

Rates versus Developer Contributions as Revenue Sources for Local Government

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Abstract

Population expansion in many New South Wales (NSW) local government areas (LGA) has resulted in an increase in demand for local infrastructure and services that has far outstripped sources of local government revenue. This paper looks at two important sources of local government revenue in NSW, municipal rates and Section 94 contributions, as a source of funding increased demand and maintenance of infrastructure. It examines some recent and potentially long-term trends of both these revenues within different economic climates. An analysis and comparison of data over the period from June 2006 through to June 2010 against data collected for the period ending June 1993 forms the basis of this research.

The research objective is to compare changes in the relativity of these revenue types and assess their application as a source of local government revenue. Data collected from the Department of Local Government NSW is compared with the findings of an earlier study, conducted by Barnes and Dollery (1996), in determining their relativity.

The provision and maintenance of infrastructure by local government is essential for growth in the economy and is a valuable asset to be used by the community. Two types of funding for this infrastructure, among others, is sourced from municipal rates and developer charges levied under Section 94 contributions either by the developer providing the infrastructure, or a contribution towards its funding (Barnes and Dollery 1996).

Introduction

Many local governments have been forced to defer infrastructure projects because of financial deficiencies. As PricewaterhouseCoopers (2006) point out, 16% of local governments having an operating deficit of around 10% of total income, a significant contributor to this problem. This emphasizes the inadequacies of local government funding not only for infrastructure, but for an increasingly service focused local government (PriceWaterhouseCoopers 2006).

Both local government rates and, to a lesser degree developer charges, comprise key sources of revenue for many of the 152 local governments in NSW. These sources have undergone a number of reforms over the past 15 years, to which the changes are examined in this paper. The Global Financial Crisis (GFC) of mid 2008 to the present has provided the opportunity to provide a contemporary look at the volatility of these revenues for local government in NSW.

Literature review

The literature review starts with a brief look at the finances and structure of local government in NSW. It examines municipal rates including some of its state restrictions and discusses the importance of land for land taxation in its various forms. This is followed by a review of Section 94 contributions and their use as a source of local government revenue. The literature concludes with a rationale that justifies the following comparative analysis of these two sources of revenue across local government in NSW.

Local Government and financing in New South Wales

The Australian constitution sets out the framework of government in Australia. Although local government is often referred to as a level of government, there are only two layers of government under the constitution; state and commonwealth. Local government is an instrument of state government and is governed by local government legislation in each state of Australia (Pearson 1994).

Whilst it is an important operational layer of government, the absence of constitutional recognition restricts its taxing and revenue raising powers. As a result many local governments in NSW are reliant on commonwealth or state government transfers in the form of grants (Mangioni 2006).

In remedying this revenue shortfall, McGill (2010) suggests that,

“national government introduce or amend local government legislation to permit councils to raise such additional revenues as they deem possible and practical”.

Despite this recommendation, any such power that conflicts with revenue raised by the states would be as rigorously challenged as the right for local government to establish itself as a level of government in Australia (McGill 2010).

PricewaterhouseCoopers (2006), Applied Economics *et al* (2008) and the Independent Inquiry into the Financial Sustainability of NSW Local Government (2006) all found that cost shifting has meant more commonwealth and state responsibilities are being moved to local governments without adequate funding (Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI) 2006; PriceWaterhouseCoopers 2006; Applied Economics and New England Education and Research 2008; Australian Local Government Association 2007c). This is a major cause of vertical fiscal imbalance (VFI).³⁴ Cost shifting is costing the local government around AUD \$500mil to AUD \$1.1billion each year (Australian Local Government Association 2007b; Australian Local Government Association 2007c).

This leads to the question of whether councils can sustain the current arrangements. Some findings of IPART (2008) indicate that many types of councils have infrastructure backlogs which suggest a lack of capital sustainability. On the other hand, recurrent income and expenditure of more than two-thirds of councils in NSW were considered sustainable (Independent Pricing and Regulatory Tribunal 2008).

According to the report by the Independent Inquiry into the Financial Sustainability of NSW Local Government (2006), councils have treated capital revenues as operating income and undervalued assets and depreciation. This has given the impression that they have had operating surplus when they may have been in deficit. This is misleading but allowed under the Australian Accounting Standard 27. The LGI is against the practice and recommends capital revenues be excluded from operating statements (Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI) 2006).

