may declare a service rate or service charge, or a combination of both, for the provision of water supply, waste disposal, sewage or other prescribed services (s. 162). A service rate or service charge may be declared on the basis of any criteria specified by the council. However, local councils in Victoria do not currently have a role in providing and charging for water services. These are supplied by metropolitan providers, non-metropolitan providers and regional water authorities.

Municipal charges are raised to cover some of the administrative costs of the council (s. 159(1)). These charges may be declared on the basis of any criteria specified by the council, and levied according to these criteria. Exemptions may be granted for farm land (s. 159(3)).

Queensland

Local governments are required to implement full-cost pricing when charging for significant business activities (*Local Government Act 1993* (s. 568)). The business activities of councils that provide water and sewerage services are subject to regulatory requirements relating to charging arrangements, including that utility charges for water are consumption-based and water and sewerage services are fully cost recovered (s. 783). Two-part pricing, cross subsidisation and some forms of price discrimination are permitted, with local governments required to disclose such arrangements. The amounts of utility charges (for supplying water, sewerage or gas services) may differ on the basis of factors under s. 973(5), including unimproved land value.

The Queensland Competition Authority (QCA) investigates the pricing practices relating to government monopoly business activities and water supply services. Councils providing urban water and sewerage services to the community must ensure that water charges are consistent with the pricing principles set by the QCA to protect consumers from being overcharged (NCC 2006, p. 4.31). In addition, the QCA is responsible for reporting to the State Government on the implementation of

NCP reforms by local government businesses including, where appropriate, reform of their water supply businesses.

Local governments are empowered to set regulatory fees for functions such as processing of applications, recording changes in land ownership and providing information. Regulatory fees generally must not exceed cost recovery levels. However, Regulations made under the Act can prescribe circumstances in which a regulatory fee may include an amount that is a 'tax' component (set above cost recovery) (s. 1071B).

Western Australia

The *Local Government Act 1995* enables local governments to levy fees and charges. Where they are statutorily imposed, fees and charges are limited to cost recovery. Local governments may impose service charges on owners or occupiers of land to meet the cost of providing a prescribed service in relation to the land. Examples of such services include rubbish collection and provision of surveillance and security services. When determining the amount of a charge, local governments are required to consider the costs of providing the service, its importance to the community and the price at which it can be provided by an alternative supplier (s. 6.17(1)). Regulations made under the Act may, in prescribed circumstances, prohibit a local government from imposing, or limit the amount of, a fee or charge.

Local governments may impose a fee or charge for goods or services other than those for which a service charge is statutorily imposed (s. 6.16). Fees and charges are to be imposed in accordance with an annual budget but can be imposed during the financial year and amended from time to time (s. 6.16(3)).

South Australia

The *Local Government Act 1999* (s. 155) permits local governments to impose service rates and service charges to recover the cost of any prescribed service in relation to the land. This includes treatment or disposal of waste. Local government fees and charges may be fixed, varied or revoked by by-law or by decision of council under section 188. Fees and charges for use of council property or facilities, or services carried out at a person's request, do not have to be fixed at cost recovery levels (s. 188(2)). However, fees and charges for providing information, materials or copies of councils records must not exceed reasonable estimates of costs to the council of providing the information (s. 188(2a)).

The State Government regulates some fees and charges imposed by councils including development assessment application fees, waste inspection and control fees and public notification fees (IIFS 2006).

Tasmania

Tasmanian local governments have broad powers to impose fees and charges under the *Local Government Act 1993*.

Service charges can be imposed in addition to a service rate for water supply, sewerage removal, waste management, fire protection and any other prescribed service (s. 93). Service charges for the supply of water must be calculated in volumetric terms (s. 94A). Local governments are also permitted to impose separate rates and charges on land holders for activities that benefit them (s. 100). Construction rates and charges may be levied for the purpose of funding the construction of water supply and sewerage infrastructure (s. 97). These rates and charges must not exceed one-half of the service rate and charge, and must not be levied for a period longer than five years (s. 98).

Local governments have authority to apply fees and charges for a range of goods and services. This includes the use of a council facility, services supplied or for carrying out work at a person's request, providing information, approving applications, registrations and authorisations and any other prescribed matter (s. 205(1)). Fees do not have to be set in reference to the cost to the council (s. 205(3)).

Northern Territory

Local governments may levy rates on property and charge for services provided in relation to land under section 74 of the *Local Government Act 2004*. Charges may be collected for environmental control, sanitation, garbage and litter control. In addition, councils may levy charges, fees, rents and recover amounts payable for the provision of other services not referred to in section 74, including registrations and issue of permits and licences (s. 115). By-laws may prescribe that local governments can, by resolution, regulate or determine charges, dues, fares, fees and rents in relation to a property, undertaking, service, matter or thing (s. 203).

Local governments are required to levy a fee or a charge in accordance with a business plan, revenue policy and an annual budget.

The current Local Government Reform Program in the Northern Territory will result in changes to the core services required by councils under amended

legislation. This will result in future changes to the fees and charges regime (ALGA unpublished).

Developer contributions and charges

There are two main types of infrastructure — economic and social — for which developers can face charges imposed by councils (PC 2004). Basic infrastructure (such as roads, water, sewerage, gas and electricity connections) is generally constructed by the developer and handed over to the relevant authority (often a local council) as a contributed asset. The developer recovers the costs of their contribution from land sales. In other cases, developers are sometimes charged for the costs incurred by the local government in providing the new infrastructure.

Legislative restrictions on the ability of local government to impose developer charges and contributions vary across States. Planning legislation in New South Wales, Victoria, Queensland and Tasmania allows for local government to impose charges to recover the costs of infrastructure. The *Local Government Act 2005* (NT) is silent on the power of local governments to impose developer charges and contributions.

In New South Wales, councils can grant consent for developments conditional upon a developer contributing land free of cost, making a monetary contribution, or both under section 94 of the *Environmental Planning and Assessment Act 1979* (NSW). Developer contributions may be levied for both economic and social infrastructure and are imposed in accordance with a Development Contribution Plan. Councils are required to take into account a number of principles for levying development contributions. This includes establishing the nexus between the development and the demand for public infrastructure created by those developments. It also includes taking into account reasonableness in the amount and timing of contributions and recovery of anticipated future costs (PC 2004). Local governments cannot require greater developer contributions than those permitted under the Plan. Alternatively, local governments may require a levy on all new development set at the maximum percentage of the cost of the proposed development prescribed by the State Government (s. 94A). Generally the maximum percentage prescribed is 1 per cent of the cost of development, although in regional cities the limit may be as high as 3 per cent (NSW Government, sub. 54). Moreover, local governments and developers may agree to an alternative contribution amount as part of a voluntary planning agreement in addition to, or substitution for, contributions determined under s. 94 or s. 94A of the Act.

The NSW Government administers a Special Contributions Areas Fund from which payments can be made to public authorities for the provision of infrastructure

(s. 94E). It may levy, or direct consent authorities to levy, special infrastructure contributions in areas deemed to be ‘special contributions areas’.

In Victoria, municipal councils may impose either a development infrastructure levy or a community infrastructure levy in accordance with a developer contributions plan under the *Planning and Environment Act 1987 (Vic)* as amended by the *Planning and Environment (Development Contributions) Act 1995* and the *Planning and Environment (Development Contributions) Act 2004*. Some specified land and types of development may be exempt from paying contribution levies under the plan. Section 46k(2) provides for differential rates or levies to be payable in respect of different types of land development or different parts of the area. Section 46L(1) prescribes a maximum amount of community infrastructure levies. Local governments also have the authority to specify conditions on planning permits and voluntary agreements between councils and developers.

In Queensland, local governments may impose a charge for the supply of trunk infrastructure and require development contributions for ‘development’ infrastructure under the *Integrated Planning Act 1997 (Qld)* as amended by the *Integrated Planning and Other Legislation Amendment Act 2003*. The basis for infrastructure charges is a priority infrastructure plan which identifies an infrastructure charges schedule for eligible developer contributions. The Act provides for regulation of the charge and also the development for which the charge may be levied. Infrastructure charges levied by a council are taken to be a rate, unless specified as a debt owed by the developer in a written agreement between the council and developer (s. 5.1.14).

The *Town Planning and Development Act 1928 (WA)* allows local governments in Western Australia to require contributions for on-site physical infrastructure and the ceding of land for primary schools and open space. The scope of contributions is guided by Western Australian Planning Commission policies.

Development contributions in South Australia are dictated by the *Development Act 1993 (SA)* and the *Local Government Act 1999 (SA)*. The *Development Act 1993* allows councils to require basic subdivision infrastructure (access roads, hydraulic connections) and the dedication of open space (s. 50A). Section 146 of the *Local Government Act 1999* allows the levying of separate rates, service rates and service charges which can be used as indirect development charges.

Tasmanian planning authorities, including local councils, are permitted to negotiate agreements with developers that specify development contributions for infrastructure as a condition of a permit, a planning scheme provision or a special planning order (*Land Use and Approvals Act 1993 (Tas)* (s. 73A)). Section 70 of the Act defines infrastructure as the ‘services, facilities, works and other uses and

developments which provide the basis for meeting economic, social and environmental needs’.

B.3 Other revenue

In addition to rates, fees and charges, local governments derive own-source revenue from investment income (interest and dividends), fines and other pecuniary penalties.

Local governments have the authority to make regulations, set fines or other pecuniary penalties, and enforce these regulations. The setting of fines is part of local governments’ regulatory activities. Examples of fines include those related to parking, health regulation, environmental and litter control and overdue library loans (FSRB 2005). Local governments in New South Wales can impose fines for a broad range of offences including breach of approval conditions, parking, dumping of rubbish and public disturbance (IIFS 2006).

To protect against the imposition of unjust fines and penalties, State governments may legislate to impose limits on the amounts which local governments may set. For example, the maximum penalty that can be fixed by a local government in South Australia is \$750 or \$50 per day for a continuing offence.

B.4 Borrowings

Borrowings are a non-revenue source of finance that local governments can use to fund council operations and the provision of infrastructure. Generally the borrowing powers of local governments are defined in the Local Government Acts. State governments, depending on jurisdiction, often impose restrictions on:

- the amount borrowed
- the purpose for which it is used
- the source of borrowings.

In every State, except for South Australia, local governments are required to seek approval from the relevant Minister prior to entering into contractual arrangements to borrow. In New South Wales, local governments cannot borrow at a rate which exceeds the indicative rate determined by the NSW Treasury Corporation. In addition, they may not borrow for a period of less than 30 days or for a period which exceeds the estimated life of the asset financed by the borrowings (DLG 2007a).

Victorian local governments have the power to borrow subject to the ‘principles of sound financial management’ (*Local Government Act 1989* (Vic) (s. 144(1))). They are restricted from borrowing for ‘ordinary purposes’ or for the purposes of municipal enterprises unless proposed in a budget, except where the borrowings are used to re-finance existing loans (s. 146).² Requests for borrowing are assessed by the Victorian Government based on analysis of financial ratios (ALGA unpublished).

Northern Territory local governments are required to seek ministerial approval prior to borrowing money. This includes where entering into individual leases with a capital value greater than \$10 000 or any combination of leases with a total capital value that exceeds \$35 000 (*Local Government Act 2005* (NT), s. 170(2A)). Local governments in Tasmania are restricted from borrowing an amount where the annual repayments required to service the debt would exceed 30 per cent of the council’s revenue (excluding specific purpose grants) from the previous year (*Local Government Act 1993* (Tas) (s. 80)).

In Victoria, South Australia, Tasmania and the Northern Territory there are no restrictions on the source of borrowings. In Queensland and Western Australia, borrowings are arranged through the Queensland Treasury Corporation and the Western Australian Treasury Corporation, respectively. In South Australia, the Local Government Finance Authority acts as a broker for borrowings and an investment authority for local governments. The *Local Government Act 1993* (NSW) restricts local governments from borrowing from foreign sources (DLG 2007a).

B.5 Defining local governing bodies

Local governing bodies are defined in the *Local Government (Financial Assistance) Act 1995* (s. 4) as:

- (a) a local governing body established by or under a law of a State, other than a body whose sole or principal function is to provide a particular service, such as the supply of electricity or water; or
- (b) a body declared by the Minister, on the advice of the relevant State Minister, by notice published in the Gazette, to be a local governing body for the purposes of this Act.

Declared bodies are provided with financial assistance grants and are treated as local governing bodies for the purpose of grant allocations. In total, 701 local governing bodies received grants in 2005-06, including 37 declared local governing

² This refers to any venture under s. 193 or any trading or entrepreneurial enterprise.

bodies and the Australian Capital Territory (DOTARS 2007, p.44). The distribution of declared bodies by State is shown in table B.5.

Table B.5 Local governing bodies by State, 2006

Number of bodies by type, as at June

Type	NSW	Vic	Qld	WA	SA	Tas	NT ^b	Total
Councils established by legislation ^a	152	79	157	142	68	29	36	663
Declared	3	1	0	0	6	0	27	37
Total	155	80	157	142	74	29	63	700

^a These are local governing bodies eligible under section 4(2)(a) of the Act, as they are constituted under State Local Government Acts. ^b Includes Northern Territory Road Trust Account.

Source: DOTARS (2007).

Declared bodies may have different legislative requirements than councils. For example, Lord Howe Island is managed by a Board under the *Lord Howe Island Act 1953* (NSW), which is empowered under the Act to make and levy fees and charges to recover the costs of supplying goods and services (s. 15). Declared bodies include certain Indigenous Community Councils.

... in relation to legislative frameworks, Indigenous councils are established under different arrangements. Indigenous councils can be established under the mainstream local government legislation of the State, or through separate, specific legislation, or can be 'declared' to be local governing bodies by the Australian Minister for Local Government, on advice from a State Minister (DOTARS 2006, p.9).

Some declared bodies are subject to provisions under Local Government Acts as well as other Commonwealth or State legislation. For example, the Outback Areas Community Development Trust is established under, and empowered by, the *Outback Areas Community Development Trust Act 1978* (SA). The Act defines the areas of the State to which its provisions apply, sets out the Trust's powers and functions and allows the Trust to borrow and apply money. The Act also enables specified provisions of the *Local Government Act 1999* (SA) to be applied by regulation to part, or all, of the Trust's area (s. 15(2)).

Recent amalgamations in Queensland, and proposed amalgamations in the Northern Territory, will significantly reduce the number of councils during 2008.

C Data and modelling

The purpose of this appendix is to provide a description of the data and statistical analysis used in this study. A description of the data and their sources is given in section C.1. A description of the methods used to pool the various data sets and to check for the quality of the data is given in section C.2. The method for estimating the fiscal capacity (income) of each local government is given in section C.3. The approach used to estimate the factors that influence revenue raised by local governments and to determine the scope for local governments to raise additional revenue is given in section C.4. The results of the statistical analysis of factors affecting revenue raised by local governments is given in section C.5. The results of the statistical analysis of the relative potential (or scope) for local governments to raise additional revenue and the results of the analyses simulating the effects of increasing local government revenue are given in section C.6.

C.1 Data sources

The Commission has drawn on a variety of sources for the data used in this study. These are outlined below.

The Australian Capital Territory was not included in the analysis as the ACT Government undertakes all local government functions. It is not possible to separate the data for its local government from its Territory functions.

State grants commissions

In each State and the Northern Territory, local governments are required to keep records of their finances, the values and numbers of (rateable) properties in their incorporated area, the services they provide, and a variety of performance measures for annual reporting purposes and as part of their reporting obligations to their State grants commission (SGC). The Australian Bureau of Statistics (ABS) and the SGCs jointly develop the data collection forms to improve the national consistency of the data.

The SGCs made available to the Commission detailed data about revenue, expenditure, property values, some services provided by local governments (such as roads, water and sewerage) and various performance information on local governments in their jurisdiction. Some of the data, such as those for New South Wales were publicly available (DLG 2007b). Data were generally available from 1994-95, but structural breaks in the series (such as that arising from the introduction of accrual accounting) meant that the earliest useable data were from 2000-01.

Australian Bureau of Statistics

The ABS provided the Commission with a variety of published and unpublished data. These include the:

- Australian national accounts data (ABS Cat. 5206.0). The national accounts data includes estimates of gross operating surplus (for incorporated businesses), gross mixed income (for unincorporated businesses) by industry for each State for 2000-01 to 2004-05.
- Government Finance Statistics (GFS) data. The GFS data includes detailed revenue, expenditure and asset data at the local government level for 1999-2000 to 2005-06.
- Household Expenditure Survey (HES) (ABS Cat. no. 6503.0). The HES data are confidentialised unit record files that among other things provide data describing the payment by households of local government rates and charges. The data used by the Commission is for 2003-04.
- National Regional Profile (NRP) (ABS Cat. no. 1379.0.55.001). The NRP data are local government level data that include, among other things, demographic characteristics of each local government (such as the population by age group, number of persons born overseas, share of people of Indigenous background and the number of persons receiving income support). These data are available for the period 2000-01 to 2003-04.
- Working Population Profile of Censuses of Population and Housing of 2001 and 2006. Data from the Census used in this study includes detailed data that provide the number of persons according to their principal location of work.

Australian Taxation Office

The Commission sourced detailed data from the ATO's database on aggregate taxable income (ATI). ATI is an estimate from the personal income of individual taxpayers based on personal income tax returns. The series used in this study covers

the years 2000-01 to 2004-05.

The ATI is only available at the statistical local area and had to be concorded (aggregated) to the ABS's classification of local government areas.

Department of Infrastructure, Transport and Regional Development

The Australian Government's Department of Infrastructure, Transport and Regional Development (formerly DOTARS) regularly collects and publishes data regarding key descriptive statistics of local governments, such as the length of roads, resident population, geographic area, Commonwealth financial assistance and road grants paid to local governments. Key statistics are summarised in DOTARS (2007).

These data items were collected and used to verify the data obtained by the Commission from other sources.

C.2 Assembling the data set

Assembling the data set for the analysis required two distinct tasks:

- pooling together various data into a consistent panel of data
- checking the quality of the data.

Data pooling

The individual data sets collected by the Commission covered:

- local government revenue and expenditure
- local government property values and numbers of assessments (rateable properties)
- local government services (such as providing and maintaining kilometres of local roads)
- demographic characteristics (such as population and age profile)
- measures of personal and business income.

During the period for which data are available, there have been a number of mergers and boundary changes of local governments. To ensure that any analytical results reflect the underlying factors of local governments and not their changing boundaries, the Commission concorded the names and boundaries of local governments between 2000-01 and 2004-05 to those existing in 2005-06. That is,

the Commission established a process to ensure that the local government boundaries that existed in 2005-06 also ‘hypothetically’ existed in earlier years.

The various data sets are reported at various levels of aggregation. Personal income data from the ATO, for example, are available at the post code level, whereas the SGC data are available at the local government level. The Commission concurred all post code level data to coincide with the local government areas that existed in 2005-06.

Descriptive statistics for selected variables for the years between 2000-01 and 2005-06 are summarised in table C.1.

Quality control

There are differences between jurisdictions in the definitions of revenue, expenditure and number of assessments. These reflect differences in legislative frameworks that apply across jurisdictions, as well as the different functions undertaken by local governments. Several agencies have sought to ensure greater consistency in the data reported, as outlined below.

- The SGCs, as part of their annual data collection, seek to improve the consistency of the data within their States.
- The ABS seeks to address differences between jurisdictions that might arise from legislative differences, as well as minimising errors that arise through the process of filing data returns. The ABS also seeks to reconcile its local government statistics with the Australian and State government data of its Government Finance Statistics collection.

Nonetheless, there are numerous inconsistencies in the data, particularly for the smallest local governments. Some local government areas were listed as having no residential populations. The smallest population for one local government area, for example, was almost zero, after the concordance process. This led to a number of errors arising in the construction of per person estimates. The aggregate income for one rural council, for example, was reported to be over \$9.7 million per person. On closer inspection, this estimate is an error arising from an underestimation of the local government area’s population.

Table C.1 **Summary of selected statistics of initial pooled data**
2000-01 to 2005-06^a

<i>Variables</i>	<i>No of observations</i>	<i>Units</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Own-source revenue (broad) ^{b, c}	3 581	\$ per person	1 532	2 049	3	32 229
Own-source revenue (narrow) ^{b, d}	3 581	\$ per person	1 438	1 983	3	29 134
Aggregate income ^b	3 138	\$ per person	86 415	2 055 166	27	9 718 157
Business income ^b	3 138	\$ per person	35 129	614 701	15	5 884 108
Personal income ^b	3 138	\$ per person	51 286	1 568 116	6	3 834 048
Residential population	3 868	No. of people	30 446	59 091	0	992 176
Share of population						
Indigenous	625 ^e	%	8.6	17.0	0	92.9
Born overseas	619 ^e	%	13.0	9.7	0	52.0
Aged ≤ 4 years	3 206 ^f	%	7.0	2.6	1.1	62.7
Aged 5–14 years	3 161 ^f	%	14.4	3.0	0	46.6
Aged ≥ 65 years	3 205 ^f	%	12.4	5.0	0	43.2
Unemployment rate	1 926 ^g	%	6.0	3.8	0	34.5
Average population growth between 2001 and 2006						
	666 ^h	%	0.63	2.07	-10.2	10.0
Road per person	3 799	Km per 1000 people	620	7 746	<1	340 096
Properties per person	3 601	Properties per person	0.57	0.62	0.005	17.8
Population density	3 810	People per km ²	359	901	<1	7 132
Area	3 972	1000s of km ²	8 225	24 494	0.36	378 533

^a Not all variables were available for all years. For a definition of these variables, see tables C.6 and C.7. ^b The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. ^c Defined as total revenue less grants. ^d Defined as total revenue less grants, interest, dividends and capital contributions. ^e The data for these variables were only available for 2001. These data were applied to each of the six years. ^f Data for these variables are only available for the period 2000-01 to 2004-05. ^g Data for this variable were only available for the period 2001-02 to 2003-04. ^h Data were only available for the average of the period. These data were applied to each of the six years.

Such types of errors were detected in estimates of populations, incomes, local government revenue and expenditure, road lengths and the numbers of rateable properties.

To address the problem that such variables might distort the analyses in the study, a number of variables were deleted from the dataset where the:

- total revenue variable was reported to be less than \$1000 per year
- ratio of own-source revenue divided by fiscal capacity was greater than or equal to one, or less than 0.01¹
- ratio of own-source revenue divided by total expenditure was greater than three
- per person financial assistance grants was less than or equal to \$7
- residential population was less than or equal to 12 people
- per person own-source revenue was less than \$7
- number of rateable properties per person was less than or equal to 0.006
- number of kilometres of roads per person was less than equal to 0.16.

In addition, not all variables were available for all councils in all years. Estimates of personal income (ATI data), for example, were not available for 2005-06. The removal of observations for 2005-06 and observations with unacceptable values reduced the size of the dataset from about 3900 to 2784 observations. The final dataset covers 602 local governments although not all local governments are represented in every year. On average, there are about 557 local governments every year (table C.2).

About 71 of the 109 observations (or 65 per cent) removed from the dataset were local governments in Queensland and the Northern Territory. About 85 of the 109 observations (or 77 per cent) were urban fringe, urban regional and remote councils. For this reason, care must be taken when interpreting the analytical results, as the average results for these classes of councils might not always be representative of the sector as a whole.

Finally, all financial data were available in current (nominal) prices. Using the Australian non-farm GDP deflator, these were converted into real terms with 2005-06 as the base year.

¹ Own-source revenue is defined as total revenue less grants and subsidies.

Table C.2 **The observations and local governments in the final data set**
2000-01 to 2004-05, number

	<i>Initial data set</i>		<i>Final data set</i>		<i>Change in the average number of councils per year</i>
	<i>Total number of observations^a</i>	<i>Average number of councils per year</i>	<i>Total number of observations^b</i>	<i>Average number of councils per year</i>	
By State					
New South Wales	760	152	717	143	-9
Victoria	395	79	313	63	-16
Queensland	790	158	579	116	-42
South Australia	350	70	292	59	-11
Western Australia	710	142	701	140	-2
Tasmania	145	29	145	29	0
Northern Territory	180	36	37	7	-29
By class of local government					
Capital city	35	7	33	7	-
Urban developed	435	87	395	79	-8
Urban fringe	330	66	218	43	-23
Urban regional	635	127	506	101	-26
Rural	1 495	299	1 409	282	-17
Remote	400	80	223	45	-35
Total	3 330	666	2 784	557	-109

^a Based on the number of observations of variables covered in table C.1. ^b For the period between 2000-01 and 2004-05.

Source: Productivity Commission estimates.

C.3 Estimating the income of local government areas

An important variable used in this study is the aggregate income of each local government's community. This variable is used in two distinct (but related) ways. First, it is used as an indicator of the local government's *fiscal capacity* (chapter 4). It is also used in the statistical analyses of the relative potential of local governments to raise additional revenue.

Fiscal capacity

The preferred indicator of fiscal capacity is the aggregate disposable income of the local community (chapter 4). The indicator of a community's disposable income should be broadly defined. It is broader than normal definitions of personal income in that it ideally includes all income that is available to the community. It includes

personal income, corporate earnings, unrealised capital gains and imputed returns on assets (including home ownership).

In practice, however, it is difficult to derive such an indicator at the local government level. In the absence of readily available measures, other indicators are required. For the purpose of this study, an indicator of income is constructed using information about the aggregate taxable personal income of residents and the estimates of the gross operating surplus (GOS) (of incorporated businesses) in a local government area.

The indicator of fiscal capacity for each local government area is estimated to be equal to the disposable (that is, after income tax) personal income and the after-tax GOS of businesses in the area.

Personal income

Personal income is estimated using two components, discussed below. The first component of personal income is based on the ATI series published by the ATO. According to the BTRE (2005, p.2), real ATI:

The reported individual taxable income is an undifferentiated aggregate of all the income accruing to taxpayers from any source. It therefore includes income derived from salary and wages, net [unincorporated] business income, distributions from partnerships or trusts, interest and dividends, eligible termination payments, some government pensions and allowances, superannuation payments and reportable fringe benefit amounts less any allowable deductions ... [it] does not include the income of individuals who earned below the tax-free threshold, either positive or negative. Also, [undistributed] taxable income for companies, [and] funds ... is *not* included.

An estimate of the post-tax ATI can be obtained from the BTRE (2005) which reports both taxable personal income and tax paid, though data can also be obtained from the ATO.

The second component of personal income is return from the ownership of dwellings as reported in the Australian national accounts. The ABS computes the return from the ownership of dwellings for both rental properties and owner-occupied housing. In the former case, it is equal to the gross rent paid on properties less operating expenses (defined to include local government rates, building insurance, repairs and maintenance, consumption of financial services and real estate agent commissions charged for the management of rental properties) (ABS Cat. no. 5216.0). No deduction is made for depreciation of fixed assets or cost of interest.

Data on returns from ownership of dwellings are available for each State. The total amount was allocated to each local government on the basis of its share of the State's total ATI. Actual and imputed amounts were deducted for the income tax paid on ownership of dwellings income in each local government area. The amount deducted was equal in proportion to the average income tax paid on ATI in each local government.

The use of ATI as an indicator of personal income has several limitations. First, it omits welfare payments, except for cases where such payments are potentially taxable and are reported to the Australian Taxation Office in personal tax returns. Second, it excludes the incomes of people earning below the tax-free threshold, who are not required to lodge tax returns. Third, it omits imputed income of households (such as imputed income of owner-occupied housing) and unrealised capital gains. A final limitation is that ATI is only a measure of taxable income of individuals. It does not include the undistributed incomes of incorporated businesses. ATI by itself, therefore, is likely to underestimate the aggregate income of a local government area. This might be substantial in low income communities, such as those with a high level of welfare dependence, and in communities with high levels of undistributed incomes.

The addition of the return from ownership of dwellings to ATI to estimate personal incomes has a limitation. Both measures include estimates of income derived from rental properties. From ABS Census data, it is estimated that numbers of rental properties account for about 25 per cent of the dwellings market. This, in effect, inflates personal income by about 4 per cent, on average.

Business income

Australian Taxation Office statistics on the taxation of businesses do not provide reliable estimates of the geographic distribution of the income of corporations that operate in more than one locality. This is because financial and taxation accounts are only reported for the legal entity as a whole according to the location of its head office and not for each site or location in which it operates.

Consequently, the Commission has sought to construct some other indicator of business income. Ideally, GOS would provide a useful measure, but ABS statistics only provide a measure that is equal to GOS plus gross mixed income (GMI), after deducting corporate income tax. The ABS national accounts data series provides estimates of GOS and GMI for each industry in each State (ABS 2007d). GOS is defined as income of incorporated businesses less expenses, but not depreciation and interest. GMI is analogously defined for unincorporated businesses (ABS 2000).

The second step was to deduct corporate income tax. The ABS estimates of GOS and GMI are gross income (before corporate income-tax) measures. The ATO provides data on the average corporate income tax paid for each industry. Imputed income tax was deducted from the ABS estimates of GOS and GMI.

The third step was to remove the estimate of GMI from the combined estimates of GOS and GMI. This is important as not doing so would lead to double-counting, as income from unincorporated businesses is included in ATI. Unfortunately, GOS and GMI estimates are not available separately for each industry in each State. However, separate GOS and GMI estimates are available for each State (ABS Cat. no. 5220.0). The share of GOS to GOS plus GMI was calculated for each State and applied to each State's industries. The limit of this approach is that it assumes that the share of GOS to GOS plus GMI is the same for all industries.

The fourth step was to allocate the state-wide industry estimates of GOS to each local government area. The ABS Census returns for 2001 and 2006 provide employment data on place of work, by industry, in each local government area. Using these data it is possible to allocate GOS for each industry to each local government areas according to the place of work of management and employees. The underlying assumption here is that GOS estimates the same across employees and local government areas.

Merits of this approach

The attraction of using GOS to estimate business income in each local government area is that it has the potential to be a relatively accurate measure of income. This is because fewer assumptions are required to convert the state-wide industry estimates into estimates for local governments. Principally, it assumes that differences in the business incomes of local government areas are fully explained by the composition of their business sector.

In contrast, estimating business income from the imputed return from property, an alternative approach considered by the Commission, requires more assumptions for business income estimates to be accurate. This method assumes that:

- the reported unimproved capital value of land reflects market estimates of the profitability of economic activity
- those values are reported accurately by State valuer generals and States grants commissions
- there is a stable relationship between unimproved capital values and capital improved values
- there is a constant rate of return to landholders from that property.

This is not to say that estimates of GOS do not have limitations, particularly when added to the above estimates of personal income. One is the double-counting of dividends included in both personal income and estimates of GOS — though dividends are estimated to be only about 3 per cent of personal income. ATI includes estimates of net income from unincorporated businesses (such as sole traders and partnerships).

Estimates of fiscal capacity

The distribution of communities' personal and business income per person by income, ranked by the total of each community, is shown in table C.3. The distribution of income by class of local government is shown in table C.4.

Table C.3 **Distribution of the fiscal capacity of local governments^{a, b}**
2000-01 to 2004-05, dollars per person

<i>Local government ranked in order of total income</i>	<i>Personal income</i>	<i>Business income</i>	<i>Total income^c</i>
Decile and mean			
Lowest	2 096	2 538	4 634
10 per cent	9 218	5 197	14 415
20 per cent	8 980	7 259	16 239
30 per cent	8 385	9 454	17 839
40 per cent	8 878	10 284	19 162
50 per cent (median)	16 058	4 723	20 781
60 per cent	13 298	9 227	22 524
70 per cent	14 463	10 567	25 030
80 per cent	10 184	19 298	29 483
90 per cent	7 094	31 988	39 083
Highest ^d	22 001	438 162	460 163
Mean ^e	12 837	15 213	28 050

^a Based on a sample of 2784 observations, representing 602 councils over five years. Data were not available for all councils for all years. ^b The base year is 2005-06, adjusted using the ABS non-farm GDP deflator. ^c Totals might not add due to rounding. ^d The maximum per person business income is in Perth, reflecting both large business income and relatively small residential population. ^e The average is calculated across councils and does not reflect the average across the Australian population.

Source: Productivity Commission estimates.

Table C.4 Distribution of the fiscal capacity, by class of local government
2000-01 to 2004-05, dollars per person^{a, b, c}

	<i>Personal income</i>	<i>Business income</i>	<i>Total income</i>
Capital city	18 488	98 307	116 795
Urban developed	17 715	7 069	24 783
Urban fringe	13 013	5 072	18 085
Urban regional	12 359	10 163	22 522
Rural	11 774	12 730	24 504
Remote	11 009	54 411	65 420
All councils	12 837	15 213	28 050

^a The estimates of total, personal and business income are an average for that class. They are calculated across councils and do not reflect the average across the Australian population. ^b Based on a sample of 2784 observations representing 602 councils over five years. Data were not available for all councils for all years.

^c The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: Productivity Commission estimates.

C.4 Approach to estimating the factors affecting revenue and the relative potential to increase revenue

The terms of reference ask the Commission to examine the factors that might influence revenue raised by local governments and revenue-raising capacity. Estimating the revenue-raising capacity of local governments raises a number of economic (theoretical) issues as well as some statistical issues.

Overall approach

As noted, an indicator of the ability of local governments to raise revenue is their fiscal capacity. However on average, the ratio of revenue raised to assessed fiscal capacity for local governments in Australia is low — the weighted mean is less than 5 per cent (chapter 5). There are, though, substantial variations in the ratio across governments with similar fiscal capacities. This indicates that a range of factors, in addition to fiscal capacity, are influencing the willingness of communities to pay for local government services, and hence the capacity of their local governments to raise revenue.

One way to identify which factors determine the revenue raised by local governments is to estimate the demands (reflecting preferences, among other things) of each local community for local government services. Two examples include Bergstrom and Goodman (1973) and Borchering and Deacon (1972). Since the demand is analogous to expenditure, estimating the demand for local government

services would assist in identifying the factors that influence the ability of local governments to raise revenue from their communities.

As noted in chapter 4, it is difficult to estimate the demands for local public goods because many local governments provide a range of services, the prices of which are not observable. It is not sufficient to simply use the council tax rate as a determining factor, since council taxes comprise less than one-half of local government own-source revenue.

The Commission's approach assumes that the revenue of a local government is reflected by a number of attributes of its community and services. These might include the community's income and population, as well as the length of roads and numbers of properties served by the local government. In addition, sociodemographic factors might assist in identifying the preferences of the community, and thereby, better describing the local government's revenue-raising behaviour. A number of participants to this study observed that persons aged 65 and over were more sensitive to increases in rates, and this had an influence on how much revenue a local government was able to raise from its community, for example.

Statistical issues

The terms of reference ask the Commission to determine the revenue-raising capacity of local governments. The approach undertaken here is to identify the scope for local governments to raise additional revenue. However, estimating the scope of local governments to raise additional revenue raises a number of practical challenges. As noted in chapters 2 and 3, there is considerable variation between local governments. Few local governments share attributes or qualities that are similar, and many councils are markedly different. In other words, there is considerable *heterogeneity* among local governments and this is reflected in the data.

Data are available at the council level for key variables — such as the level of own-source revenue, the income of the community, the length of roads, the number of rateable properties, size of the incorporated area and so on. The ABS also collects various data describing the sociodemographic characteristics of communities.

But these data items are not extensive. Other data items are collected, but these are not generally comparable across jurisdictions. Each of the State grants commissions have different data requirements of local governments. Data items that are reported for some jurisdictions are not collected in others. The NSW Local Government

Grants Commission, for example, collects data on the number of library circulations, an item that is not routinely publicly reported in other jurisdictions. The ABS Census provides some data at the local government level, but this is only available for every Census period. Other ABS collections are usually based on surveys and are not available at the local government level.

Quite apart from the heterogeneity of local governments, another challenge associated with the data is its quality. As noted earlier, there are noticeable measurement errors in the data. It is widely acknowledged that the quality of data from local government sources is, on the whole, not very reliable. Though some measurement errors are due to smaller councils not having sufficient resources to commit to maintaining administrative data collections, others are due to the inadequate collection and validation of data by the grants commissions in some of the States.

There is anecdotal evidence that some governments have scope to raise *additional* revenue. This has been identified in a number of studies (for example, PwC 2006; Access Economics 2005, 2006a, 2006b and 2007). They have identified that some local governments can raise more revenue (as well as reduce costs) by, among other things, improving their communication strategies with their communities and adopting better rating strategies (chapter 8).

The Commission examined the suitability of a number of techniques (models) that might provide an assessment of the scope of local governments to raise additional revenue, while addressing the challenges of heterogeneity among councils and paucity of data, as well as problems associated with the quality of data.

There are a number of techniques that have been used to benchmark the performance of businesses and even local governments. Two techniques include data envelopment analysis (DEA) and corrected ordinary least squares (Coelli, Battese and Rao 1998; Kumbhakar and Lovell 2000).

Data envelopment analysis

DEA is the more widely used technique. In this technique, the revenue raised by decision-making units (in this case, local governments) is compared to a group of 'peer' local governments. 'Best-practice' local governments are given a rank of 1.00 (or 100) and the ranks of all other local governments are assessed in terms of how much revenue they can generate for a given set of inputs — relative to how much the best-practice local governments can raise for the same inputs.

A limitation with DEA, however, is there are no means by which measurement error can be accounted for. It is quite possible that the observed best-practice local governments are those that exhibit the most measurement error rather than some underlying best practice. In other words, DEA is sensitive to ‘outliers’.

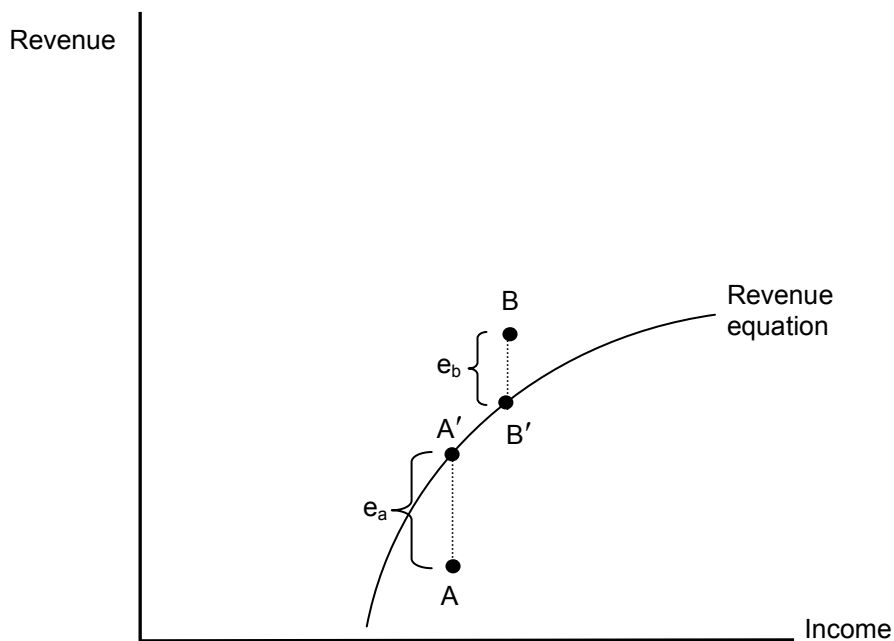
Ordinary least squares

There is a stream of literature that asks a similar question to that being asked in this study. The international comparative taxation literature is concerned with identifying the factors that determine national government revenue (tax) raising, and measuring the scope for national governments to raise additional revenue (see Bird, Martinez-Vazquez and Torgler 2004; Davoodi and Grigorian 2007; Leuthold 1991; Piancastelli 2001; and Teera and Hudson 2004).

This stream of literature uses a number of statistical methods, although ordinary least squares is most commonly used, to identify both the factors determining revenue raised by local governments and the scope to raise more revenue. The general approach used in this literature when applied to local governments is illustrated in figure C.1. Consider two councils A and B. Assume that it is possible through multivariate regression analysis to establish a relationship between the revenue of a local government and its fiscal capacity (income). This is represented with the revenue equation which is estimated for councils A and B (figure C.1).

Once a revenue equation is estimated it then becomes possible to measure the potential for each government to increase its revenue by reference to the estimated function. Local government A raises less revenue than local government B even though their communities have similar incomes. The difference between how much local government A raises relative to the predicted level (A') represents how much less than the ‘average’ it is raising given its fiscal capacity. Similarly the difference between how much revenue local government B raises relative to the predicted level (B') represents how much more than the ‘average’ it is raising given its fiscal capacity.

Figure C.1 **Scope for raising additional revenue**



Teera and Hudson (2004) provide an example of this approach. Their statistical technique is based on a fixed effects model, though they also use the similar random effects model. Applying their technique to our example of local government, figure C.1 can be represented mathematically as:

$$R_{ij} = f(Y_{ij}) + e_{ij} \quad (1)$$

The dependent variable R_{ij} is the own-source revenue of local government i in year j and Y_{ij} is the fiscal capacity of local government i in year j . The term e_{ij} represents a variety of unknown influences that affect R_{ij} . They would include unobservable local government-specific factors such as the expenditure requirements, the preferences of the local community and the scope for efficiency improvements in each council. It also includes a random term that accounts for random events (such as measurement error and seasonal effects like drought).

The coefficients of the variables in the revenue equation provide the basis for analysing the factors that influence the revenue raised by local governments. The relative revenue-raising potential is found by calculating a revenue-raising index:

$$\text{Index} = \frac{R}{\hat{R}} \quad (2)$$

where the numerator is the actual own-source revenue of local government (A or B in figure C.1) and the denominator is the predicted own-source revenue (the A' and

B' in figure C.1). If the ratio is less than 1, the revenue-raising effort is below the average (as in the case of local government A). If it is greater than 1, the revenue-raising effort is greater than the average (as in the case of local government B).

A limit to this approach is that no account is taken to separate the unobservable idiosyncratic factors from the true random errors. As a result, the deviations from the regression equation include the effect of random errors contained within the e_{ij} term.

$$\text{Index} = \frac{f(Y) + e_{ij}}{f(Y)} \quad (3)$$

As a result, the index tends to provide an exaggerated estimate (positively or negatively) of each local government's revenue-raising effort. In the context of this study, it would imply that some local governments have relatively more or less scope to raise revenue than they might do in practice.

While this approach to measuring relative revenue raising offers some attractive features, an approach that separates the effects of the unobservable factors and the random errors is more desirable.

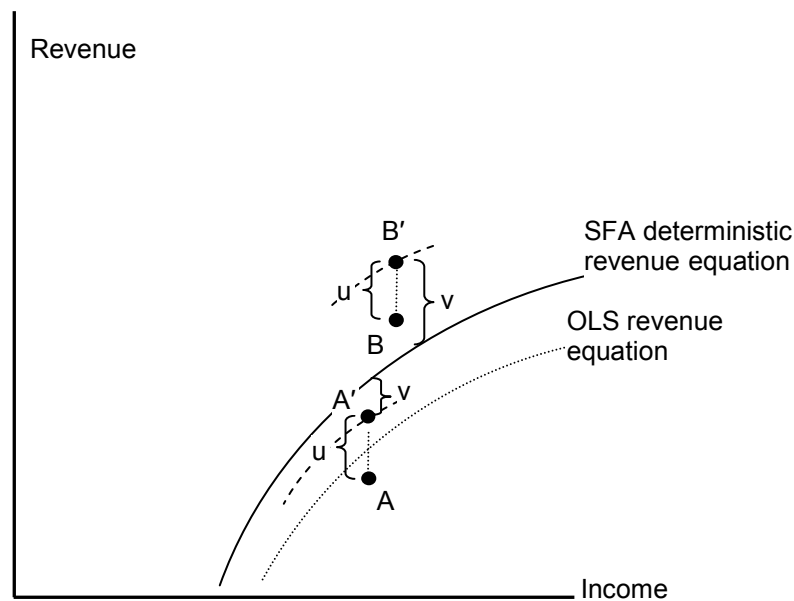
Stochastic frontier analysis

SFA is a statistical technique similar in nature to the fixed and random effects model described above. It was originally developed to study efficiency and productivity (Coelli, Rao and Battese 1998; Greene 1997; Kumbhakar and Lovell 2000). SFA also can be applied to study capacity utilisation which has a strong parallel to this study (UNFAO 2003).

The difference between the ordinary least squares approach (a variant of this approach is used by Teera and Hudson [2004]) and SFA is illustrated in figure C.2. As with ordinary least squares (OLS), SFA establishes a relationship between the various explanatory factors. In figure C.2, this is given by the SFA deterministic revenue equation.

One difference between SFA and OLS is the estimation of the 'deterministic' equation. The SFA revenue equation tends to have a different intercept than the OLS equation. The slope of the coefficients tend to be slightly different. This reflects the practice of pushing the revenue equation upwards towards a frontier.

Figure C.2 **Scope for increased revenue raising**



Source: Adapted from Coelli, Rao and Battese (1998).