IPART (2008) indicated that NSW councils averaged a debt service cost, as a percentage of their operating revenues, of 4.2% compared with 20% being the upper limit benchmark. These results were similar to that found in Access Economics (Access Economics 2006, Independent Pricing and Regulatory Tribunal 2008). Local governments that run a deficit are generally reliant on commonwealth grants, and there is typically an inverse relationship between the receiving of rates and other charges and a councils reliance on grants (Independent Pricing and Regulatory Tribunal 2008).

³⁴ When there is not enough revenue to meet the expenditure vertical fiscal imbalance (VFI) can occur. The current combination of expenditure and revenue gives rise to VFI in local government finance today

Recurrent income for local government is derived from two main sources, namely own-source revenue and external sources such as grants and contributions. Councils own-source revenue is important for flexibility and allows them to influence growth.³⁵ Local government has limited control over other revenues, such as grants and contributions (Independent Pricing and Regulatory Tribunal 2008). Therefore financial sustainability through increases in own-source revenue is important for the independence of local government.

The national study by PricewaterhouseCoopers (2006), found that inadequacies in the structure of local government funding has meant that traditional revenue, including rates and Section 94 contributions are not adequate to support the required services and essential infrastructure of local government, particularly in rural and remote LGA's where rates cover less than 40% of the required finance and even less for Section 94 contributions (PriceWaterhouseCoopers 2006)

In Tables 1 and 2, tax revenue by level of government exemplifies the dependence of state and local government on commonwealth grants and further emphasizes vertical fiscal imbalance across government in Australia.

Table 1: Percentage share of taxation revenue by sphere of government past two decades

	Commonwealth	State	Local
1990-91	79.1%	17.4%	3.6%
2000-01	81.9%	15.2%	3.0%
2010-11	80.5%	16.2%	3.5%

Source: ABC Cat. No. 5506.0 Taxation Revenue Australia

Table 2: Taxes raised and spent by level of government, 2002-03

	Commonwealth	State	Local
Total taxation raised (A)	81.7%	15.3%	3.0%
Total tax-funded own-purpose expenses (B)	40.3%	55.2%	4.5%
Degree of VFI (=A/B)	2.03	0.27	0.71

Source: Access Economics 2004 cited by Comrie, 2012.

In defining the impact of vertical fiscal imbalance on local government in Australia, Comrie (2012) highlights that 10% of local government revenue is made up of grants and subsidies from the commonwealth government via the states.

³⁵ Rate revenue is subject to rate pegging.

The following sections review the literature on local government rates and Section 94 developer contributions. A summary of the contrasting merits of each is considered as a prelude to the study which examines changes in the relativity of these sources of revenue over the current and earlier study periods.

Council rates: Land value rate pegging and perceptions of this tax

Recurrent income derived from land taxation (local municipal rates and state land tax) are sometimes considered to be the most efficient and least distortive source of local government income (Australian Federal Government 2011). Australia's current land tenure system is important for property taxation in two ways. Smiley (1997) states that without a land tenure system, land cannot be treated as immobile, nor can it be allocated to a single owner. Thus the increased value created from land (through supply and demand) can be measured and subsequently taxed on the value of the fee simple (Smiley 1997).

Unlike labour, the fixed nature of land means that as profits from land use rises (i.e. through development) so does the value of land. This is an important principle underpinning land as a base of recurrent taxation, as it is deemed to be the most neutral and least distortive base on which to impose a tax on property (Arnott 2000). NSW continues to levy council rates on land value, in contrast to the states of Victoria and South Australia which levy local government rates on improved value. Table 3 sets out the diverse bases on which local government rates are determined across the states of Australia.

Table 3: Bases of value for recurrent property taxation across Australia

State	State Land Tax	Local Council Rate
New South Wales	Land Value	Land Value
Queensland	Site Value	Site Value
Victoria	Site Value	Improved Value
South Australia	Site Value	Improved Value
Western Australia	Unimproved Value	Unimproved Value
Tasmania	Land Value	*Assessed Annual Value
Northern Territory	N/A	Unimproved Capital Value
ACT	Unimproved Value	Unimproved Value

Source: State valuation of land legislation

Council rates in NSW are determined on land value, as defined under Section 6A of the *Valuation of Land Act 1916*. Despite the veneer of value within this definition, it is highly distorted when applied to council rates. One of the main influences is Section 500 of the *Local Government Act NSW*, which allows local government to collect up to 50% of its rate revenue as a base amount per property, with the balance determined from the land value. This is unlike the United States, where the method is

applied uniformly (Scorsone and Plerhoples 2010). Section 500 of the *Local Government Act* undermines the tax principles of transparency and the economic efficiency of this tax.