Another difference is that SFA then stochastically repositions the revenue equation *for each observation* by an amount equal to the random error term v . Each uniquely shifted revenue equation becomes the frontier of that observation. In the example in figure C.2, the frontier is shifted downwards for local government A (by the amount v which is negative) and shifted upwards for local government B (by the amount v , which is positive). The remaining distance between the observed value of each local government (A and B) and the revised (stochastic) frontier (A' and B') is the relative revenue-raising potential. For both local governments A and B this is equal to the amount u . The revenue-raising index is constrained to be between 0 and 1 in value.

In practical terms, it is very unlikely that any local government is ranked as having a revenue-raising index equal to 1. This is because the frontier is determined from all the observations in the data set, not just a group of neighbouring peers. In other words, even the better performing local governments have scope to raise additional revenue because even they can learn from other councils in the sample.

Mathematically, a stochastic frontier regression takes the general form:

$$R_{ij} = f(Y_{ij}) - u_{ij} + v_{ij} \quad (4)$$

where R_{ij} and Y_{ij} are own-source revenue and fiscal capacity respectively, u_{ij} is a

one-sided distribution of the scope to raise additional revenue and v_{ij} is the random error term. The v_{ij} term captures random variations across councils reflecting the effect of random events, that might include:

- measurement error in the variables
- other random factors that affect revenue raised per person across councils (for example, droughts)
- the combined effects of other omitted factors, many of which are not amenable to quantification. These might include local preferences and attitudes towards local governments (Coelli, Rao and Battese 1998).

Both u_{ij} and v_{ij} are assumed to be independently and identically distributed, while u_{ij} can adopt a half-normal, truncated half-normal or exponential distribution (depending upon the specification) and has a positive mean. It is assumed that v_{ij} adopts a normal distribution with a zero mean and has a constant variance.

When the estimated function is in logarithmic form, a local government's revenue-raising index can be derived through:

$$\text{Index}_j = \exp(-u_{ij}) \quad (5)$$

If u_{ij} equals zero (that is, there is no scope to raise additional revenue) then the index equals one. On the other hand, if after allowing for the known factors a council raises less revenue than its hypothetical benchmark, u_{ij} will be positive and the index will be less than one. This can be taken to be an indication that it has the potential to increase its revenue.

The indices resulting from the application of SFA are more realistic to those derived from random or fixed effects models. SFA leads to a more conservative assessment of the potential for local governments to increase their revenue since it makes allowances for measurement error, random shocks and omitted variables.

Extensions to the basic stochastic frontier analysis

SFA has an additional advantage over the other techniques listed above. It is able to account for the heterogeneity among councils in a way that makes economical use of variables.

As noted earlier, SFA partitions the error structure into a one-sided non-normal distribution of the u_{ij} and a two-sided normal distribution of the v_{ij} . In the presence of significant heterogeneity in the data, as experienced in this study, it is not always guaranteed that SFA will be able to identify the u_{ij} error structure even where there

is good reason to believe that such a structure exists. In such a case, the entire error will be consigned to v_{ij} .

Ordinarily, this is a sign that there are omitted variables. In ordinary least squares, this problem is addressed by adding variables into the equation with the expectation that they would account for the heterogeneity. This too, can be done in SFA. However, as noted, there are often too few variables available with which to fully account for the heterogeneity among councils.

An alternative approach is to estimate two additional equations simultaneously with the primary model explaining the variances of the u_{ij} and v_{ij} terms. The stochastic frontier regression equation takes the form:

$$\begin{aligned} R_{ij} &= f(Y_{ij}) - u_{ij} + v_{ij} \\ \mu_{ij}^u &= H_{ij}\delta + \xi_{ij} \\ \mu_{ij}^v &= H_{ij}\theta + \zeta_{ij} \end{aligned} \quad (6)$$

where H represents the range of factors that are thought to be correlated with the heterogeneity in the model, δ and θ the estimated parameters, and ξ_{ij} and ζ_{ij} represent the independent and identically distributed error terms. H is regressed against the means of the residuals (μ_{ij}) of both u and v . In the case of μ_{ij}^v , the H variables reduce the heterogeneity in the v_{ij} error structure, thereby permitting more variation to enter into the u_{ij} error structure. It is possible that some of the variation passed to the u_{ij} error structures will reflect heterogeneity rather than just the scope to raise additional revenue. In this case, H is also regressed against μ_{ij}^u so that none of the variation remaining in the u_{ij} is associated with heterogeneity.

Using two secondary models is a more economical method than using the primary model alone to explain the variance of the overall model, as fewer variables appear to be needed.

The model used in this study

It is apparent that the local government's population is a major contributing factor in its ability to raise revenue. An objective of the analysis was to separately identify the effects of population size from other variables (such as the level of local public goods) that might also be influenced by population size.

Assume a local government's revenue (R_{ij}) is a function of its fiscal capacity (Y_{ij}), the key services supplied by local governments (Z_{ij}), and the control variables used to account for the heterogeneity between local governments using secondary models

(denoted using the term $|H_{ij}$):

$$R_{ij} = f(Y_{ij}, Z_{ij} | H_{ij}) \quad (7)$$

Assume for the moment that the primary equation takes a Cobb-Douglas functional form:

$$R_{ij} = AY_{ij}^{b_1} Z_{ij}^{b_2} \quad (8)$$

where A is a scale parameter and the b 's are elasticity parameters. Assume also that both the local government's fiscal capacity and its grants can be expressed as:

$$r_{ij}P_{ij} = A(y_{ij}P_{ij})^{b_1} (z_{ij}P_{ij})^{b_2} \quad (9)$$

where r_{ij} , y_{ij} and z_{ij} represent per person revenue, per person fiscal capacity and local government services per person respectively and P_{ij} represents the size of the local government's population. Dividing through by P_{ij} and rearranging the terms gives:

$$r_{ij} = Ay_{ij}^{b_1} z_{ij}^{b_2} P_{ij}^{(b_1+b_2-1)} \quad (10)$$

This functional form facilitates the decomposition of the income effects into a per person effect for income and services, and a scale effect (for the size of the population). The marginal effect of population on own-source revenue is equal to (b_1+b_2-1) .

The general functional form used in this study is:

$$r_{ij} = f(y_{ij}, z_{ij}, P_{ij} | h_{ij}) \quad (11)$$

where r_{ij} , y_{ij} , z_{ij} and h_{ij} are the per person equivalents of R_{ij} , Y_{ij} , Z_{ij} and H_{ij} , and P_{ij} is the population of the community.

Several functional forms were considered by the Commission for the primary equation: the transcendental logarithmic (translog) function, extended logarithmic quadratic function and a simpler logarithmic quadratic function. The choice of functional form was determined based on the overall descriptive power of the model, parsimony of variables and the ease of interpretation of the results.

The translog function took the form:

$$\ln r_{jit} = a + \sum_i b_i \ln x_{jit} + \frac{1}{2} \sum_i \sum_k c_{ik} (\ln x_{jit} \ln x_{jkt}) - u_{jt} + v_{jt} \quad (12)$$

where t is the time period, j is the local government, and x_{jit} and x_{jkt} are the factors (i,k) contributing to per person own-source revenue r_{jit} . The form is the most flexible but also the most costly in terms of the number of variables.

The extended logarithmic quadratic took the form:

$$\ln r_{jit} = a + \sum_i b_i \ln x_{jit} + \frac{1}{2} \sum_i c_i (\ln x_{jit})^2 + \sum_n d_n D_{nj} + \sum_i \sum_n e_n (D_{nj} \ln x_{jit}) + \frac{1}{2} \sum_i \sum_n f_{in} (D_{nj} \ln x_{jit})^2 - u_{jt} + v_{jt} \quad (13)$$

where D_{nj} is the vector of dummy variables for each of the ACLG classes of local governments. This functional form is also relatively flexible and allows a test of whether there are significant differences between ACLG classes.

The simpler logarithmic quadratic took the form:

$$\ln r_{jit} = a + \sum_i b_i \ln x_{jit} + \frac{1}{2} \sum_i c_i (\ln x_{jit})^2 + \sum_m d_m S_{mj} + \sum_n e_n D_{nj} - u_{jt} + v_{jt} \quad (14)$$

where S_{mj} is the vector of dummy variables for each State. This functional form offers the least flexibility of the forms discussed, but is more flexible than a linear (Cobb-Douglas) model.

Variables used in the analysis

A review of the literature (such as Shadbeigian 1999 and Mullins 2004) and submissions to this study suggest that some of the factors that would be included in the regression analysis include:

- the income of the local community, including both personal and business income
- the local public services provided by the local government (such as the length of roads provided and whether the council supplies water and sewerage services)
- the classification of local government
- the State of the local government (as a proxy for the regulatory and economic environment in which they operate)
- the population characteristics of the community, such as its residential population, population density and population growth.

Sociodemographic characteristics (such as the age distribution, unemployment

levels and Indigenous composition of the population) are often suggested as contributing to the service needs of the community. The ALGA (2004), for example, noted that ageing communities placed demands on local government services (such as social and activity support services, meals programs, in-home support, respite and allied health services), leading to higher levels of expenditure and revenue. The South Australian Centre for Economic Studies (SACES 2002, p. 20) said:

In inner metropolitan areas, which are experiencing urban regeneration and an influx of younger higher income households, there is probably a greater willingness to pay for enhanced public services.

Sociodemographic variables can be used as factors that might explain the determinants of own-source revenue raised by councils, or as factors that might explain the heterogeneity of local governments in the secondary models. A full description of the variables, their definitions and sources, is given in table C.5. Unless otherwise specified, financial and population variables are specified in natural logarithms.

Table C.5 Summary of variables

<i>Variable</i>	<i>Definition</i>	<i>Data sources</i>
Dependent variables in the first (primary) model		
Own-source revenue (broad)	Own-source revenue broadly defined. Equal to total revenue of local government less current and capital grants, per person.	ABS government finance statistics data (unpublished).
Own-source revenue (narrow)	Own-source revenue narrowly defined. Equal to total revenue of local government less interest, dividends, grants and capital contributions.	ABS government finance statistics data (unpublished).
Independent variables in the first (primary) model		
Per person personal income	Equal to personal post-tax income plus income from the ownership of dwellings, per person.	Income data obtained from the BTRE, and ownership of dwelling data from the ABS.
Per person business income	Equal to gross operating surplus of the local government area, excluding income from unincorporated businesses, per person.	Gross operating surplus data obtained from the ABS, and apportioned to local governments on the basis of employment by local government area. Place of work data obtained from ABS Census data.
Water	A dummy for whether water and sewerage services were provided by each local government.	

Table C.5 (continued)

<i>Variable</i>	<i>Definition</i>	<i>Data sources</i>
Population	Residential population of local government.	ABS (3218.0).
Roads per person	Kilometres of sealed and unsealed roads (undifferentiated) as a proxy for the level of road services.	From Australian Department of Infrastructure, Transport and Regional Development (DITRD).
Properties per person	Number of assessable or rateable properties in the local government area as a proxy for the level of property-based services provided by each local government.	State grants commissions.
NSW	A value of '1' if the council is in New South Wales, '0' for others.	
Qld	A value of '1' if the council is in Queensland, '0' for others.	
WA	A value of '1' if the council is in Western Australia, '0' for others.	
SA	A value of '1' if the council is in South Australia, '0' for others.	
Tas	A value of '1' if the council is in Tasmania, '0' for others.	
NT	A value of '1' if the council is in the Northern Territory, '0' for others.	
Capital city	Dummy for UCC local governments.	Based on DITRD Australian Local Government Classification.
Urban fringe	Dummy for UFV to UFS local governments.	Based on DITRD Australian Local Government Classification.
Urban regional	Dummy for URV to URS local governments.	Based on DITRD Australian Local Government Classification.
Rural	Dummy for RAV to RAS and RSG local governments.	Based on DITRD Australian Local Government Classification.
Remote	Dummy for RTL to RTX local governments.	Based on DITRD Australian Local Government Classification.
Independent variables in the μ_{ij}^u and μ_{ij}^v models		
Per person grants	Commonwealth current grants to local governments. A proxy for Commonwealth financial assistance grants.	ABS government finance statistics data (unpublished).
Young	Share of population aged 4 and under.	ABS National Regional Profile data.
Student	Share of population aged between 5 and 14.	ABS National Regional Profile data.
Old	Share of population aged 65 and over.	ABS National Regional Profile data.
Overseas born	Share of population born overseas.	ABS 2001 Census and National Regional Profile data.
Unemployment rate	Unemployment rate.	ABS National Regional Profile data.
Indigenous	The share of persons identified as Indigenous, as at 2001 Census.	ABS 2001 Census and National Regional profile data.
Population growth rate	Average rate of population growth between 2000-01 and 2005-06 squared.	ABS resident population data.
Area	The local government's incorporated area in terms of thousands of square kilometres.	State grants commissions and the Australian Department of Transport and Regional Services.
Population density	The number of residents per square kilometre of local government area.	Derived from data provided by the ABS and the Australian Department of Transport and Regional Services.

Estimation approach

The approach to estimating the final stochastic frontier model was to initially estimate the model using ordinary least squares (OLS). Three possible model specifications were tested — translog, extended and simple log quadratic models. Statistical and economic criteria were used to choose the final functional form and preferred set of variables. The final OLS model was then used to inform the starting point for estimating the stochastic frontier model.

The initial regressions of the translog model yielded 369 variables for estimation, the extended log quadratic yielded 219 variables, and the simple log quadratic yielded 43 variables. After removing insignificant variables, the modelling results show that:

- translog function had an adjusted R-squared of 0.87 with 167 variables
- extended log quadratic model had an adjusted R-squared of 0.82 with 73 variables
- simple log quadratic model had an adjusted R-squared of 0.78 with 30 variables.

The last of the three OLS models served as a starting point for stochastic frontier regressions. The first two models were eliminated because of the lack of parsimony in variables. The final version of the log quadratic model had about 18 to 20 independent variables.

Four versions of the stochastic frontier model were estimated. These reflect differing assumptions about the appropriate dependent variable and the variables in the secondary models. The dependent variables include:

- Own-source revenue broadly defined total revenue less grants and subsidies.
- Own-source revenue narrowly defined to include rates, fees and charges, payments in lieu of rates and fines. This definition excludes interest, dividends and capital contributions as these were not thought to contribute to ordinary income of local governments (LGASA, sub. DR86).

Several different combinations of independent variables were used in the secondary models to explain the heterogeneity across councils:

- per person financial assistance grants from the Commonwealth
- a number of demographic variables (such as the share of persons aged 65 and over).

C.5 Factors affecting revenue raised

The results of the stochastic frontier regressions for all Australian local governments are presented in table C.6. With a few exceptions, only the statistically significant variables are presented. The coefficients on the variables are broadly consistent across the various specifications of the models.

Own-source revenue per person increases with both personal income per person and business income per person. An interpretation of this result is that as each after-tax source of income increases, the community prefers to spend proportionally less of it on local government services (chapter 4). The coefficient on business income is smaller than that of personal income, suggesting that a local government's revenue stream is more inelastic (that is, less sensitive) to changes in business income than to changes in personal income.

In terms of local government services, own-source revenue per person also increases with the length of roads per person. This suggests that as the length of roads (in per person terms) increases, so do the per person costs of maintaining them. Similarly, own-source revenue per person increases with the number of rateable properties per person, reflecting increased levels of services and expenditure needs. Some councils are required to supply water and sewerage services. As expected, the revenue raised by councils supplying water and sewerage services is higher.

In terms of other factors that might influence the costs of local government services, own-source revenue per person decreases with the size of the population, which suggests economies of scale. Population density, however, was not found to be statistically significant. Population density was not strongly correlated with own-source revenue, but was correlated with population level. This suggests that communities that benefit from economies of scale also benefit from economies of density. Population growth was found to be positively correlated with own-source revenue, confirming the view that communities experiencing population growth are also those likely to be raising more own-source revenue per person.

There are also differences in the level of revenue raised by councils between States. The reference State for comparisons is Victoria. Councils in New South Wales and Queensland on average tend to raise more revenue than councils in Victoria, whereas councils in South Australia, Western Australia and the Northern Territory raise less than Victoria.

Table C.6 Results of the stochastic frontier regression analysis

<i>Dependent and independent variables</i>	<i>Model 1 Log of own-source revenue per person (broad)</i>	<i>Model 2 Log of own-source revenue per person (narrow)</i>	<i>Model 3 Log of own-source revenue per person (broad)</i>	<i>Model 4 Log of own-source revenue per person (narrow)</i>
Primary model				
Characteristics				
Log of personal income per person	0.309 ^a	0.275 ^a	0.314 ^a	0.280 ^a
Log of business income per person	0.089 ^a	0.108 ^a	0.063 ^a	0.075 ^a
Log of roads per person	0.079 ^a	0.078 ^c	0.093 ^a	0.097 ^a
Log of properties per person	0.084 ^a	0.072 ^a	0.060 ^a	0.052 ^a
Water (categorical variable)	0.237 ^a	0.219 ^a	0.253 ^a	0.224 ^a
Log of residential population	-0.125 ^a	-0.145 ^a	-0.099 ^a	-0.118 ^a
Population growth rate	0.009 ^a	0.004 ^a	0.011 ^a	0.005 ^a
State ^e				
New South Wales	0.168 ^a	0.169 ^a	0.205 ^a	0.185 ^a
Queensland	0.110 ^a	0.154 ^a	0.140 ^a	0.169 ^a
South Australia	-0.147 ^a	-0.094 ^a	-0.116 ^a	-0.090 ^a
Western Australia	-0.096 ^a	-0.078 ^a	..	..
Tasmania	-0.075 ^c	..	-0.077 ^a	..
Northern Territory	-0.711 ^a	-0.714 ^a	-0.447 ^c	-0.511 ^a
ACLG class ^f				
Capital city	0.845 ^a	0.964 ^a	0.729 ^a	0.788 ^a
Urban fringe	..	-0.103 ^a	0.079 ^b	..
Urban regional	0.074 ^d	..	0.156 ^a	0.103 ^a
Rural agricultural	-0.221 ^a	-0.290 ^a	-0.086 ^c	-0.136 ^a
Remote	..	-0.069 ^d	0.157 ^b	0.132 ^a
Constant	4.225 ^a	4.527 ^a	3.954 ^a	4.311 ^a
Secondary model				
Log σ_v^2				
Log of grants per person	0.534 ^a	0.551 ^a	0.553 ^a	0.564 ^a
Share of persons aged <5 years	..	..	-10.544 ^a	-12.503 ^a
Share of persons aged 5–14 yrs	..	..	-3.453 ^b	-5.146 ^a
Share of persons aged >64 years	..	..	-7.204 ^a	-8.8134 ^a
Constant	-5.656 ^a	-5.836 ^a	-3.771 ^a	-3.425 ^a
Log σ_u^2				
Log of grants per person	-0.521 ^a	-0.604 ^a	-0.610 ^a	-0.552 ^a
Share of persons aged <5 years	..	..	-17.399 ^c	-20.590 ^b
Share of persons aged 5–14 yrs	..	..	54.915 ^a	57.710 ^a
Constant	..	..	-6.955 ^a	-7.522 ^a
Mean of u	0.889	0.894	0.876	0.877
Number of observations	2854	2854	2254	2254
Number of councils ^g	604	604	601	601
Log likelihood	-758.133	-646.463	-516.387	-437.158

^a Significant at less than the 0.1 per cent level. ^b Significant at 1 percent level. ^c Significant at the 5 per cent level. ^d Significant at the 10 per cent level. ^e The reference State captured in the constant term is Victoria. ^f The reference ACLG region captured in the constant term is urban developed. ^g Not all councils are represented in all years. .. Not significant at 10 per cent level or below.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

There are also differences in the level of revenue raised by councils between different ACLG classes. The reference ACLG class for comparison is urban developed. Capital city, and to some extent urban regional councils, tend to raise more own-source revenue per person than urban developed councils. This most likely reflects the higher per person (resident) costs of servicing those areas. Rural councils raise less than urban developed (after taking account of other factors such as roads, population and income). This suggests that rural communities, on average, make fewer demands on their councils than do urban developed councils.

Accounting for heterogeneity

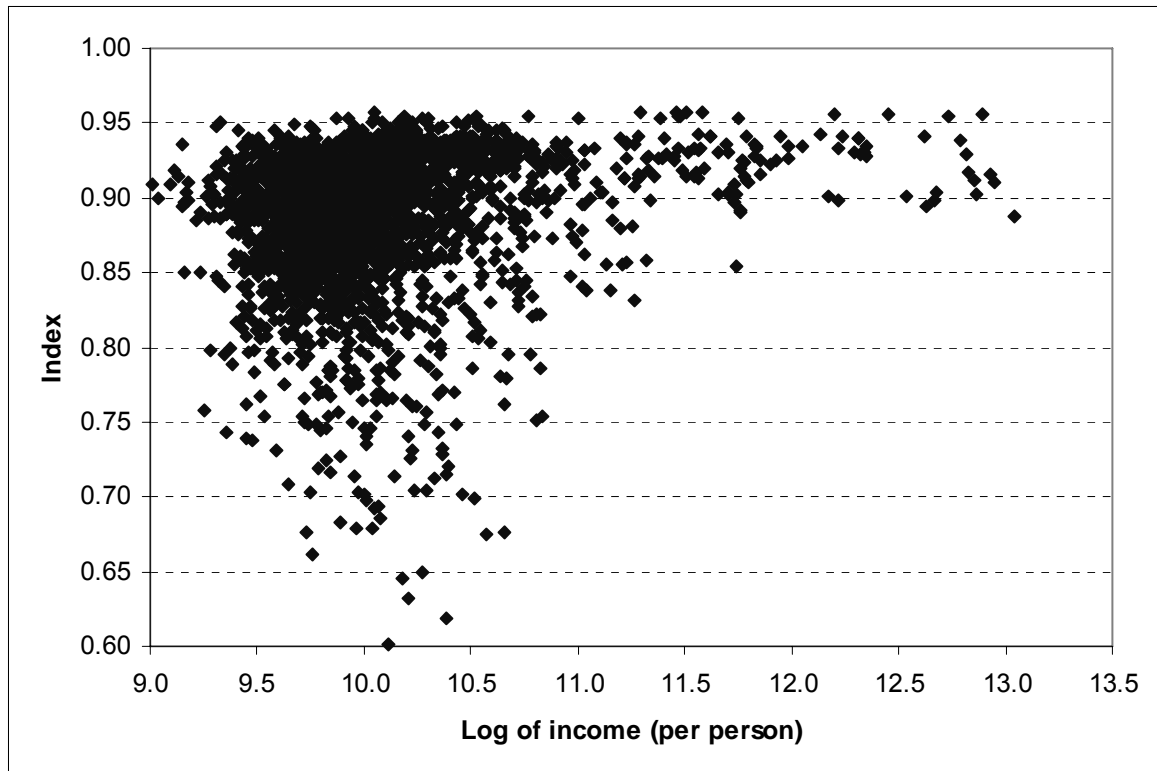
Table C.6 also includes the results for the regressions of the secondary models to account for the heterogeneity of the sample. The measure of per person financial assistance grants and the proportion of persons aged four or less were statistically significant. Other demographic variables, such as the proportion of the population that was Indigenous, was not significant. The strong correlation of grants in each of the four models reaffirms that this variable reflects the distribution of financial assistance grants by the State grants commissions. The Commissions distribute more grants to councils with higher needs. These councils are usually those already making relatively high per person revenue-raising effort.

The choice of variables to control heterogeneity across the four models had a role in determining the average revenue-raising score across councils. This score (the 'mean of u') varies between 0 and 1, and indicates how much revenue a local government currently raises relative to its potential. Across the four classes, the mean of scores varies between 0.876 and 0.894, suggesting an average potential to increase revenue of between 10 and 13 per cent.

C.6 Relative potential to increase revenue

Drawing on the results from model 1, the indices of current own-source revenue raised relative to the amount of own-source revenue that could potentially be raised, are plotted versus aggregate income in figure C.3.

Figure C.3 **Estimates of the relative potential to increase own-source revenue, by aggregate income**
2000-01 to 2004-05



Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

The distribution of the indices of the potential to increase revenue is presented in table C.7. The unweighted and weighted averages of the index of revenue-raising potential are 0.88 and 0.86 respectively, which suggests that own-source revenue might be able to be increased by about 12 per cent and 14 per cent respectively, on average.

Table C.7 Distribution of the estimated indices of each local government's own-source revenue relative to its potential own-source revenue, by class of local government
2000-01 to 2004-05, per cent^a

<i>Decile and mean</i>	<i>All councils</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	0.56	0.75	0.56	0.67	0.60	0.67	0.84
10 per cent	0.83	0.77	0.75	0.78	0.83	0.87	0.90
20 per cent	0.86	0.78	0.80	0.82	0.85	0.88	0.91
30 per cent	0.87	0.80	0.83	0.83	0.86	0.89	0.91
40 per cent	0.89	0.82	0.85	0.85	0.87	0.90	0.92
50 per cent (median)	0.89	0.85	0.86	0.85	0.88	0.91	0.93
60 per cent	0.90	0.87	0.87	0.86	0.89	0.91	0.93
70 per cent	0.91	0.89	0.88	0.88	0.89	0.92	0.94
80 per cent	0.92	0.91	0.89	0.89	0.90	0.92	0.94
90 per cent	0.93	0.93	0.91	0.91	0.91	0.93	0.95
Highest	0.95	0.94	0.93	0.94	0.94	0.94	0.95
Mean (unweighted) ^b	0.88	0.85	0.84	0.85	0.87	0.90	0.92
Mean (weighted) ^c	0.86	0.81	0.85	0.86	0.88	0.89	0.91

^a Based on a sample of 2784 observations, representing 602 councils over five years. Data were not available for all councils for all years. ^b Average not weighted by relative population share. ^c Average weighted by relative population share.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Cost recovery from own-source revenue

Cost recovery from own-source revenue is defined to be equal to own-source revenue (broadly defined) divided by total expenditure, using ABS data. It is a measure of the extent to which a local government is recouping its expenditure from own sources of revenue. This indicator is not a measure of the real cost recovery or financial viability of local governments because it does not include any:

- costs from outstanding infrastructure renewals and maintenance
- grants that would contribute to the actual cost recovery of local governments.

The current ratios of cost recovery from own-source revenue are illustrated in table C.8. Between 2000-01 and 2004-05 own-source revenue recovered 0.76 (76 per cent) of local government total expenditure, across Australia on average. On average, rural and remote council's cost recovery were substantially lower than the national average.

Table C.8 Distribution of the ratio of cost recovery from own-source revenue

2000-01 to 2004-05, ratio^{a, b}

<i>Decile and mean</i>	<i>All councils</i>	<i>Capital city</i>	<i>Urban developed</i>	<i>Urban fringe</i>	<i>Urban regional</i>	<i>Rural</i>	<i>Remote</i>
Lowest	0.07	0.76	0.61	0.50	0.47	0.15	0.07
10 per cent	0.46	0.82	0.78	0.73	0.61	0.43	0.24
20 per cent	0.55	0.88	0.83	0.82	0.70	0.50	0.35
25 per cent	0.58	0.91	0.85	0.83	0.74	0.52	0.38
30 per cent	0.62	0.95	0.86	0.86	0.78	0.56	0.41
40 per cent	0.70	1.02	0.89	0.89	0.83	0.60	0.48
50 per cent (median)	0.77	1.05	0.93	0.94	0.86	0.65	0.51
60 per cent	0.83	1.13	0.96	0.98	0.91	0.71	0.55
70 per cent	0.89	1.18	0.99	1.02	0.97	0.77	0.59
75 per cent	0.92	1.19	1.01	1.05	0.99	0.80	0.63
80 per cent	0.96	1.22	1.03	1.07	1.03	0.83	0.68
90 per cent	1.06	1.29	1.09	1.18	1.11	0.93	0.80
Highest	1.80	1.35	1.67	1.80	1.55	1.69	1.26
Mean ^c	0.76	1.06	0.94	0.96	0.87	0.68	0.52

^a The own-source revenue cost recovery ratio is defined as total revenue less current and capital grants, divided by total expenditure. ^b Based on a sample of 2784 observations, representing 602 councils over five years. Data were not available for all councils for all years. ^c Average weighted by relative population share.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Simulating the effects of increases in own-source revenue

The final modelling exercise is a simulation of the effect of increasing own-source revenue (assuming the results from model (1)) on each local government's:

- total revenue per person
- revenue-raising effort (defined as own-source revenue divided by fiscal capacity)
- cost recovery from own-source revenue.

The purpose of the simulation exercise is to provide some insights into how material the scope for local governments to raise additional revenue is on local government finances. It is not intended to demonstrate that local governments should seek to recover all their costs from own-source revenue.

It must be noted that these simulations are partial in nature. They do not consider the effects of demand for services that might arise from increases in revenue raised (since increasing fees and charges, for example, might induce a reduction in the demand for some services), and any commensurate change in expenditure.

The estimated index of the potential to increase own-source revenue is used to calculate the increase in each local government's hypothetical total revenue per person (table C.9). Across all local governments, total revenue is projected to increase by about \$140 per person.

Table C.9 Effect of a hypothetical increase in own-source revenue on total revenue per person, by class of council
2000-01 to 2004-05, per person^a

<i>Local governments by ACLG class</i>	<i>No. of observations</i>	<i>No. of councils</i>	<i>Actual total revenue</i>	<i>Potential total revenue</i>	<i>Average increase in total revenue</i>
			\$	\$	\$
Capital city	33	7	4 251	4 751	500
Urban developed	394	87	829	955	126
Urban fringe	219	48	905	1 029	123
Urban regional	506	111	1 317	1 453	135
Rural	1 409	298	2 367	2 502	135
Remote ^b	223	51	6 642	6 837	194
All councils	2 784	602	2 208	2 350	142

^a Average not weighted by population share. ^b Care must be exercised due to concerns about the quality of data from remote local governments.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

The effect of a hypothetical increase in own-source revenue on revenue-raising effort is illustrated in table C.10. Across all councils, the revenue-raising effort is projected to increase from 5.8 to 6.4 per cent. Since local governments vary in size (there are a relatively large number of small local governments), the revenue-raising effort adjusted for population size is also presented in table C.10. The average revenue-raising effort across the Australian population is projected to increase from 4.5 to 5.1 per cent.

The effect of a hypothetical increase in own-source revenue on the cost recovery from own-source revenue is illustrated in table C.11. The own-source revenue cost recovery could potentially increase from 0.76 to 0.87. When the different populations across local governments are taken into account, the own-source revenue cost recovery across the Australian population could feasibly increase from 0.94 to 1.09 — reflecting the influence of the larger local governments.

Table C.10 Effect of a hypothetical increase in own-source revenue on revenue-raising effort, by class of local government

2000-01 to 2004-05, per cent^a

<i>Local governments by ACLG class</i>	<i>Revenue-raising effort not adjusted for population</i>			<i>Revenue-raising effort adjusted for population</i>	
	<i>Actual mean</i>	<i>Hypothetical mean</i>	<i>Hypothetical distribution^b</i>	<i>Actual mean</i>	<i>Hypothetical mean</i>
Capital city	4.2	4.9	2.8–6.8	5.2	6.4
Urban developed	3.1	3.6	3.0–4.0	3.1	3.6
Urban fringe	4.4	5.1	3.6–6.2	4.1	4.7
Urban regional	5.4	6.2	4.3–7.7	5.8	6.5
Rural	6.4	7.0	4.6–8.5	6.0	6.6
Remote	8.7	9.3	2.2–13.0	6.4	6.9
All councils	5.8	6.4	3.8–7.8	4.5	5.1

^a Based on a sample of 2784 observations representing 602 councils. Not all councils are represented in all years. ^b This is the distribution of the middle 50 per cent (inter-quartile range) of observations around the median hypothetical revenue-raising effort.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Table C.11 Effect of a hypothetical increase in own-source revenue on cost recovery from own-source revenue, by class of local government

2000-01 to 2004-05^{a, b}

<i>Local governments by ACLG class</i>	<i>Cost recovery not weighted by population share</i>			<i>Cost recovery weighted by population share</i>	
	<i>Actual</i>	<i>Potential</i>	<i>Hypothetical distribution^c</i>	<i>Actual</i>	<i>Potential</i>
	Ratio	Ratio	Ratio	Ratio	Ratio
Capital city	1.06	1.25	1.13–1.34	1.01	1.23
Urban developed	0.94	1.11	0.99–1.20	0.94	1.10
Urban fringe	0.96	1.12	0.99–1.21	1.00	1.16
Urban regional	0.87	0.99	0.84–1.13	0.95	1.08
Rural	0.68	0.75	0.58–0.89	0.74	0.83
Remote	0.52	0.56	0.41–0.68	0.56	0.61
All councils	0.76	0.87	0.64–1.06	0.94	1.09

^a The own-source revenue cost recovery ratio is defined as total revenue less current and capital grants, divided by total expenditure. ^b Based on a sample of 2784 observations representing 602 councils over five years. Not all councils are represented in all years. ^c This is the range of the middle 50 per cent (inter-quartile range) of observations around the median hypothetical cost-recovery ratio.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Care must be exercised when interpreting the results of table C.11. Even if a council is reported to be recovering less than its expenditure from own-source revenue, this

does not imply that it is currently operating a deficit — other sources of income (namely Commonwealth and State government grants) might be augmenting its revenue.

Finally, the proportion of councils that are not recovering their costs, before and after a hypothetical increase in revenue, are reported in table C.12. It is apparent that despite an improvement in revenue-raising effort, many councils, including the majority of rural and remote councils, will not be recovering their costs without financial assistance from other governments.

Table C.12 Estimates of the proportion of local governments that are grant dependent, by class of local government
2000-01 to 2004-05, per cent^a

<i>Local governments by ACLG class</i>	<i>No. of councils</i>	<i>Councils that are grant dependent</i>		<i>Councils that are grant dependent after raising additional revenue</i>	
		<i>No. of councils</i>	<i>Share of councils</i>	<i>No. of councils</i>	<i>Share of councils</i>
Capital city	7	2	36	—	—
Urban developed	87	63	72	27	27
Urban fringe	48	31	64	16	36
Urban regional	111	84	76	51	50
Rural	298	277	93	245	87
Remote ^b	51	49	96	42	95
All councils	602	506	84	371	67

^a Based on a sample of 2784 observations, representing 602 councils over five years. Data were not available for all councils for all years. ^b Care must be exercised due to the quality of data from remote local governments.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Sensitivity of predictions

Sensitivity tests were undertaken of the predictions implied by the stochastic frontier equations reported in table C.6. Selected results from tables C.7, C.11 and C.12 were reproduced for the period 2000-01 to 2003-04. The results of models (1) and (3) were different to those for models (2) and (4) — the latter two excluded observations for 2004-05 because demographic data were not available for that year. Thus, to ensure comparability between the estimates from each of the models, the simulation results were reproduced for 2000-01 to 2003-04.

The results of the sensitivity tests for the ratio of each local government's revenue-raising potential are summarised in table C.13. For capital city and urban

developed councils, the estimates of model (1) are at the bottom end of the range of estimated ratios. Most of these differences appear to be explained by the choice of the dependent variable. When capital contributions, interest and dividend income are included in the definition of own-source revenue, capital city and urban developed councils have *more* scope to raise additional own-source revenue than do other councils.

Table C.13 Sensitivity tests: local government's own-source revenue relative to its potential own-source revenue
2000-01 to 2003-04, per cent^{a, b}

<i>Local governments by ACLG class</i>	<i>Model (1)^c</i>	<i>Range of estimated indices^d</i>
Capital city	85.6	83.8–95.1
Urban developed	85.2	85.0–91.6
Urban fringe	85.6	81.0–86.6
Urban regional	87.8	85.9–88.3
Rural	90.4	87.5–91.2
Remote	93.0	90.7–93.9
All councils	89.0	87.6–89.6

^a The own-source revenue cost recovery ratio is defined as total revenue less current and capital grants, divided by total expenditure. ^b Based on a sample of 2225 observations representing 601 councils over four years. Not all councils are represented in all years. ^c Average weighted by relative population share. This estimate is based on the results of model (1) (table C.6). It differs from the finding in table C.7 because of differences in sample sizes. ^d This range is of the means of the four models presented in table C.6.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

The results of the sensitivity tests for the cost recovery ratio of each local government are summarised in table C.14. Capital city and urban developed councils could be at the higher end of estimates of own-source revenue cost recovery, when capital contributions, interest and dividend income are included in the definition of own-source revenue.

Finally, the results of the sensitivity tests for the proportion of councils unable to recover their costs are summarised in table C.15. When capital contributions, interest and dividends are included in the definition of own-source revenue, relatively fewer capital city council and urban developed councils are likely to be under-recovering their costs.

Table C.14 Sensitivity tests of the effect of a hypothetical increase in own-source revenue on cost recovery from own-source revenue, by class of local government
2000-01 to 2003-04, ratio^{a, b}

<i>Local governments by ACLG class</i>	<i>Actual^c</i>	<i>Model (1)^c</i>	<i>Range of average potential cost recovery ratios^d</i>
Capital city	1.07	1.24	1.05–1.24
Urban developed	0.93	1.10	0.95–1.10
Urban fringe	0.95	1.11	0.94–1.18
Urban regional	0.87	0.99	0.91–1.02
Rural	0.67	0.74	0.69–0.77
Remote	0.57	0.61	0.59–0.62
All councils	0.76	0.86	0.79–0.88

^a The own-source revenue cost recovery ratio is defined as total revenue less current and capital grants, divided by total expenditure. ^b Based on a sample of 2225 observations representing 601 councils over four years. Not all councils are represented in all years. ^c Average weighted by relative population share. This estimate is based on the results of model (1) (table C.6). It differs from the finding in table C.8 because of differences in sample sizes. ^d This range is of the means of the four models presented in table C.6.

Source: ABS unpublished; ATO unpublished; State grants commissions unpublished; Productivity Commission estimates.

Table C.15 Sensitivity tests of the effect of a hypothetical increase in own-source revenue on the proportion of councils not recovering their costs, by class of local government
2000-01 to 2003-04, per cent^{a, b}

<i>Local governments by ACLG class</i>	<i>Actual^c</i>	<i>Model (1)^c</i>	<i>Range of proportion of councils not recovering costs^d</i>
Capital city	32	0	0–32
Urban developed	72	29	29–64
Urban fringe	66	29	18–66
Urban regional	77	52	48–72
Rural	93	88	84–93
Remote	93	91	91–92
All councils	85	68	67–80

^a The own-source revenue cost recovery ratio is defined as total revenue less current and capital grants, divided by total expenditure. ^b Based on a sample of 2225 observations representing 601 councils over four years. Not all councils are represented in all years. ^c Average weighted by relative population share. This estimate is based on the results of model (1) (table C.6). It differs from the finding in table C.12 because of differences in sample sizes. ^d This range is of the means of the four models presented in table C.6.

D Australian Classification of Local Governments

Box D.1 Australian Classification of Local Governments				
<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>	<i>Identifiers</i>	<i>Category</i>
Urban (U)				
Population more than 20 000 OR If population less than 20 000 EITHER Population density more than 30 persons per sq km OR 90 per cent or more of local government area (LGA) population is urban	Capital city (CC)	Not applicable		UCC
	Metropolitan Developed (D) Part of an urban centre of more than 1 000 000 or population density more than 600/sq km	Small (S) Medium (M) Large (L) Very large (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	UDS UDM UDL UDV
	Regional towns/City (R) Part of an urban centre with population less than 1 000 000 and predominantly urban in nature	Small (S) Medium (M) Large (L) Very large (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	URS URM URL URV
	Fringe (F) A developing LGA on the margin of a developed or regional urban centre	Small (S) Medium (M) Large (L) Very large (V)	up to 30 000 30 001–70 000 70 001–120 000 more than 120 000	UFS UFM UFL UFV
Rural (R)				
An LGA with population less than 20 000 AND Population density less than 30 persons per sq km AND Less than 90 per cent of LGA population is urban	Significant growth (SG) Average annual population growth more than 3 per cent, population more than 5 000 and not remote	Not applicable		RSG
	Agricultural (A)	Small (S) Medium (M) Large (L) Very large (V)	up to 2 000 2 001–5 000 5 001–10 000 10 001–20 000	RAS RAM RAL RAV
	Remote (T)	Extra small (X) Small (S) Medium (M) Large (L)	up to 400 401–1 000 1 001–3 000 3 001–20 000	RTX RTS RTM RTL
<i>Source:</i> Department of Transport and Regional Services (2006).				

E Effective property rates

As noted in chapter 7, there are limitations in the indicators of income used to derive the average incidence of rates in each local government area. In this appendix, the impacts of local government rates are presented using property values rather than income.

The measure used here is the average effective property rate, which is defined as the ratio of total rates revenue to the total value of rateable property in each local government area. The effective rates are averages across councils. They cannot be used to make judgments about the effective rates across individual properties within councils. In section E.1, the indicators of effective property rates are described. This is followed by an analysis of effective property rates (section E.2).

A consistent indicator of property values available across States is unimproved capital valuations (UCVs). The indicators of effective property rates used in this appendix are for local governments in New South Wales, Victoria, South Australia and the Northern Territory. The data are for the period 2000-01 to 2004-05.

E.1 Indicators of effective property rates

The four indicators of effective rates are defined below.

- Total effective property rates — defined as the ratio of total rates revenue for a council to the total UCV of all rateable properties in that local government area. This indicator is used to compare the aggregate (average) effective property rates across councils.
- Residential effective property rates — defined as the ratio of total residential rates revenue for a council to the total UCV of all rateable residential properties in that local government area. This indicator is used to compare the residential effective property rates across councils. The tax deductibility of residential rates for property investors has been taken into account using the share of rented properties in each local government area and an estimate for average marginal tax rates of individuals in each local government area.
- Business effective property rates — defined as the ratio of total business rates revenue for a council to the total UCV of all rateable business properties in that

local government area. This indicator is used to compare the business effective property rates across councils. The tax deductibility of business rates has been taken into account using a business tax rate of 30 per cent. Business rates include commercial and industrial rates.

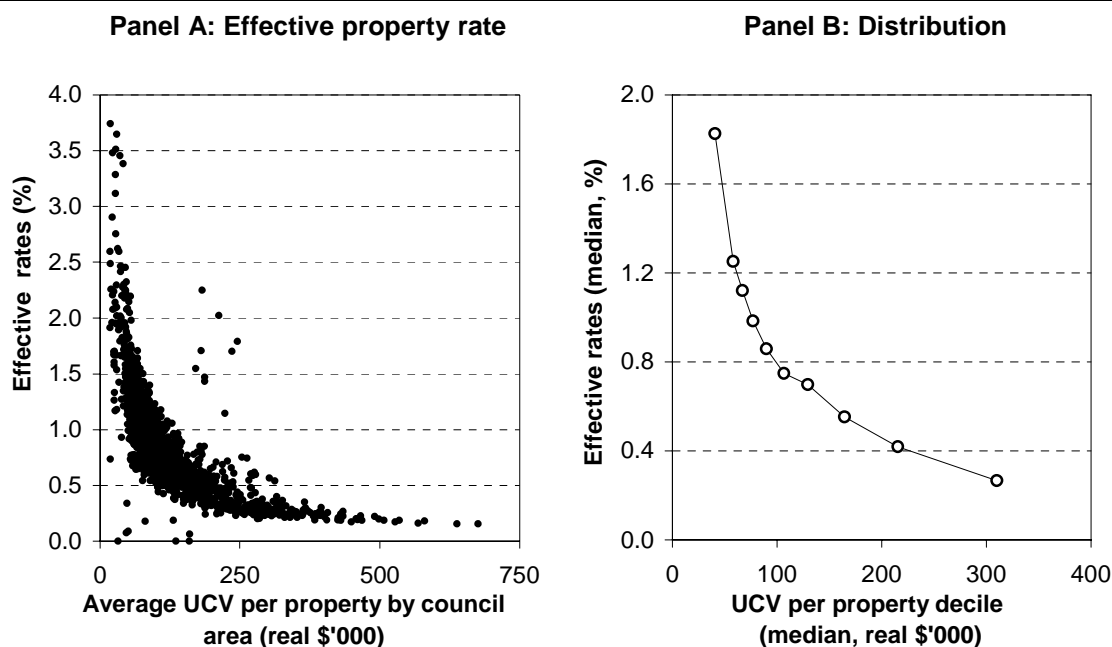
- Rural effective property rates — defined as the ratio of total rural rates revenue for a council to the total UCV of all rateable rural properties in that local government area. This indicator is used to compare the rural effective property rates across councils.

E.2 Effective property rates

Total effective property rates

Total effective property rates are inversely related to the average UCV per property in each council (figure E.1, panel A). The effective rates were predominantly less than 1.5 per cent.

Figure E.1 **Total effective property rates in Australia**
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by total (average) real UCV per property across local government areas. Data are based on 1432 observations. Data are for New South Wales, Victoria, South Australia and the Northern Territory. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; State grants commissions unpublished; Productivity Commission calculations.