The Productivity Commission (2008) argues that this method increases councils' revenue raising capacity (Productivity Commission 2008). However, the LGI is of the opinion that rates are inequitable and not reflective of council services used per household (Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI) 2006).

Under Section 497 of the *Local Government Act* 1993, rates consist of two parts. Firstly the *ad valorem* rate, which is levied on the Unimproved Capital Value (UCV) of land or Land Value (LV), and also a base amount, which the *ad valorem* amount is added to. This base amount is determined by each local government and must be the same for each different category. There is flexibility in its determination, but that depends on the base dates used and on ministerial approval. In NSW the land values are issued every four years, except when there has been little movement in land values, in which case it may be up to every six years (Mangioni 2006).

Rate revenue growth is generally a reflection of budget requirements and an indication of an area's capacity to pay. In NSW the ability to raise the tax rate is restricted by the imposition of rate pegging. Because of this, NSW is the only state where rates do not increase along with the increase of property values (Australian Local Government Association 2007a).

Rate pegging was introduced to provide equity for 'cash poor' property owners and is a statutory provision under Section 506 of *The Local Government Act*, (Mangioni 2007). Consequently, rate revenue for each local government cannot increase by more than the percentage approved by the Independent Pricing and Regulatory Tribunal (IPART) (previously by the Minister) unless requested through a special variation (Applied Economics and New England Education and Research 2008). As of 2010 the NSW Government announced IPART as responsible for the determination of the rate peg that applies to council's general income, using the Local Government Cost Index (Division of Local Government 2012a).

Because rate pegging applies to councils overall general income, and not for individual properties, it is possible for rates to be increased by more than the rate peg for some property owners and less for others, and still comply with regulation (Independent Pricing and Regulatory Tribunal 2008). More prohibitive provisions exist in other local government taxing jurisdictions including the United States, in which the regressive nature of local rate capping is noted because it benefits large landowners (Havman and Sexton 2008).

Rate pegging is designed to improve social equity but is one of the most controversial restrictions on the growth of rates. The findings of IPART (2008) show overall revenue growth in NSW as similar to that of other states where the rate peg is not imposed. Effectively NSW councils have sourced funds elsewhere (Independent Pricing and Regulatory Tribunal 2008). Wijeweera and Dollery (2010) argue that this creates pricing inequity (Wijeweera and Dollery 2010). The Productivity Commission (2008) notes that these additional sources of revenue have not offset the rate peg very significantly in recent years (Productivity Commission 2008).

Table 4 contrasts with the findings of IPART (2008), as NSW with the largest land area per capita has only the fourth highest revenue from rates. However, it is the third highest state reliant on grants and subsidies.

Table 4: Local government rates versus grant subsidy comparison, 2008-09

Revenue Sources		NSW	Vic	Qld	WA	SA	Tas	NT	Total
Taxation	\$m	3 041	2 928	2 393	1 220	956	263	74	10 874
	%	33.6	43.7	27.0	41.3	55.2	32.7	17.1	35.6
Grants & subsidies	\$m	1 104	740	698	342	185	111	134	3 314
	%	12.2	11.0	7.9	11.6	10.7	13.8	31.0	10.9

Source: 2008/09 Local Government National Report cited by Comrie (2012)

Principally the rate peg percentage reflects the increase in the costs that a typical council would incur in delivering services comparable to the previous year (Independent Pricing and Regulatory Tribunal, 2008). The economic rationale sees local government as a monopoly, and as such can provide services inefficiently or at excessive prices. The rate peg is imposed by higher tiers of government to regulate this and ensure efficiency and equity in raising revenue (Wijeweera and Dollery, 2010).