In panel B, the median effective rates are grouped according to deciles of UCV per property. For UCV per property between \$60 000 and \$130 000, effective rates were between 0.7 and 1.3 per cent. For the highest UCV per property decile, effective rates were about 0.3 per cent.

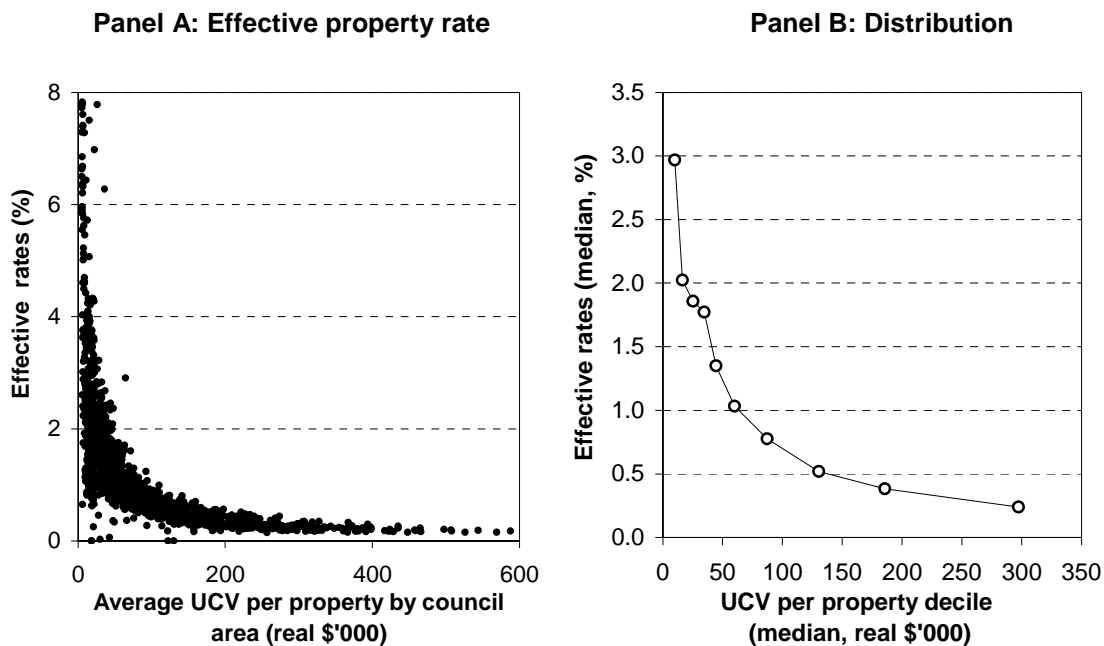
Generally, local government areas with higher valued properties, on average, apply relatively lower rates than lower valued properties when compared to their respective property valuations. However, effective rates may also vary for similarly valued properties due to the way in which rates are set. For example, councils may differ in their application of minimum rates and/or flat rates in the dollar that are applied on the value of properties. The total rates payable, and hence the effective rates, would vary despite the same property values.

Residential effective property rates

There is an even more evident inverse relationship between the average unimproved value of residential properties and the residential effective rates paid on corresponding properties across different local government areas (figure E.2, panel A).

In terms of the UCV per property deciles, residential effective rates were less than or equal to 0.5 per cent for council areas with the highest (average) valued 30 per cent of residential properties (panel B). On the other hand, the lowest (average) valued 30 per cent of residential properties had effective rates of 1.9 per cent or higher.

Figure E.2 Residential effective property rates in Australia
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by average real residential UCV per property across local government areas. Data are based on 1399 observations. Data are for New South Wales, Victoria, South Australia and the Northern Territory. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

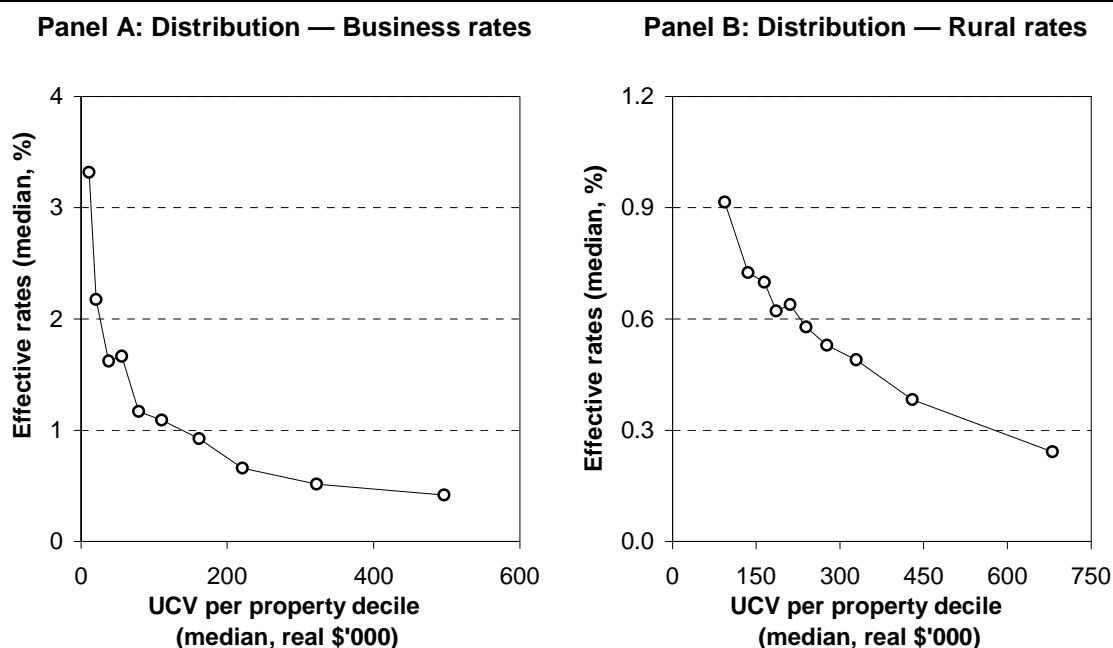
Source: ABS unpublished; State grants commissions unpublished; Productivity Commission calculations.

Business and rural effective property rates

Broadly in line with residential average effective property rates, both business and rural average effective property rates by council area are inversely associated with their corresponding average property values (figure E.3).

In terms of business properties, the difference in the effective rates between the highest decile and the lowest decile was, on average, around 2.9 percentage points (panel A in figure E.3). For 50 per cent of average council UCV per property, grouped by deciles, business effective rates were less than 1.1 per cent.

Figure E.3 **Effective business and rural property rates in Australia**
2000-01 to 2004-05 estimates^a



^a Deciles are grouped by average real business and rural UCV per property across local government areas, respectively. Data are based on 1397 observations for business effective rates and 1175 observations for rural effective rates. Data are for New South Wales, Victoria, South Australia and the Northern Territory. The base year is 2005-06, adjusted using the ABS non-farm GDP deflator.

Source: ABS unpublished; State grants commissions unpublished; Productivity Commission calculations.

In comparison with residential median effective property rates, the median effective rates on business property were about the same across all deciles. This was despite the significant differences in the median real values of UCV per property, as grouped by deciles. For example, in the sixth UCV per property decile, median effective rates were about 1.1 per cent for both residential and business properties while the median residential UCV per property was about \$60 000 and the median business UCV per property was about \$110 000.

Average rural effective property rates by council area are notably lower across all deciles in comparison with both residential and business effective property rates. Average rural effective property rates were less than 1 per cent across all deciles (panel B in figure E.3).

F Indigenous local governing bodies

The purpose of this appendix is to provide insights into issues related to the revenue-raising capacity of Indigenous local governing bodies (ILGBs) and mainstream local governing bodies with large Indigenous populations (MILGBs). The circumstances of ILGBs are different from those of MILGBs but the two share some issues that warrant exploration. Section F.1 provides the context about Indigenous Australians and their LGBs and section F.2 describes the level and composition of revenue raising in ILGBs. Section F.3 attempts to identify the factors influencing the revenue-raising capacity of ILGBs and explores a number of related issues.

Case studies of three LGBs (two ILGBs and one MILGB) are presented in section F.4, using statistics and qualitative material based on interviews, to illustrate the issues raised in section F.3. Interview material reflects the insights and views of various local government officers from the three councils discussed in section F.4.

F.1 Indigenous Australians and local governing bodies

This section provides contextual material about Indigenous Australians by local government area. The Council of Australian Governments endorsed the *National Commitment to Improved Outcomes in the Delivery of Programs and Services for Aboriginal peoples and Torres Strait Islanders* in 1992. That agreement clarifies the role of local government, which is to maintain its responsibilities to ensure the provision of a full range of local government services to Indigenous people in accordance with appropriate planning, coordination and funding mechanisms.¹ The Australian and State Governments signed the *Bilateral Agreement on Indigenous Affairs* in July 2006. Its purpose is to improve and streamline government (including local government) services to Indigenous people by having one level of service delivery to Indigenous communities.

In rural and remote areas, Indigenous communities are often represented by local governing bodies established under specific State legislation, or the *Corporations (Aboriginal and Torres Strait Islander) Act 2006 (Cwlth)*, to enable direct grant

¹ For a history of Australian Indigenous government administrative arrangements see for example FACHSIA 2008, Gardiner-Garden 1997, MCATSIA 2007, Pratt 2003 and Taylor 2006).

funding. The community associations (in some cases ‘declared bodies’) do not have the same statutory independence with respect to decision making and funding allocations (Dodson 1991; Local Government Acts). ILGBs’ administrative arrangements by type and State are shown in table F.1. These LGBs are eligible to receive Australian Government financial assistance grants (FAGs). ILGBs generally have Indigenous councillors, with operational management drawn from their own community or appointed by the various departments of local government.

Table F.1 ILGBs by type and State, by legislative or administrative arrangement^a

June 2006

<i>State</i>	<i>Established under state local government legislation</i>	<i>Established under separate State government legislation</i>	<i>Declared LGBs under Australian Government legislation</i>	<i>Total Indigenous councils</i>
Qld	2	32	0	34
WA	1	0	0	1
SA	0	2	3	5
NT	26	1	24	51
Total	29	35	27	91

^a Councils can be established under mainstream local government legislation in the State or under separate State legislation or as bodies that the Australian Government minister, on advice from the applicable state minister, has declared to be local governing bodies that can receive FAGs.

Source: DOTARS 2007.

Table F.1 is one method of describing legislative and administrative structures surrounding ILGBs. However, LGBs can also be described by proportions of Indigenous people in the local government area (table F.2). Descriptive statistics in tables F.3 and F.4 are based on ABS data on Indigenous populations as described in table F.2. Analyses included in this appendix (tables F.4 onwards) are based on the DOTARS classification of ILGBs.

Table F.2 LGBs by type and State, by Indigenous population

2006

<i>Indigenous people</i>	<i>Unit</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>NT</i>	<i>Total</i>
LGBs with >50%	No	1	0	35	5	2	0	52	95
Total pop. in LGBs	No	138 156	30 080	127 086	58 645	24 901	16 658	42 146	437 672
Share of pop. in LGBs	%	2.0	0.6	3.1	2.9	1.6	3.4	22.3	2.2

^a Data are based on 691 observations. Population data disaggregated by Indigenous status was unavailable for 29 councils categorised as Indigenous by DOTARS, therefore, these were assumed to have majority Indigenous populations and counted in the ‘LGBs with >50 per cent Indigenous people’ category.

Source: ABS Census of Population and Housing unpublished; DOTARS 2007; PC calculations.

Collectively, the tables identify Queensland and the Northern Territory as the jurisdictions with a substantial number of ILGBs. In addition, New South Wales, Western Australia and South Australia have a small number of LGBs with majority Indigenous populations. It is likely that issues identified in this appendix also affect those local governments.

General characteristics of populations residing in LGBs

Indigenous Australians' are concentrated in the remote and rural areas of the Northern Territory, Queensland, Western Australia and South Australia. In these areas, Indigenous people tend to live separately from other people and sometimes represent a majority of the total resident population of LGBs. By contrast, there are much smaller concentrations (albeit larger numbers) of Indigenous people living in urban LGBs. In urban areas, Indigenous people may be integrated or may reside segregated, or on the fringe, of the rest of the community (Sanders 2006).

Table F.3 shows the characteristics of populations residing in LGBs. The populations residing within the boundaries of ILGBs are characterised by low income and low literacy rates by comparison with the national average (ABS unpublished; MCEETYA 2007).

Table F.3 Characteristics of populations residing in LGBs
2004-05, 2005-06, 2006^{a, b}

<i>Population</i>	<i>LGBs</i>	<i>Total population</i>	<i>Indigenous population</i>	<i>Annual net personal income^c</i>	<i>Weekly median household income</i>	<i>Unemployment rate</i>
No	No	No	%	\$/person	\$	%
Less than 500	76	22 944	52.4	10 129	828	6.0
501-1000	54	42 142	30.9	12 670	836	3.7
1 001-2 500	85	134 162	21.4	14 460	795	4.5
2 501-10 000	164	909 836	6.2	14 332	758	5.0
10 001-50 000	185	4 237 585	2.9	15 951	864	5.4
More than 50 000	127	14 980 057	1.4	17 803	1 050	5.4
Australia	691	20 326 726	2.2	15 152	850	5.1

^a Data are based on 691 observations for number of LGBs and population. Data are based on 666 observations for the other variables. ^b Data for 2004-05 are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator. Annual net personal income data are for 2004-05. ^c Care must be exercised when interpreting personal income because of its estimation.

Source: ABS unpublished; DOTARS unpublished; Productivity Commission calculations.

Data suggest that in LGBs with populations greater than 500 and less than 2501, with substantial Indigenous populations, unemployment is lower than in LGBs with lower Indigenous populations (table F.3). This is likely due to many Indigenous

people in small LGBs receiving a CDEP allowance which then does not classify them as unemployed in ABS labour force statistics and that unemployment is generally higher for Indigenous people than for all Australians (ABS National Aboriginal and Torres Strait Islander Health Survey 2004-05, unpublished; ABS National Health Survey 2004-05, unpublished).

The number of local governments by the proportion of Indigenous people is described in table F.4. For a large number of LGBs (78 per cent) Indigenous people comprise up to 10 per cent of the population. There are 56 LGBs (8 per cent) for which the proportion of Indigenous people is greater than 70 per cent.

Table F.4 Number of LGBs by the proportion of Indigenous people
Per cent, 2005-06^a

<i>Proportion of Indigenous people</i>	<i>Number of LGBs</i>
Less than 2%	270
Between 2 and 5%	183
Between 5 and 10%	83
Between 10 and 30%	51
Between 30 and 50%	9
Between 50 and 70%	39
Greater than 70%	56
Total	691

^a Data are based on 691 observations. Population data disaggregated by Indigenous status were unavailable for 29 councils categorised as Indigenous by DOTARS, therefore, these were assumed to have majority Indigenous populations and counted in the 'between 50 and 70 per cent' category.

Source: ABS unpublished; Productivity Commission calculations.

F.2 Revenue raising in ILGBs

This section seeks to explore the differences in the level and composition of revenue raised in ILGBs relative to non-Indigenous LGBs (NILGBs). Specifically, it describes the major revenue-raising instruments, expenditure and fiscal capacity (as measured by the income of the LGB population) of LGBs, by providing comparisons of ILGBs and NILGBs, exploring differences in revenue, expenditure and FAGs on a per person basis.

Sources of revenue

Revenue sources for ILGBs and NILGBs are provided in table F.5. The revenue raised in per person terms for ILGBs varies markedly from those in NILGBs both for the weighted mean and the mean weighted by population.

Table F.5 Total revenue, averages by revenue category
2005-06, per person^{a, b, c}

<i>LGB type</i>	<i>Grants and subsidies^d</i>	<i>Rates</i>	<i>Sales of goods and services</i>	<i>Other</i>	<i>Interest and dividends</i>	<i>Total</i>
Unweighted	\$	\$	\$	\$	\$	\$
Indigenous	4 996	35	1 675	945	83	7 733
Non-Indigenous	1 002	623	652	194	62	2 532
All	1 321	576	733	254	63	2 947
Weighted by population						
Indigenous	4 635	62	1 451	980	69	7 197
Non-Indigenous	193	441	318	184	33	1 169
All	201	441	320	185	33	1 180

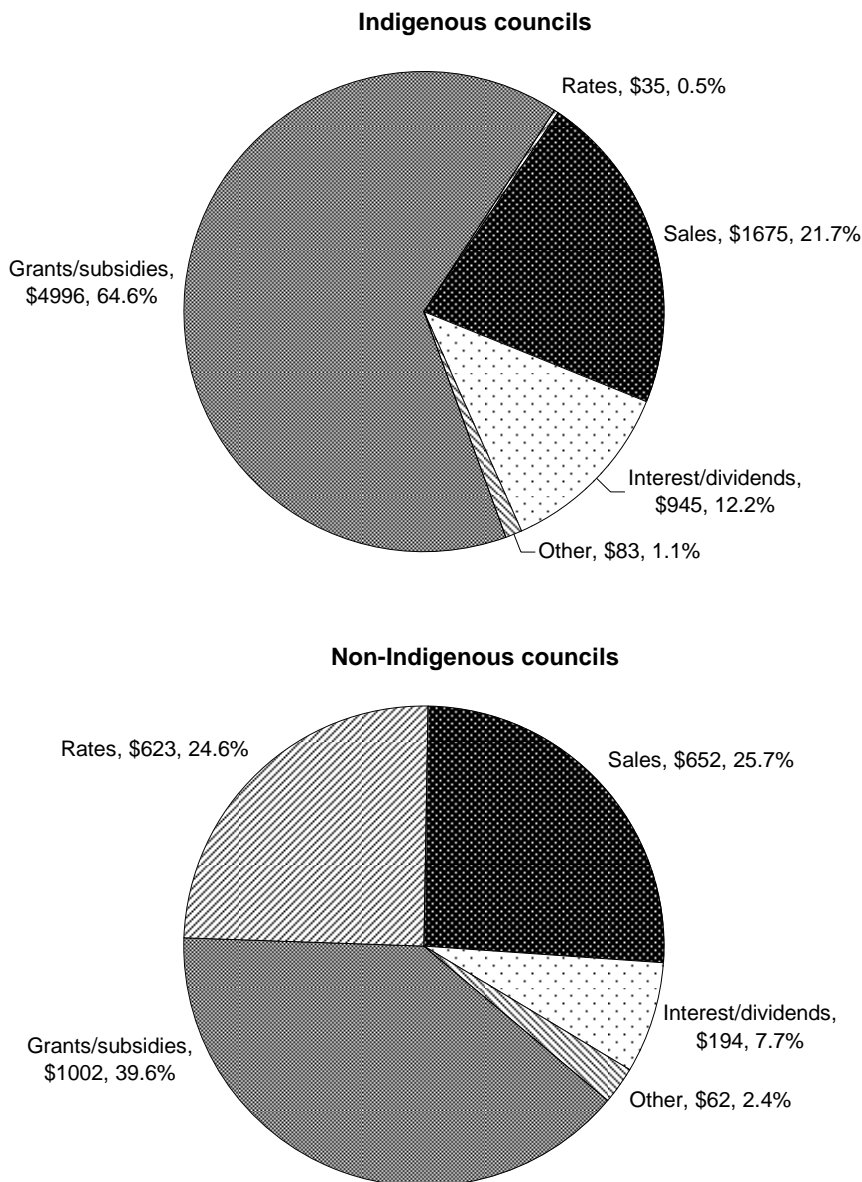
^a Data are categorised as Indigenous or non-Indigenous according to DOTARS classification for 2005-06. The classification of rate equivalent payments depends on the nature of each particular payment. For example, NT poll tax amounts are included under sales of goods and services, whereas, in lieu of rates amounts are included under other revenue. Contract and commission income is treated as service income, and is classified as sales of goods and services. Other revenue also includes fines, developer contributions and other current and capital revenue not classified elsewhere. ^b Data are based on 651 observations including 52 ILGBs. ILGBs' data are likely to be overestimated because missing data are for mostly low population ILGBs that are likely to have little to no own-source revenue. ^c Means are calculated using individual LGBs' data. These differ chapter 2 means for two reasons. First, chapter 2 means are calculated using jurisdictional totals, whereas, in table F.5 averages of individual LGBs are summed. Second, chapter 2 presents weighted means (by population) only (unweighted means are calculated using individual LGBs' observations). Totals may not add due to rounding. ^d Australian Government FAGs and subsidies plus state grants and subsidies.

Source: DOTARS 2007; ABS unpublished; PC calculations.

In per person terms, ILGBs have higher revenue than NILGBs, with the exception of rates revenue. The differences in the revenue raised between LGB types for grants and rates are as expected. Interestingly, sales of goods and services and other revenue for ILGBs is significantly higher per person than for NILGBs. This may be a result of many ILGBs' activities in business enterprises where thin markets exist (discussed subsequently in section F.3 under *Functions and services*). Revenue from some of these business activities may be captured under other revenue, with the remainder under sales of goods and services depending on the nature of each payment (ABS unpublished).

The differences in the shares of revenue sources between ILGBs and NILGBs are shown in figure F.1.

Figure F.1 Revenue of LGBs, by Indigenous status and source
Per cent share, dollars per person, 2005-06^a



^a Data are based on unweighted means. See footnotes to table F.5.

Source: DOTARS 2007; ABS unpublished; PC calculations.

On average, ILGBs raise 69.6 per cent of their total income from grants and subsidies. This is significantly higher than NILGBs which raise 39.6 per cent of their revenue through grants and subsidies. There is also a significant difference in the shares of revenue collected from rates (0.5 per cent in ILGBs and 24.6 per cent in NILGBs).

Proportion of grants to expenditure and own-source revenue to grants

The proportion of total grants to expenditure is higher for ILGBs than NILGBs. The proportion of own-source revenue to total revenue is lower for ILGBs than NILGBs (table F.6).

Table F.6 Grants to expenditure and own-source revenue to total revenue, by Indigenous status
Per cent, 2006^{a, b, c}

<i>LGB type</i>	<i>Share of grants to total expenditure</i>	<i>Ratio of own-source revenue to total revenue</i>
Indigenous	68.7	34.1
Non-Indigenous	17.8	84.8
All	17.9	84.7

^a Data are categorised as Indigenous or non-Indigenous according to DOTARS classification for 2005-06.

^b Data are based on 651 observations and are weighted by population. Data are likely to be overestimated for ILGBs because missing data are for mostly small LGBs which are likely to have little to no own-source revenue. ^c Grants are Australian Government grants and subsidies plus State grants and subsidies.

Source: DOTARS 2007; ABS unpublished; PC calculations.

Financial assistance grants

Australian Government general purpose grants are significantly higher per person in ILGBs, than in NILGBs. Identified roads grants per kilometre are significantly lower in ILGBs, than in NILGBs (table F.7).

Table F.7 Financial assistance grants, by Indigenous status
Dollars, 2005-06^a

<i>LGB type</i>	<i>General purpose grants per person</i>	<i>Identified roads grants per person</i>	<i>Identified roads grants per kilometre</i>
Indigenous	791	112	771
Non-Indigenous	507	176	990
All	504	169	968

^a Data are based on 667 observations.

Source: DOTARS 2007; PC calculations.

Information received during visits suggests that, in most jurisdictions, ILGBs receive significantly higher grant funding per person and that even with that assistance ILGBs still have a paucity of resources.

F.3 Factors affecting revenue-raising capacity

Own-source revenue — rates

Revenue from rates, or rates equivalents, in ILGBs is affected by the rateability, or non-rateability, of land determined by:

- land tenure arrangements
- applicability of rates exemptions to particular types of land
- history of not having to pay property rates
- ability to raise rates equivalent amounts.

There are revenue-raising capacity restrictions facing ILGBs resulting from the existence of non-rateable land (whether this be from land tenure arrangements or exemptions).

Indigenous land tenure, rateability and exemptions²

The capacity of ILGBs to raise revenue through property rates is constrained by land tenure structures. Indigenous people reside on land under different tenure arrangements. Land tenure arrangements by State are summarised in table F.8.

Table F.8 **Indigenous owned or controlled land by State**
Kilometres squared, December, 2006

<i>Land tenure type</i>	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas</i>	<i>NT</i>	<i>Australia</i>
Freehold (inalienable) ^a	–	50	–	–	188 820	46	568 367	757 283
Freehold (alienable)	3 582	48	25 212	438	167	31	10 765	40 243
Old system	–	2	–	–	–	1	–	3
Leasehold	369	–	29 080	161 640	14 909	47	23 123	229 168
Licence	64	–	–	–	25	–	–	89
Aboriginal Reserve	–	–	51	202 353	–	–	–	202 404
Deed of Grant in Trust (Queensland)	–	–	156	–	–	–	–	156
Tenure not stated	167	–	259	5	1	44	2 588	3 064
Total Indigenous land	4 181	100	54 758	364 437	203 923	169	604 842	1 232 410

^a 'Inalienable' implies that the land cannot be sold or mortgaged and the government is restricted in its ability to compulsorily acquire the land. ^b Data may differ from those published elsewhere due to rounding.

Source: Indigenous Land Corporation unpublished.

² The CGC (2001, p. 56) states 'local government representatives noted that legal issues, generally associated with the land tenure in Indigenous communities, sometimes impact on the requirement or the ability of local councils to provide services on community land.'

This constraint is mainly due to the rates-exempt nature of much Aboriginal land, but there are also isolated cases where there is resistance to ratepaying. That is, even where land is rateable, rates cannot always be collected. This is evident in Litchfield Shire Council for example, where rates notices are issued for some Indigenous land but are left unpaid.

In New South Wales, the types of land exempt from all rates under section 555 of the Local Government Act include land that is vested in the NSW Aboriginal Land Council or a Local Aboriginal Land Council and is declared under the Aboriginal Land Rights Act 1983 (Division 5 of Part 2). This may also exempt land from all charges in some circumstances.

In Queensland, section 957 of the *Local Government Act 1993* provides that all land is rateable but generally excludes Aboriginal land other than that used for commercial or residential purposes (Queensland Government, sub. 63). The 34 ILGBs in Queensland have no rateable land, that is, this land is rates exempt.³ Further, even where rates raising is possible, it can be difficult where landowners are not liable to pay rates. For example, one rural shire in Queensland contains a large pastoral property owned by the Indigenous Land Corporation (ILC) which is not liable for rates. The ILC has held the property for over 10 years and although the property is leased to a major non-Indigenous cattle enterprise, the ILC has refused for many years to contribute to rates revenue.

The Queensland Department of Local Government, Planning, Sport and Recreation recognises that the large proportion of conservation land and other forms of non-rateable land in some LGB areas has a significant impact on the rating capacity of local governments (Queensland Government visits 2007). However, while some rates exemptions exist for Indigenous land, the State Government pays an assistance grant to Queensland ILGBs in compensation for the non-rating capacity of the land. Further, under new Queensland (2007) arrangements for Torres Strait Island LGBs, there will be some rateable leasehold land which may enable LGBs to raise additional rates revenue (Queensland Government visits 2007).

In the Northern Territory, top-up funding is considered necessary by the NT Government because of the very restricted capacity to raise own-source revenue for the small, remote councils, including many ILGBs.⁴ NT LGBs have retained a

³ This statement relates to pre-amalgamation status of Queensland councils.

⁴ There are also perceived equity issues in the Northern Territory regarding pastoral leases and mining fees because, generally, pastoral and mining land will be classified as rateable, whereas Indigenous land will not be rateable. According to some NT participants in this study, this is because the base for applying property rates is non-existent in Indigenous communities. Notwithstanding this, an example was given by NT Government officials, whereby the NT pastoralists pay very low rates and lease fees compared to their Western Australian and

moderate level of rating, less than in other jurisdictions. Revenue-raising capacity from rates, however, would increase if leases on NT Indigenous land are implemented because the land will then be rateable. Jabiru Town Council is raising rates from business ratepayers and utilises user charges instead of residential rates.

Reserve land

Information from Western Australia is used to illustrate the implications for LGBs' ability to rate Aboriginal reserve land because the amount of reserve land is significant in that State.

Reserve land is exempt from rates under the *Local Government Act 1995*. However, if a service is delivered to people on reserve land, a service charge may be levied. Where reserve land is leased, the exemption from rates may no longer apply, for example if a business is operating, in which case the lessee is responsible for the rates payment (Department of Indigenous Affairs 2007).

Freehold and leasehold land

Freehold and leasehold lands are subject to rates unless they are held by associations or corporations which are deemed to be charitable or benevolent organisations, which are then non-rateable under local government acts. Many Aboriginal associations and corporations are deemed to be benevolent because they are operating for public benefit. Even where charitable or benevolent status is granted, these freehold or leasehold lands may remain liable for service charges such as provision of sewerage or garbage collection (Dodson 1991; Department of Indigenous Affairs 2007).

The capacity of local governments to raise rates revenue is restricted by land that is held as Aboriginal land under the *Aboriginal Land Rights (Northern Territory) Act 1976*. This land is inalienable and held in trust under a form of 'communal title' (multiple land owners and very few individual surveyed land allotments) which not only makes rates recovery impossible but negates section 77 of the *Local Government Act 2005*, which says in part 'the owner of land in relation to which a rate or charge is levied is liable for the payment of all such rates and charges' (LGANT, sub. 46). Rating of Indigenous land is a major issue currently for the Northern Territory LGBs because many of these areas were unincorporated and therefore unrateable prior to the implementation of the new local government reforms.

Queensland counterparts.

The NT issues described in relation to inalienable land likely relate to South Australia also, as that State is the only other jurisdiction that has a substantial amount of inalienable land.

Voluntary 'rates' and charges

Some ILGBs encourage the use of voluntary payments to raise revenue. This is through both voluntary 'rates' (that is payments in lieu of rates) and rates equivalent charges per head.

The Queensland Department of Local Government, Housing and Sport notes that most ILGBs have a rates equivalent applied and this fee (calculated as a percentage of the CDEP, or Centrelink, payment) is similar to the residential rate level applied in NILGBs.

Further to the Queensland example cited in the rating exemptions section, the ILC offered to make an ex gratia payment of three years rates in 2007. The LGAQ notes however that such payments are at the discretion of the body concerned and therefore cannot be relied upon by LGBs for raising revenue (LGAQ, sub. 11, p. 28). It is sometimes the case that an LGB is at risk of incurring expenses in attempting to collect such revenues, as illustrated by the following Western Australian example (WALGA, sub. 51, pp. 21-22):

The State Administrative Tribunal has made a determination to uphold a claim for an exemption from rates levied by the Shire of Derby/West Kimberley on a pastoral lease in the far North West of the State. The exemption from rates was sought on the basis that the whole of the land was being used exclusively for charitable purposes. The applicant is an organization representing the local Indigenous population, including the Aboriginal elders of the area. While the taxation authorities had recognised the organization as a charity for some purposes, it had, until recently, paid rates. The land is run as a pastoral station and the Council (basing its rating on land use) deemed the property as rateable, as it believed a pastoral station was not a charitable purpose. The Tribunal's decision is based on the view that the pastoral enterprise use is charitable because it serves the social, economic and 'traditional' advancement of a clearly disadvantaged group. This view is at odds with case law on charitable purposes which focuses on the actual use of the land and it is difficult to see that the actual use of the land in this case is any different to any other pastoral enterprise. The decision essentially means that any enterprise run by an Indigenous group is likely to be considered a charitable land use, unless the use can be established to operate to profit individuals, or a group of Aboriginal people that are not disadvantaged. This decision has the potential to seriously erode the rate base of some local authorities. The Shire of Derby/West Kimberley has advised that they are appealing this decision to the Supreme Court. The cost of the appeal is likely to be between \$40 000 to \$60 000. If the Council loses the case it will also have to pay the legal costs of the other party.

According to the NT Government, an implication of a rates exemption is that it may be perceived to absolve the local government from its responsibility to deliver services to the population in the LGB. It is thought, at least in the Northern Territory, that it is better for people residing in exempt LGBs to pay an in lieu 'rate' which in turn implicitly contracts local government service provision. Therefore, some Indigenous people, at least in Queensland and the Northern Territory pay a levy, or a rates equivalent amount. Some local governments operating on Aboriginal land have tended to set general charges based on households as a means of recovering rate equivalent revenues. According to participants in the NT visits a general charge per household can be most useful because it is often difficult to identify the number of people residing in a house. Increasingly NT ILGBs are charging a rate equivalent so the 'no fee' culture has changed somewhat.

Debits from welfare payments direct to LGBs are used in some ILGBs to overcome their constraints on raising revenue either through rates exempt property or lack of ability to collect rates owing. In LGBs such as the Tiwi Island Shire, where most property is unrateable, a rates equivalent is used. This is implemented by individuals signing a deduction form enabling a direct debit from their Centrelink/CDEP payment (through their bank account) to the local government. This works well in some areas. However in others, there is evidence of people changing bank accounts or indicating that less people live at a particular address than is the case to reduce the rates equivalent charge.⁵

Great variation exists over the setting and collection of such charges between the current mix of LGBs in the Northern Territory. According to NT Government Officials (personal communication, April 2007), this is likely to change once the new shires are created under the new local government reforms. If leases on Aboriginal land increase to the extent proposed by the Federal Government then it is possible for LGBs to rate them in the future (LGANT, sub. 46).

Own-source revenue — user fees and charges

Australian and State local government legislation permits LGBs to raise fees and charges from Indigenous constituents.

Queensland LGBs have the capacity to levy service charges and this provides some own-source revenue from services such as solid waste management, water and

⁵ The CGC (2001, p. 56) notes that the reliance on CDEP schemes to provide funding for local government services was another particular concern raised in its inquiry. In relation to any material additional capacity to raise revenue from a rates equivalent charge, according to visit participants in the NT Government, the Indigenous CDEP dollars have been stretched to the upper limit.

sewerage and housing. According to study participants visited in the Queensland Government, councils obtain a contribution to housing maintenance through rentals, however, the rental amounts set are insufficient to cover actual housing related costs.

Although ILGBs may undertake some business operations, most of these do not cover operational costs and those that do (for example, taverns) have conflicting obligations in terms of community wellbeing (limiting alcohol consumption) and maximising profits (Queensland Government Officials, personal communication, April 2007).

According to the SA Government (sub. 64) there is little or no capacity for smaller or remote LGBs such as ILGBs to raise revenue through user charges because of the nature of these ILGBs (small populations and geographical remoteness) which are sometimes characterised by low incomes and high unemployment.

According to the NT Government, fees have not been implemented as successfully in Darwin as in other states' cities, but have been more successful than in other NT LGBs. Some NT LGBs have a general charge for garbage, rent and all other services, whereas other LGBs have separate charges for services. The NT Grants Commission noted that there is some unutilised capacity for NT local governments to raise own-source revenue, even in the small, remote, ILGBs. This is particularly evident when comparing levels and extent of rates, fees, fines and charges with other jurisdictions, identifying that the Northern Territory has a relatively minimal user pays approach.

Own-source revenue from fees and charges in ILGBs is affected by the scope of services provided, the ability of people to pay and the ability of ILGBs to directly access welfare payments from individuals. Indigenous populations, where fees and charges may apply, appear to have a significantly lower ability to pay than other populations (discussed in the following section). This suggests that the fiscal capacity in ILGBs is relatively lower than in NILGBs.

Fiscal capacity of LGBs

The fiscal capacity of LGBs (measured by the incomes of LGBs' communities) influences the ability of their communities to pay rates and rates equivalents. The needs of ILGBs and the factors that influence their fiscal capacity differ from NILGBs. ILGBs typically have a low economic base, serve populations with low personal incomes and generally do not have rateable property (LGAQ, p. 3; table F.3). Indigenous populations (even where some land is rateable) appear to have a significantly lower capacity to pay than other populations.

The relatively low personal income available to individuals in ILGBs compared with LGBs limits the capacity of their local governments to raise any significant own-source revenue. Personal income levels per person in ILGBs are, on average, less than a third that of those in NILGBs. ILGBs, on average, are therefore far more reliant on Australian and State government grant funding for general operational revenue.⁶ Available data suggest that grants in ILGBs are, on average, about 68 per cent of their expenditure. These data are likely to be understated because there are missing observations for 34 ILGBs which receive grants, but data items on other revenue and expenditure are unavailable (for example, Erub Island has a population of 320 and a general purpose FAG of \$1112 per person). Some study participants indicate that some ILGBs are completely reliant on grants funding.

Personal, business and combined income and revenue-raising effort

The fiscal capacity of LGBs was estimated in chapter 5. It comprises business income and personal income (including some welfare payments — those that are recorded through the tax system). Table F.9 shows that personal income per person, is significantly lower for ILGBs, than for NILGBs. The higher business income per person for ILGBs might reflect both mining and energy operations of large corporations and local arts and tourism enterprises.

Table F.9 Income and revenue-raising effort

Per person, average, 2004-05^{a, b}

<i>LGB type</i>	<i>Personal income^c</i>	<i>Business income</i>	<i>Combined income</i>	<i>Revenue-raising effort</i>
	\$	\$	\$	Per cent
Indigenous	5 110	16 999	22 109	11.6
Non-Indigenous	17 170	9 262	26 433	3.7
All	17 157	9 271	26 429	3.7

^a Data are based on 651 observations. ^b Data for 2004-05 are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator. ^c Care must be exercised when interpreting personal and business income because of their estimation.

Source: ABS unpublished; BTRE unpublished; State grants commissions unpublished; Productivity Commission estimates.

Notwithstanding this, data suggest that revenue-raising effort (measured by the ratio of own-source revenue to combined income) is about three times higher for ILGBs compared with NILGBs. Revenue-raising effort is likely to be somewhat overstated for the ILGBs reported here because smaller ILGBs (by population) are not

⁶ For example, the Queensland Government provides untied revenue support through the State Government Financial Aid (SGFA) program. This is in addition to funding provided from FAGs. Other jurisdictions provide similar State government funding to councils.

included in the estimated average. These bodies are likely to have lower revenue-raising efforts.

High costs of service delivery

The implications of a low fiscal capacity are highlighted in this and the following sections, where it is established that costs of services are higher, and governance challenges are greater, in ILGBs compared with NILGBs.

Due to location, many ILGBs face the same challenges as other remote LGBs: higher input costs, the need to provide a wider range of services due to the absence of alternative private or government supplier(s), and higher costs due to factors such as climate and a lack of economies of scale and density, and lack of competition in thin markets.

Service delivery in small, remote LGBs

Size and scale

Many ILGBs are characterised by multiple, small, remote populations. This can lead to higher overheads per person or property relative to larger LGBs and, consequently, more expensive service delivery. For example, diseconomies of scale can be so large that a comprehensive range of services cannot be provided across most of the Northern Territory.

According to Sanders (2006), many LGBs comprise less than 200 people, which is insufficient for self-funding infrastructure provision and maintenance. Where Aboriginal residents are differentiated from the mainstream LGB community (for example, Halls Creek), the service provision to Aboriginal residents requires subsidisation from the non-Indigenous population. Where the entire LGB population is Aboriginal, there is likely to be an under provision of services due to a lack of funds.⁷

Functions and services

There are core elements of services that local government is generally expected to deliver. However, the scope, level, and quality of these services differs across LGB

⁷ Sanders (2006, p. 10) notes that the argument of recent regionalisation policy is that these populations are too small [populations of less than 1000] to sustain viable community government councils.

communities, largely due to remoteness of some populations.

The roles and responsibilities of small, remote ILGBs range from providing rubbish collection services to running the local shop and CDEP programs. Some ILGBs provide little to no services to Indigenous residents, particularly in town camps and settlements that are adjacent to mainstream communities but which do not receive services such as garbage collection or water supply (Commonwealth Grants Commission [CGC] 2001; Department of Indigenous Affairs 1999). Some ILGBs focus on core services such as rubbish, roads and sanitation services. Others provide these core services together with a wide range of other services (Tiwi Island is an example). Examples of these wider services are operating business enterprises in arts/culture and tourism as well as providing many basic business activities such as postal, banking and hotel services.⁸

Dual service delivery can also occur where a LGB provides a service to the town residents and replicates this service to remote, separate Indigenous residents in the LGB. Other LGBs do not provide services directly to separate Indigenous populations because these services are delivered within the township and may be accessed by Indigenous people (Department of Indigenous Affairs 1999).

Infrastructure in small, remote LGBs

The Department of Indigenous Affairs (1999) claims that in order for local governments to adopt responsibility for the maintenance of infrastructure on Aboriginal lands, this infrastructure needs to be brought up to the standard which exists elsewhere within the LGB area. Recent reports into local government financial sustainability suggest that these infrastructure needs remain.

According to the Law Reform Commission of Western Australia (2006) the comparative sub-standard of infrastructure creates a cycle for levels of welfare in remote settlements, indicating a causal relationship between Indigenous disadvantage in Western Australia and the lower level of infrastructure and essential government services provided. It is this sub-standard infrastructure starting point which is seen as a barrier to local government involvement in Indigenous communities (CGC 2001). The barrier may be that such infrastructure would require grants funding because there is no own-source revenue capacity to pay and the responsibility amongst the different spheres of government for its provision has not been settled.

⁸ Core and other (non-core) services identification and focus is a major part of the NT Government's New Local Government reforms, to identify services that local government should be providing and assess whether there are funds for non-core services after that, recognising that the breadth of service types will vary across council type.

Another issue identified as creating a disincentive to LGBs investing in infrastructure is uncertainty about land tenure. In Western Australia, access to reserve land declared under the *Aboriginal Affairs Planning Authority Act 1972* is by permit only. The essentially privately owned nature of this land has led to a reluctance by local governments to provide infrastructure and services, such as road maintenance, which are deemed to be for the benefit of the wider general public. One of the ways in which this has been resolved is to declare the roads to be public under the *Land Administration Act 1997*. However, this clashes with the original intention of the lands being isolated for social and cultural reasons (Department of Indigenous Affairs 1999). An alternative arrangement is through agreements between the service provider — which may be the local government — and the Aboriginal trust or corporation charged with managing the reserve as has occurred in the Northern Territory (Dodson 1991).

Finally, there is a reluctance of local government to invest in, or to maintain, infrastructure assets because of the significant costs involved.

There is anecdotal evidence, however, that partnership agreements between the different spheres of government and Indigenous groups improve infrastructure provision and service delivery (CGC 2001, p.175).

Governance

A framework for improving governance is provided in chapter 8. This framework, while generally applicable to LGBs, may not be able to be adopted by small, Indigenous, remote LGBs because of their unique characteristics, particularly if assistance is not provided. This section identifies governance issues for ILGBs (and provides some references that discuss these) but does not develop them in detail. They are likely to *indirectly* impact upon ILGBs' ability to raise revenue and affect expenditure. These include:

- lack of available skilled labour (Cleary 2006; Costello and O'Donohue 2005; LGANT unpublished; NT Department of Local Government, Housing and Sport [DLGHS] unpublished; Queensland Government, sub. 63)
- lack of policy and program coordination between spheres of government (Cleary 2006; Costello and O'Donohue 2005)
- poor asset management (NT DLGHS unpublished)
- various governance strategies (application of differential rates in ILGBs [Dodson 1991; Department of Indigenous Affairs 1999]; development of entrepreneurship [CGC 2001], development of skills for Indigenous people [DOTARS 2007; NT DLGHS unpublished], central and/or shared service arrangements [(CGC 2001; Framework Service Agreement between the Shire of Broome and the Aboriginal

Communities of the Dampier Peninsula and Bidyadanga, July 1999; LGANT unpublished])

- lack of political representation and Indigenous engagement in council (Dodson 1991; DOTARS 2007)
- differences between Indigenous peoples' culture and the cultures of those predominantly managing council operations (Cleary 2006; Mowbray 2005; Sanders 2006a).

F.4 Local governing bodies — case studies

This section provides information on three LGBs chosen as case studies. A series of interviews was undertaken in December 2007 with three local governing bodies that service Indigenous residents. Two are majority Indigenous population LGBs (Tiwi Islands Local Government and Shire of Halls Creek) and the other is a minority Indigenous population LGB (Port Augusta City Council). These LGBs have been chosen to illustrate the diversity among LGBs servicing Indigenous populations, with a focus on the issues outlined earlier in this appendix.

The views expressed in this section reflect information collected by interview with LGB officials and documentation such as strategic plans and annual reports, unless otherwise referenced. These are supplemented by available data (ABS and DOTARS unpublished). Table F.10 provides a statistical profile of economic and demographic characteristics of these LGBs. Table F.11 provides a statistical profile of revenue and expenditure for these LGBs. Some key indicators, consistent with earlier material in this appendix, are presented in table F.12.

Table F.10 Economic and demographic profiles of the case study LGBs
2006, 2005-06

<i>Variable</i>	<i>Unit</i>	<i>Tiwi Islands</i>	<i>Halls Creek</i>	<i>Port Augusta</i>
Economic				
Median individual income	\$ per week	213	248	418
Median household income	\$ per week	620	696	798
Unemployment rate	%	6.5	5.6	6.9
Demographic				
Indigenous population ^a	%	88.2	65.1	16.2
Indigenous population ^a	no	1 868	2 378	2 267
Total population	no	2 117	3 655	14 024
LGB area sq km	no	2 115	142 908	1 193
Total road length km	no	905	1 251	408

^a The ABS population statistics are recognised as being significantly understated.

Source: ABS (unpublished); DOTARS (2007); PC calculations.

Table F.11 Revenue and expenditure profile of case study LGBs
2005-06, \$'000s^a

<i>Variable</i>	<i>Tiwi Islands</i>	<i>Halls Creek</i>	<i>Port Augusta</i>
Revenue			
Rates	342	941	6 553
Total all governments' grants	16 219	6 015	8 694
FAG (\$ per person)	415	835	211
General purpose grants	447	2 400	2 812
Roads grants	613	700	203
Total Commonwealth grants	1 059	3 100	3 016
Sales of goods and services ^b	2 872	742	4 208
Interest	181	50	177
Fines	0	5	23
Other revenue ^b	3 366	102	500
Total own-source revenue	6 761	1 840	11 461
Total revenue	22 980	7 855	20 155
Expenditure^c			
Transport and communications	0	3 234	2 232
Housing and community amenities	10 257	1 565	1 998
General public services	4 351	301	2 378
Recreation and culture	352	994	2 361
Health	0	201	5 449
Social security and welfare	1 100	321	2 147
Education	74	0	0
Public order and safety	20	92	212
Other services ^c	11 545	388	3 640
Operating expenditure	27 629	7 078	20 046
Total expenditure^d	27 699	7 140	20 607

^a Data are expressed in \$000s except where indicated. ^b See footnotes to table F.5 for inclusions in sales of goods and services and other revenue. ^c Data categorised by expenditure category may be unreliable. 'Other' services includes expenditures not classified elsewhere, including fuel and energy, construction, agriculture, forestry and mining. ^d Capital and operating (recurrent) expenditure.

Source: ABS (unpublished); DOTARS (unpublished); PC calculations.

Table F.12 Indicators of revenue-raising effort and fiscal capacity
2004-05, 2005-06^a

<i>Variable</i>	<i>Unit</i>	<i>Tiwi Islands</i>	<i>Halls Creek</i>	<i>Port Augusta</i>
Total all governments' grants	\$ per person	7 661	1 646	620
Combined (personal and business) income ^a	\$ per person	16 818	15 547	20 956
Own-source revenue	\$ per person	3 194	503	817
Own-source revenue to total revenue	ratio	0.29	0.23	0.57
Own-source revenue to grants	ratio	0.42	0.31	0.13
Own-source revenue to combined income (revenue-raising effort)	%	18.1	3.1	3.7

^a Data for 2004-05 are adjusted to 2005-06 dollars using the ABS non-farm GDP deflator.

Source: ABS (unpublished); DOTARS (unpublished); PC calculations.

Tiwi Islands Local Government

A case study of Tiwi Islands Local Government (TILG) is featured in this section. TILG is an example of a majority Indigenous population, separate, remote LGB. It might be described as drawing relatively heavily on its fiscal capacity, that is, it has a high revenue-raising effort (18.1 per cent) compared with other LGBs.

The Tiwi Islands local council functions are currently carried out by the TILG. A prospective body, the Tiwi Islands Shire Council, is undertaking establishment of the new Shire under the NT Government's new local government reforms. The Tiwi Islands Shire Council will come into full effect on 1 July 2008. The information provided in this case study describes the situation of the TILG. In addition, the case study mentions how changes are taking place under the auspices of the Tiwi Islands Shire Council in order to improve financial accountability and strength and to improve service provision to residents.

The Tiwi Islands are situated 80 km north of Darwin in the Arafura Sea. There are two islands, Bathurst Island and Melville Island, with a total land mass of 8320 square kilometres and a population of approximately 2235 in 2007 (1450 in Nguiu, 400 in Milikapiti, 335 in Pirlangimpi and 50 in Wurankuwu). TILG was established in 2001, when the previous community government LGBs in the three main communities were amalgamated to coordinate local government activities and governance. It has an unemployment rate of 6.5 per cent, and a median household income of \$620, according to 2006 Census data.

Service delivery in TILG

The TILG local government area has well defined, concentrated populations so the LGB can be reasonably sure that it is servicing most of the community if it targets the main community centres. There are some small outstations, but, most constituents are easily able to access LGB services.

There is a high cost of service delivery for the TILG due to a lack of economies of scale of the communities and levels of service, and its remoteness, with supplies delivered by sea or air transport. Further, targeting services to the Indigenous population is more expensive than servicing the non-Indigenous population. Factors here include dealing with low levels of literacy and English being the second language for a high proportion of residents. In addition, there can be confusion over what services TILG is responsible for and what services other agencies are responsible for. As a general comment, all services need to carry out intensive education and consultation campaigns to ensure residents understand the services available and the benefits of using services. For example, providing public health services can involve cleaning houses for lice, cleaning the community swimming pool, ensuring good medical services (medivac for serious cases). Effectively explaining why the house became lice infested to the householder and why the householder would want to eradicate the lice can be difficult. The provision of health services is a joint effort between the health agency and TILG.

Dog control is a major issue in TILG particularly in Nguuu (the largest community). A by-law limits the number of dogs to two per household. The by-law is difficult to police. This law is constantly ignored. Dogs are often dangerous, many have open sores, suffer mange and other health issues that have public health implications. Dogs are revered as part of the family home and are allowed to roam through the community, often in packs. To address these problems a vet service is brought in by TILG to de-sex pets and there is an animal registration service.

A positive example of service provision is garbage collection. Garbage collection is an essential service provided by TILG. Very frequent (daily) services are provided in communities such as Pirlangimpi. The regular garbage services are an essential element in improving the overall health of residents.

The new shire council will be required by law to concentrate on a set of core functions such as garbage collection, roads and lighting. This focus on core services aims to ensure the shire expends resources on the basic requirements so that the communities will have a reasonable standard of services. The shire may take on other services through funding agreements with agencies, but only on the basis that services are cost neutral or provide a financial gain to the shire. In the past there have been many instances of government agencies expecting TILG to provide

services at a certain level, but not providing sufficient funding. This has resulted in cross subsidisation and a drain on the TILG resources.

At present TILG carries out agency services such as the post office and has funding agreements for services such as child care, recreation and youth programs and night patrol.

The new NT shires, as a collective, are negotiating improved funding agreements with Australian Government agencies. The negotiations involve ensuring that the Australian Government understands that there needs to be sufficient funding provision for administrative overheads, vehicle replacement and maintenance, and superannuation to provide the service properly. TILG often feels pressured to take on a service as a community service obligation when no one else will provide it, and then takes funds from another service to meet expenses, potentially leaving these other services with a funding shortfall.

The postal and banking services are similar examples. If Australia Post wants to continue to provide a service in remote locations, it will need to pay for this in full. The TILG appears to be the only real choice of provider currently for these types of agencies.

It is a critical time for Tiwi (and other ILGBs) with the NT Government's latest reforms regarding provision of services at less than cost recovery. There is going to be considerable transparency as to full costs of services and where revenues are actually spent, and there will be explicit recognition up-front that if an organisation wants the LGB to provide a service, the relevant agency must pay for this in full.

Land tenure and land council issues for TILG

The Tiwi Islands comes under the jurisdiction of the Tiwi Land Council. Leasing must be negotiated through the Tiwi Land Council, except for Nguiu. In Nguiu, the Australian Government has negotiated a 99 year lease with the Tiwi Land Council. The Tiwi Islands Shire Council is negotiating with the Australian Government to obtain sub-leases and licences over roads, ovals and so on. TILG works cooperatively with the Tiwi Land Council on providing services to communities, however, the new shire will take the opportunity to strengthen and formalise the relationship between the two bodies. This can be an issue as there is no memorandum of understanding between the Land Council and TILG.

Own-source revenue raising

One way TILG raises own-source revenue is through rates equivalent payments. Almost everyone in the community pays a per house rates equivalent amount. There are schemes in place for collection of this with varying levels of success. The rates equivalent charges are calculated based on benefits received — for example a three bedroom house is charged at one amount, a 4 bedroom at a higher amount and a newer block home is charged at the highest level.

Deductions from Centrelink, or CDEP payment is the main collection mechanism, with the agreement of the person receiving the welfare or CDEP payment. Most people are reconciled to paying for the services they receive, but it is easy for a person to stop the payment and then the only way to collect payment is to convince the constituent to sign a new bank deduction authority or make payments direct to TILG offices. It can be difficult to obtain payments from defaulters, however there is a rule that no maintenance will be done on a house until the occupier pays rent.

It is proposed that in future Territory Housing (a Northern Territory Government agency) will be responsible for all community housing on the Tiwi Islands. When Territory Housing takes over the housing function (post the reforms), it will be responsible for collecting the rent and the Shire will then charge Territory Housing a rate, eliminating the collection from householders. The new arrangements with Territory Housing will be more rigorous in calculating the assessments and should provide greater scope for the Shire to collect rates revenue.

It is expected that Territory Housing will introduce increased rigour and fairness in the allocation of housing. At present there are instances where families simply move into vacant houses with no reference to a waiting list or allocation priority.

There is also a transport fee per person, per week, for the community bus which then provides bus services between communities. This provides partial cost recovery.

There are two major commercial enterprises on the Tiwi Islands. One is a forestry company and the other carries out sand mining. Both of these companies are heavy users of infrastructure, particularly roads. There is an arrangement between TILG and the companies for the payment of a service charge. The new shire will negotiate special rates with both companies in order to ensure the shire is fully compensated for the services it provides to these major users.

The other major category of revenue is other recurrent revenue which for TILG comprises mainly commercial activities (54.2 per cent in 2005-06, after subtracting insurance claims from total other recurrent revenue). These are income received for providing contracted services and commissions received on various activities.

These (non-core) services are, however, under re-negotiation with the Australian Government and other funding providers. The Australian Government has shown an understanding that TILG has been subsidising these services and the TILG anticipates that the Australian Government will contribute the full cost to the Shire (or another provider) to run these non-core services in the future.

Shire of Halls Creek

A case study of Shire of Halls Creek (SHC) is featured in this section. SHC is an example of a majority Indigenous population, separate, remote LGB. It might be described as drawing relatively lightly on its fiscal capacity, that is, it has a low revenue-raising effort (3.1 per cent) compared with other LGBs.

The SHC is a WA ILGB. Halls Creek is geographically isolated, located over 350 km from Kununurra (the nearest town with a population over 5000 people), 1288 km from Darwin and 2873 km from Perth. It is a physically large Shire covering 142 908 square kilometres of predominantly desert and pastoral country. Halls Creek is the fourth fastest growing shire within Western Australia. The Shire's population is estimated to be 3791 while the town's population is estimated to be 1300 in 2007. Approximately 80 per cent of the Shire's population are Indigenous Australians and almost 60 per cent live in remote settlements, but regularly commute to town for the purchase of goods and services. The average population age is 27, the third lowest in the State. It has an unemployment rate of 5.6 per cent, and a median household income of \$696, according to 2006 Census data.

Currently there is a State Government response to Indigenous issues including child protection and other initiatives generating a huge amount of activity in Halls Creek together with a Commonwealth-WA bilateral agreement. The SHC is the proposed trial shire in the recent bilateral agreement whereby on 1 July 2008 SHC is expected to take over delivery of municipal services to the Indigenous communities (*Bilateral Agreement on Indigenous Affairs Between The Commonwealth of Australia and The State of Western Australia 2006 – 2010*). The SHC Acting CEO reports that this is unachievable:

To do this we would need to be reimbursed financially and have all the resources in place (which we don't even have to pay for what we currently do and we do not have our normal staffing level in place to do our normal functions). The MUNS project was

made without agreement with the SHC. These agreements are negotiated between Commonwealth/State/Land Councils and these sorts of arrangements are widespread where local council is not included. This would not be the case in a community where the white population is the majority, council would then be consulted.

Service delivery in SHC

There are several Indigenous fringe communities in SHC and 48 surrounding communities, (6 major communities) with 250 people and above. The SHC acts as a hub for servicing these communities. There are 42 other communities which have between 20 and 500 people. A large proportion of the Indigenous population is in the remote communities. This presents challenges to the SHC in providing services. The main role of the SHC is to maintain the town, including the facilities such as the recreation centre, library and so on. The Acting CEO reports that the SHC also has a major role in maintaining the local road network but is significantly under resourced for that task.

The WA Government noted that there are difficulties for Indigenous communities where LGBs are not servicing them adequately. The Halls Creek Aboriginal community explored the possibility of breaking away from the SHC, however, the *WA Local Government Advisory Board* reported that both entities under such an arrangement would be unsustainable.⁹ Some WA ILGBs have been financially sustainable (WA Government Officials, visits).

The SHC Acting CEO indicated that:

Normally in a shire where there are remote communities (cited a similar shire “down south”) the local government body would be the provider of the basic services such as environmental health (for example waste removal and dog control). Here the SHC provides these services to the town only. There is WA Department of Health funding to SHC to provide assistance to Aboriginal communities to provide environmental health services. We do go out from time to time and look at things but have no regulatory power to provide services. For example:

- with a water supply problem, SHC plays an advisory role only whereby they would receive information about supply contamination and advise the remote community to boil their water or arrange for bottled water supplies
- the SHC provides advocacy services for the remote communities if requested
- if people are having issues with buildings, the SHC gets the building surveyor out there to provide advice.

⁹ Some ILGBs in WA have been sustainable. This has depended, inter alia, on the entrepreneurial ability of the LGB in deriving other own-source revenue (WA visits).

The remote communities, some 250 kilometres away from Halls Creek, are often cut off in the wet season when the roads are closed. While the State Government (through emergency services agencies) responds to needs generally with aircraft, the problem for the SHC is a resulting influx of itinerant people in town who have no accommodation, which leads to an increase in anti-social conduct. The SHC cannot stop the influx of people and finds it very difficult to manage.

There are council provided drop-in centres such as youth centres. Most of the cost is in management and administrative time because there are so many agencies of higher levels of government that SHC has to deal with in relation to these programs. The Acting CEO notes that at times he has struggled to keep abreast of even what programs are operating and by whom. Further, he indicated that everything the SHC does takes longer with the Indigenous community. This adds to SHC operational expenditure but such costs are difficult to quantify.

Regulatory and legislative constraints on revenue raising

Regulation, legislation and compliance issues are a major burden. The Acting CEO interviewed gave notice to resign his employment over this issue in November 2007 when the Department of Local Government and Regional Development, complained that the SHC *2006 Statutory Compliance Return* relating to the Local Government Act had not yet been completed (due on 31 March 2007). According to the Acting CEO (who once did this type of compliance reporting as a consultant), to complete the return properly and provide meaningful and relatively accurate information takes a lot of time and effort (about a week to satisfy himself that things are being complied with). At the time of the request follow-up by the Department, the Acting CEO had pressing community issues to deal with such as a chlorine gas leak in the main street and some major safety compliance issues to attend to in keeping the airport operating. Legal advice was sought by the SHC because the Acting CEO was uncomfortable about 'just ticking the boxes'. The Acting CEO commented:

I have been reduced to destroying dogs when we lost our ranger because no one else was available. When you are in crisis management mode it is very difficult to do strategic planning or proactive management.

There are multiple layers of government involved in service delivery and approvals processes in Halls Creek whereas in a mainstream WA council the local government is the main authority.

Land tenure and land council issues for SHC

The SHC is responsible for the whole shire, much of which is in remote communities, but in many cases are under land council (Aboriginal Land Trust control). The SHC however is prohibited from entering unless invited. For example, if there is a dog control problem, SHC has to wait to be invited by the Land Council before entering to provide assistance. So the SHC is responsible but experiences difficulties in providing core services. In these cases basic or essential services are provided by community corporations (which are resource centres funded by the Australian Government). In a recent example cited, however, a community corporation providing these services became dysfunctional.

Under the new bilateral agreement arrangements, an issue for SHC is that historically services to people residing in outstations (that is, within Land Council boundaries) were established under arrangements which differ from those in other councils that have remote communities. Residents in these outstations are not ratepayers and the SHC under normal conditions would be servicing these people. In any other local governing body the Acting CEO has worked in, the whole community is provided at least the basic municipal services (public health, planning and building compliance, roads, rubbish) by local government. Given this, the proposed timeline for the introduction of municipal service delivery (1 July 2008) is considered short by the SHC and management is unsure of the associated funding.

Another issue for the SHC is that parts of the Health Act apply on Aboriginal land and the Building code is an Australia-wide law regardless of location. If there is an issue of a public health risk nature, such as food poisoning, then the SHC authorities can deal with it at anytime. This is where the Health act overrides the Land Councils. Other sections of the Health Act are, however, overridden by the Land Councils. The Building Code overrides the Land Councils but the SHC reports that it does not have the resources to provide inspections to all the remote properties. The SHC can apply the Building Code, but for example, there are some requests for SHC to issue demolition orders on residences. However, there are families living in these houses and if demolished, there will be social issues, such as homelessness and dwelling overcrowding to contend with, so the SHC retains these dwellings.¹⁰

Own-source revenue raising in SHC

The SHC has a very limited rate base. The communities other than in the main town

¹⁰ To illustrate the housing shortage an example was given where in the last few months the Coroner's inquiry into suicides (based on Fitzroy Crossing) identified that there is a shortage of about 800 houses in the Kimberley region and SHC estimates roughly about 120 of these are in Halls Creek.

are unrateable. According to the Acting CEO, a rates equivalent (as is common practice in the NT) cannot be charged. Further, even if the communities were rateable, it is perceived that there is no financial capacity in the community to pay rates. The Acting CEO indicated that there probably is the willingness to pay if SHC provided the service, but there is little capacity to pay.

Further, fees are limited because there are few services provided to the communities, so SHC charges few user fees. SHC provides some fee-based garbage services to Aboriginal communities (where a satellite community or suburb of Halls Creek), but reports that it is often hard to collect the fee. The Acting CEO notes:

... strategies for trying to get payment for waste services are not generally useful in the Halls Creek communities because there is an absolute inability to pay.

The SHC sometimes provides services such as dog control to its remote communities, but that is funded through an arrangement it has with the WA Department of Health.

Port Augusta City Council

A case study of Port Augusta City Council (PACC) is featured in this section. The PACC is an example of a minority Indigenous population, integrated, urban LGB. It might be described as drawing relatively lightly on its fiscal capacity, that is, it has a low revenue-raising effort (3.7 per cent) compared with other LGBs.

The PACC is a non-ILGB in South Australia, with a population of 14 024 (and growing), of which, 16 per cent is Indigenous. Port Augusta is situated at the head of the Spencer Gulf, close to the Flinders Ranges. To the west and south-west lie hills which once marked the territory of the Nakuma Aboriginal tribe. It has an unemployment rate of 6.9 per cent, and a median household income of \$798, according to 2006 Census data.

The majority of the permanent Indigenous population live in the Port Augusta community. There are also two segregated groups.

- The Davenport Community is essentially an Aboriginal reserve with about 40–50 homes and a population of about 200 people (down from about 400 a few years ago). The community lives in very basic conditions located about 3 kilometres outside the city. The reserve was previously managed by the Davenport Community Council Inc. (which still exists) but with cuts to Commonwealth funding (previously about \$300 000 per year Commonwealth Municipal Services Program funding, to provide basic municipal services including roads) they are unsupported. PACC has no responsibility for this community.

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- There has been pressure on PACC from the Commonwealth to pick up these services but it has resisted in part through the LGASA because there are about 6 councils around SA that have similar reserves. The PACC may have some legal obligations that are yet to be resolved (the CEO says council is likely to have municipal obligations at least for people within the LGA boundary). The community can use the PACC library and pool facilities but the PACC is not, for example, maintaining its roads. The community is relatively permanent and PACC management indicates that Davenport people hardly use facilities in town. The CEO notes that PACC would be requiring extra funding from the Commonwealth if it was to service Davenport as part of the Commonwealth Government’s ‘normalisation’ process. The CEO indicates that there needs to be a much longer transition period — conditions are not much better than in the 1960s — so if the council takes this on it does not want to be held responsible for offering sub-standard conditions and, therefore, wants conditions improved first. Further PACC is not consulted about arrangements probably because the Aboriginal Lands Trust (ALT) owns these lands.
 - The rentals from Housing SA (perhaps in arrangement with the ALT) are much lower than they are in Port Augusta town and this provides an incentive for people to stay together with proximity to the community’s homeland. PACC sees that area as one large private property and cannot envisage how this would be rated without division into many separate titles within the land area.
 - The other group is a transient population that moves into the city, especially in summer, from the Anangu Pitjantjatjara Yankunytjatjara lands in the north and other locations. The population is difficult to service but there has been improvement in PACC’s management of the transient population in recent times. The whole city of Port Augusta is now a public dry-zone (where people can consume alcohol only in private and licenced premises, and this regulation has been extended for a number of years by the State Government due to positive community feedback). PACC now has many less itinerant people coming into town since prior to the regulation. It was 600 to 700 people in summer previously. At the same time Port Augusta has had a transitional housing facility built by the State Government (for about 70 people but had about 15 people staying in December 2007). The facility is next to the Davenport property and is owned and run by the State Government to meet temporary accommodation needs.

Service delivery in PACC

Beyond core services, other services provided by PACC to the Port Augusta

community are a 'sobering up' unit, a mobile assistance program and a needle exchange program.

Currently PACC provides a partial rubbish collection service to Davenport through a contractor. PACC management notes it would probably be more expensive to provide services to the separate Davenport community than if the population integrated and it could continue to provide a single, centralised service.

According to the CEO, servicing the Indigenous population costs PACC no more than the non-Indigenous population. PACC has no Indigenous specific programs. A large proportion of PACCs Indigenous population is unemployed, however, many Indigenous people are participating in TAFE courses and PACC envisages that this training, coupled with increased opportunities from the growing mining sector, will result in greater workforce participation by Indigenous people in Port Augusta. A specialised staff member is employed to manage Indigenous specific issues (within programs that are for the whole community), so there is a small cost but Indigenous specific programs are Commonwealth–State initiatives. The council has many Indigenous employees but wants to increase representation because it is well below the 17 per cent of the population. PACC service delivery has improved through better communication with community members.

Areas of service that PACC has moved into are security camera (owning and running) and crime prevention programs. These are needed for the whole community, but the PACC CEO noted:

... it is fair to say that a higher proportion of incidents involve Indigenous people. We have received some grants/subsidies in purchasing the cameras but not for monitoring and for our IT staff maintaining these. However, the annual cost is very small in our budget.

With health and education services, PACC works in close liaison with Australian and State government agencies.

A greater proportion of the population accessing the sobering-up program is Indigenous. There is no user fee charged by PACC but these services are heavily subsidised (about 75 per cent) by other spheres of government. PACC has a special needs facility where it assists children with a disability and it provides both aged and child care services but these are not specifically targeted to Indigenous people.

Land tenure and land council issues for PACC

The PACC receives an ex-gratia payment in lieu of rates from the ALT of about \$15 000 per year which is a token amount, but council is happy to get some funds. It does not subsidise the service, except for providing a little administration. PACC

considers that it is obliged to provide a token rubbish service as a result of this payment but the Commonwealth bears the main cost for environmental health services. PACC officers go into Davenport to provide assistance on occasion when asked to, but the Davenport community does not want council entering their land without permission. PACC entry rarely requires a permit, it is more a courtesy to telephone and let someone know staff want to access land for a particular reason. This is generally not a problem. Notwithstanding this, there have been times when PACC has accessed reserve land and people have resisted PACC services (particularly with road and dog services). There are some occupational health and safety issues for PACC in relation to servicing segregated communities which could be helped through a long term integration program.

Own-source revenue raising in PACC

Rates are paid by Indigenous people in the Port Augusta community or by Housing SA. PACC used 22 sub-categories under three differential categories (urban, non-urban and shacks) to set rating levels in 2006-07. The adoption of a self-imposed capping strategy delivered a rates increase of approximately 6 per cent for each differential rating category. The PACC management reported no particular issues with rates revenue raising.

With regard to fees and charges, most PACC services are provided fee-free with the exception of pool entry charges, effluent drainage charges, rental fees for halls and other community facilities, cemetery and stable leasing fees (City of Port Augusta 2006-07 Budget Papers). The PACC management reported no particular issues with fees and charges revenue raising.

G Residential rates incidence in the City of Charles Sturt

As discussed in chapter 7, due to data limitations, it has not been possible to estimate the incidence of council rates *within* each local government area. Rather, in chapter 7 estimates of average rates incidence were provided across local governments, which reflect differences in expenditure levels across local governments rather than rates structures within local government areas. In this appendix, some insights into the distribution of residential rates incidence are provided at the postcode level within the City of Charles Sturt (South Australia), using published personal income data from the Australian Tax Office (ATO) and the values of residential rates as provided by the City of Charles Sturt.

This appendix is structured in two parts. Section G.1 briefly discusses the data sources used to derive the estimates of residential rates incidence. Section G.2 presents the estimates of incidence within the City of Charles Sturt.

G.1 Data sources

The aggregate after-tax personal income of residents in each of 15 postcode areas of the City of Charles Sturt was derived from the ATO Taxation Statistics for 2004-05. This included information on the number of taxable individuals, values of taxable income and net tax paid, which were then used to derive an estimate of the average after-tax income per taxpayer for the 15 postcode areas.

The City of Charles Sturt provided the Commission with data on the value of residential properties and the number of residential properties for each postcode area.

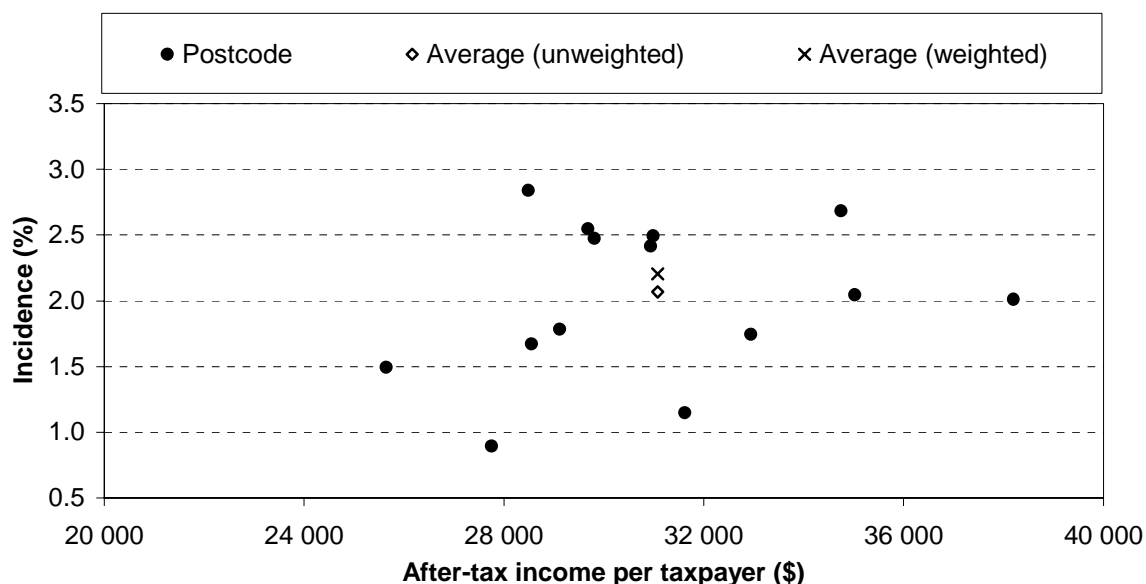
One of these postcode areas (Ovingham, 5082) was excluded because it straddles an area partly outside the City of Charles Sturt. Other suburbs which are also part of neighbouring local government areas are Devon Park (postcode 5008) and West Beach (postcode 5024). Although the data for these postcodes has been included in the analysis, the estimates of average incidence for them should be treated with

particular caution.¹ The reported incidence rates for these postcode areas are likely to be underestimated as the available income data are for the entire postcode areas. Table G.1 at the end of this appendix provides a summary of the rates and income data used for the rates incidence estimates.

G.2 Estimates of residential rates incidence

The incidence of residential rates at the postcode level for the City of Charles Sturt is illustrated in figure G.1. The highest average incidence of residential rates was 2.8 per cent for average after-tax income per taxpayer of \$28 491 (postcode 5023).

Figure G.1 Residential rates incidence — City of Charles Sturt
2004-05^a



^a The incidence for each postcode refers to the total residential rates paid on property divided by total after-tax personal income. The average unweighted residential rates incidence for the City of Charles Sturt refers to the total residential rates paid on property divided by total after-tax personal income for all postcodes. The average weighted residential rates incidence for the City of Charles Sturt is derived using the residential rates incidence for each postcode and the corresponding weight for each postcode based on its share of residential properties relative to the sum of all properties in the council.

Source: ATO (2007); City of Charles Sturt (pers. comm., March 2008).

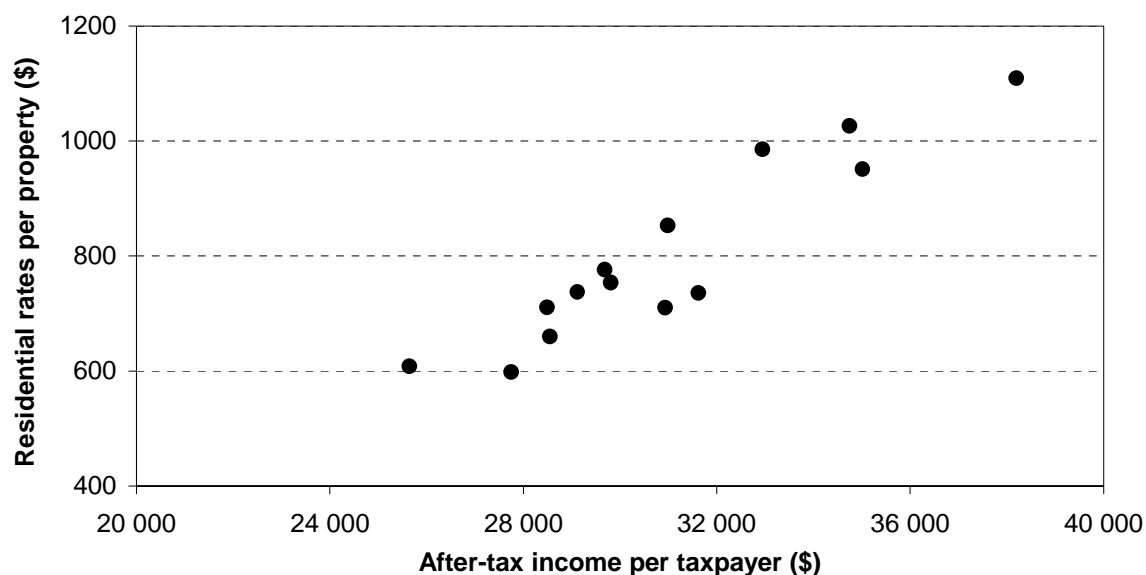
The lowest average incidence of residential rates was 0.9 per cent for average after-tax income per taxpayer of \$27 755 (postcode 5013). For the entire City of Charles Sturt, the average residential rates incidence was 2.1 per cent (after-tax

¹ Postcode 5008 has five suburbs (Croydon, Devon Park, Renown Park, Ridleyton and West Croydon) while postcode 5024 is made up of Fulham Gardens and West Beach.

income per taxpayer of \$31 080). The weighted average residential rates incidence for the City of Charles Sturt, which takes into account the number of residential properties in each postcode relative to all residential properties, was 2.2 per cent.

The relationship between the average residential rates per property and the average after-tax income per taxpayer for each postcode are shown in figure G.2. Generally, there was a positive trend between average residential rates per property and average after-tax income per taxpayer.

Figure G.2 Residential rates per property and income — City of Charles Sturt
2004-05



Source: ATO (2007); City of Charles Sturt (pers. comm., March 2008).

Table G.1 **City of Charles Sturt — Residential rates and personal income**
2004-05

<i>Postcodes</i>	<i>Residential rates^a</i>	<i>Residential properties^a</i>	<i>Residential rates per property^a</i>	<i>Taxable income</i>	<i>Net tax</i>	<i>After-tax income</i>	<i>Average after-tax income</i>
	\$	No	\$	\$	\$	\$	\$
5007	1 898 564	2 672	711	102 390 131	23 819 089	78 571 042	30 933
5008	2 566 970	3 479	738	183 986 220	40 145 294	143 840 926	29 118
5009	1 640 960	2 115	776	82 431 600	18 016 741	64 414 859	29 684
5011	3 031 324	4 023	753	157 304 482	34 791 212	122 513 270	29 809
5012	935 229	1 537	608	77 693 891	15 121 902	62 571 989	25 644
5013	879 213	1 469	599	124 319 314	25 929 465	98 389 849	27 755
5014	2 239 914	3 394	660	170 010 056	36 110 105	133 899 951	28 550
5019	1 460 248	1 984	736	165 815 911	38 536 353	127 279 558	31 622
5020	1 203 031	1 265	951	78 761 209	19 931 074	58 830 135	35 018
5021	2 650 421	2 390	1 109	176 619 637	44 845 230	131 774 407	38 195
5022	6 583 861	6 415	1 026	328 826 483	83 527 943	245 298 540	34 745
5023	4 867 251	6 845	711	217 456 178	46 085 216	171 370 962	28 491
5024	3 666 092	3 720	986	276 200 661	66 002 343	210 198 318	32 946
5025	2 754 849	3 230	853	143 010 450	32 534 834	110 475 616	30 989
Charles Sturt	36 377 927	44 538	817	2 284 826 223	525 396 801	1 759 429 422	31 080

^a Excludes retirement homes. The income data refers to the total for each postcode. The residential rates and properties data refer to those in the City of Charles Sturt. Postcodes 5008 and 5024 include suburbs outside the City of Charles Sturt. Postcode 5082 has been excluded from the data. This exclusion has reduced the value of residential rates for the City of Charles Sturt by about 0.5 per cent (or about \$167 000) and the number of residential properties by 0.6 per cent (or 262).

Source: ATO (2007); City of Charles Sturt (pers. comm., March 2008).

H Referee reports on modelling

To improve the quality of the modelling, the Productivity Commission asked two independent experts to act as referees and provide input to the modelling process. The referees were asked to comment on the appropriateness of the assumptions and modelling techniques, and to advise on any possible improvements. Each referee provided useful insights to improve the modelling at a workshop held prior to the release of the draft report and again before the final report. In addition, each referee provided a written report on the modelling.

This appendix contains reports from Dr Peter Abelson (Managing Director of Applied Economics) and Associate Professor Joe Hirschberg (Department of Economics, University of Melbourne).

H.1 Report from Peter Abelson

The full terms of reference for this inquiry into the revenue raising capacity of local government in Australia require the Productivity Commission to examine the capacity of various types of council to raise revenue, to explain how this capacity may change over time, to explain the impact of the various revenue sources on individuals, organisations and businesses, and to examine the impacts of State regulatory limits on revenue raising capacity.

This review focuses, as requested, on the first of these issues, namely the capacity of various types of council to raise revenue as discussed in chapters 4 and 5 and appendix C of the report.

The Productivity Commission treats this issue in two parts: the **capacity** of a local council to raise revenue, which it calls fiscal capacity, and the **willingness** of a council to raise revenue. This is an important and reasonable distinction which is followed in this review.

Fiscal capacity in concept

The report asserts (page 52) that ‘... a comprehensive measure of the income of a person (or household or business) is the best indicator of their ability to pay taxes

and charges ... It is a natural extension of this concept to suggest that the aggregate income of a community is an indicator of that community's ability to pay for government services.'

As the report notes (page 55): 'Ultimately, it is the incomes of individuals in local communities that constrain the choices they face between consuming public or private sector goods and services.'

This is a fundamental point of the report. It is perhaps worth noting two possible caveats on this core principle.

First, there is an assumption that local councils are not revenue constrained by limited tax instruments. For example if local councils were required to raise all their revenue by a uniform poll tax on all adults, the revenue they could raise would be severely constrained by the amount that they could levy on the lowest income individuals in the community. However there is no such constraint in Australia. Australian councils can raise as much revenue as they wish via their tax on land values. While these land values are not perfectly correlated with incomes, the tax base does not constrain the total revenue that can be raised.

Second, tax competition may constrain the amount of tax that an individual council can raise as high tax rates without a commensurate improvement in services could cause households or firms (or capital) to emigrate. However, providing higher taxes fund improved (and desired) services, they should not create emigration. In any case, tax competition does not appear to be a major constraint on raising local government revenue in Australia.

Accordingly I concur with the report, in line with a very large body of technical literature (some of which is cited in the report) that aggregate disposable community income (inclusive of local business income) is the appropriate measure of the fiscal capacity of a community.

Fiscal capacity measurement

The report assesses the aggregate income in each community as the sum of after-tax personal incomes, rents from the ownership of dwellings net of expenses (including imputed rents), and the after-tax operating surpluses of local businesses pro-rated on local employment.

This represents quite a comprehensive assessment of income. The median Australian council is estimated to have a fiscal capacity of \$20,700 per person. Although these estimates do not include most welfare payments, low incomes under

the tax threshold, and unrealised capital gains, this does not detract significantly from the results.

Willingness to raise local council revenue

In 2005-06, total local government taxes were only 1.5 per cent of household disposable income in Australia. Prima facie in these circumstances it is hard to believe that there is a binding financial constraint on the ability of councils to raise more revenue. Rather councils, at least those that are not rate regulated as in New South Wales, set the tax rate so as to collect the revenue that they deem their communities are willing to pay for local public services.

However local communities have different amounts of local income and councils raise varying amounts of own revenue. These differences may be taken to imply that some councils are working harder to raise own revenue than others are. After any determining factors have been taken into account, such as differences in income, the remaining differentials between low and high revenue councils may indicate the extent to which low revenue raising councils could increase their revenues.

As described in appendix C of the report, there are three main ways of estimating these own-revenue raising differentials.

Ordinary least squares (OLS) regression. In this case actual own-revenue raised by councils is regressed against various determining variables. A revenue effort index is obtained by comparing the actual revenue ratio (revenue/fiscal capacity) of a council with the revenue ratio predicted by the own-revenue equation. If the revenue effort index is below one, a council is not exploiting its fiscal capacity. This method presumes that all unexplained difference is due to revenue effort.

Data envelopment analysis (DEA). Using DEA all councils are assumed to be able to meet the highest standards in their group of councils for each type of council (e.g. for councils in different geographical locations). Thus DEA analysis sets a higher target than the mean predicted by an OLS regression.

Stochastic frontier analysis (SFA). Here again actual own-revenue raised by councils is regressed against various determining variables. However SFA attempts to distinguish between the unexplained variance that is determined by unobserved variables and the random error terms. Once the former is estimated, the highest possible target is lower than in DEA, but higher than the predicted revenue equation.

The report adopts the SFA method. This is based on the regression results described in table 5.4. This shows that own-source revenue is positively and significantly related to personal and business income per capita, to road km per person, the provision of water supply, the number of properties per person, and the population growth rate. It is negatively related to population size. Allowing for these factors, own-revenue raised is higher in urban than in rural areas. The results are all plausible and have expected signs and significance.

The report then estimates that own-source revenue raised averages about 12 per cent below the stochastic frontier for each local council (the frontier depends in each case on the characteristics of the council area). This is equivalent to about \$140 per person per annum or \$370 per household.

A difficulty with the SFA method is that the results emerge from a statistical black box. The report does not provide any evidence that can readily be used to validate the results. However the results do pass the common sense test. If all councils raised own-source revenue as vigorously as the most vigorous in their group (after allowing for all possible determining factors), a 12 per cent increase in own-revenue raised appears realistic.

Conclusions

The report uses an appropriate measure of fiscal capacity. It also devotes considerable resources to estimating after-tax community incomes inclusive of business income. It is clear from these data that there is essentially no fiscal constraint on local councils.

Rather, except where there is rate regulation, the own-revenue that councils raise is essentially a political decision. Analysing these decisions, the report estimates that bringing the lower revenue-raising councils in line with the highest revenue-raising councils would increase councils' own-revenue by about 12 per cent. This conclusion appears realistic.

H.2 Report from Joe Hirschberg

The majority of the literature concerning municipal government efficiency is oriented to the provision of specific services such as: rubbish collection, parks and the libraries. However this study goes beyond this traditional literature to consider the overall operation of local government. The techniques used in this analysis are current methods in the area of efficiency measurement and the cross government comparisons of revenue raising activities. To date, there are no other analyses to

which it can be compared directly and it stands as research that could be submitted to an international journal in the field of public finance.

The premise that a national comparison of local governments can be made between different types of jurisdictions is fraught with numerous difficulties. The primary difficulty is that the local governments in Australia vary quite widely in their capacities and the demands on their services. In order to make inter-council comparisons it is necessary to account for these differences so that the comparisons do not merely reveal the systematic variations as one find between the bush and the capital city and between the councils that can draw on a wealthy population and a strong business base and those that cannot. The basic method applied in the wide literature that accomplishes such comparison is the use of conditioned averages which are available via use of regression techniques.

In the interpretation of the results of regression techniques one must keep in mind the old adage — GIGO (garbage in garbage out). Thus no matter how sophisticated the methods used for analysis, the quality of the data used is elemental to the quality of the conclusions drawn from the results. In this case the Commission researchers have compiled a unique data series that combines information from a number of sources.

Once a sufficient data series are assembled the application of regression methods requires a number of modelling decisions. The decision to use the log of revenue raised per capita as the measure of revenue raising capacity is based on a desire to use a single measure to facilitate interpretation.

The choice of conditioning information is driven, in part, by what information is available and their relationship to the log of revenue per capita. Given the differences between the States and Territories and the differences between the classes of urban and rural councils, it is reasonable to allow the mean log revenue raised per capita to vary by state and city type. Although, this means that it is more difficult to establish whether certain characteristics of these councils, that only vary by state and council type have an influence on the revenue raising process, can be discovered. The additional information as to the kilometres of roads per capita, properties per capita, the log of total population of the council, and whether the council is also responsible for local water supply are all factors that will influence the level of services required by the residents of the particular council and thus indirectly influence the revenue raised. Other characteristics of the council areas could have been included and it appears that a detailed 'specification search' was conducted in which only a subset of potential variables were used. Some attempt should be made to include some results of these alternative models so that the reader could satisfy their curiosity as to whether other characteristics are of value or not in the results that are given in the body of the report. In particular, the inclusion

of demographic variables as well as growth values of income, the proportion of the population employed full time, and the average vintage of the housing would be of interest.

In addition to the physical characteristics of the community the two other regressors are the log of personal income per capita and the log of business income per capita. It is most crucial that these two factors be included in the model separately because the estimates of these incomes are generated using different sources.

A characteristic of the regression estimated is the linear nature of the relationship between the log revenue per capita and all the regressors. By taking the logs of the values used in this analysis the variability of these values is reduced. However, there is a significant literature on the question of economies of scale in the production of specific municipal services. A recurring question in regard to Australian local governments is whether councils are of sufficient size to achieve economies of scale. An answer to this question in regard to the revenue raising process could be found if the impact of size was allowed to vary within the specification chosen.

The estimation methodology employed in this study is referred to as stochastic frontier analysis (SFA). This class of models has the ability to model not only the conditioned mean of the dependent variable (here log of revenue per capita) but it also allows the distribution of the dependent variable to be asymmetric. This generalization allows the computation of the degree to which each council is off the most productive frontier. The main alternative technique for the estimation of efficiency measures is the data envelopment analysis (DEA). DEA would provide similar results however frontier of efficiency would be determined by only a few councils instead of the entire set of councils. In other words, if only 5 councils were on this frontier all the other council's data will have no influence on the location of the frontier. In contrast the SFA will use all the information in the data to construct the frontier. In the current application SFA has the advantage that it can accommodate the presence of outliers in the data caused by the highly variable quality of the data and the large variation in the size of the councils included together. In addition, this method allows the researchers to include auxiliary variables to explain the general accuracy of the model (the symmetric component of the errors) and the efficiency of each council (the asymmetric component of the errors).

Aside from the concern that this analysis does not account for the measurement of the presence of economies of scale, another area where this analysis would benefit is from the possible inclusion of the location of the councils with respect to each other. Other than the possibility that the errors by council are not independent of each other (that they are subject to spatial autocorrelation), there is also the

possibility of the presence of spill-over effects that may influence the demand for services by adjacent councils since for the most part many services are not excluded to residents of adjacent councils — it would be of interest to determine if such ‘free riding’ does occur.

In conclusion, this report represents an application of a number of methods to a unique data series. The methodology applied is sound and demonstrates the ability to adapt a model first used for international comparisons to a national study and to improve upon that analysis by modelling the revenue raising by utilizing an efficiency framework that accounts for the difficulties encountered in the data.

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