Some arguments for the rate pegging process are that it manages poor governance and controls the provision of non-core services and infrastructure that might prove unsustainable. The rate peg is designed to encourage the supply of non-core services and infrastructure by the private sector. However Wijeweera and Dollery (2010) argue that this effect does not meet with 'empirical reality' due to the ongoing shift of local government responsibilities of services and infrastructure to services and people (Wijeweera and Dollery, 2010).

Both IPART (2008) and the Productivity Commission (2008) suggest that rate pegging may be limiting the growth of capital expenditure for NSW councils compared to other Australian states. However IPART(2008) concludes that due to the 'lumpy' nature of infrastructure expenditure and

other influential factors, a clear connection could not be made (Independent Pricing and Regulatory Tribunal, 2008, Productivity Commission, 2008).

The key arguments made against rate pegging are that they lack transparency, discourage medium to long term planning, and are not reflective of council cost movements and council accountability to their community (Independent Pricing and Regulatory Tribunal, 2008). The Productivity Commission (2008) argues that compliance and administration costs increased and the financial constraint could affect a council's sustainability, especially if it is servicing a growing population (given that rates do not relate to population numbers). The Independent Inquiry into the Financial Sustainability of NSW Local Government (2006) argued that the rate peg limits supply, and by removing it, local government would have access to a range of better quality services (Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI), 2006).

Section 94 contributions

The second form of revenue reviewed in this paper is Section 94 contributions. This tax is, to some extent, designed to tax those who benefit from the infrastructure directly. It is efficient in that those who create the demand for infrastructure and those who use it pay for it (Vickers *et al.*, 2010, Dollery, 2005).

Australia's history shows a clear trend of increased 'user pays' systems for urban infrastructure. The *Local Government Act 1919* was the first piece of legislation that contained provisions which allowed taxes that resembled 'developer contributions'. Efforts were made to create a formal legislative framework with the *Environment Planning Bill 1976*, and then in 1979, when the *NSW Environmental Planning and Assessment Act 1979* came into effect, superseding the Bill (Simpson, 1989).

After the Simpson Inquiry the NSW Department of Urban Affairs and Planning introduced the *Section 94 Contributions Plans Manual* in 1992-3 and released the *Revised Manual* in 1996 which became the *Section 94 Contributions Plans Manual 1997* (Simpson, 1989). The Simpson Inquiry led to the requirement of all councils to prepare Section 94 contribution plans, as a requirement before they were able to extract developer contributions. This plan is used to detail the use of Section 94 and to show that there is a clear 'nexus'³⁶ between the development that has raised the Section 94 contribution and the project funded by the Section 94 contribution (Cox, 1991).

³⁶ **Nexus:** The connection between development and the developer contributions that are levied. Causal nexus, physical nexus, temporal nexus and beneficial nexus are the four main areas of tests that are applied by the courts and department of planning when assessing the degree and extent of nexus.

McNeil and Dollery (2001) point out that the *Section 94 Contributions Manual* seems to discourage mitigation fees, where Section 94 is levied to mitigate the ‘adverse consequences of development’. They discuss the difficulty in finding the line between what mitigation fees are and what a contribution for increased demand is in the context of development charges levied for the loss of affordable housing (McNeill and Dollery, 2001)

Marginal cost principals underpin the idea that developer charges should be user charges based on the physical and social infrastructure costs of new development. McNeil and Dollery (2003) discuss the application of Marginal Cost Pricing in the determination of developer charges, arguing it’s costly and requires complex data requirements (McNeill and Dollery, 2003).

Barnes and Dollery (1996) identified that smaller councils located in low growth areas found developer contributions to be an inefficient source of funds. Significantly, administration costs increased for these smaller LGA’s (Barnes and Dollery, 1996). Further, such charges if not applied consistently, may cause the movement of development and redevelopment from one LGA to another.

Vickers *et al* (2010) describe developer charges as being consistent with the benefit principle of equity and encourage efficient consumption of goods and use of resources. The benefit principle is essentially those who benefit from the services or infrastructure should pay for them. It is consistent with the theory that an increase in the value of property should be taxed as a ‘public economic rent’ (Vickers *et al*, 2010). In achieving the benefit principle, this value tax, is often referred to as the betterment tax and resembles a type of horizontal equity (Applied Economics and New England Education and Research, 2008). A problem identified with a betterment tax is that it has tended to discourage development and the boundary of increased value is difficult to determine (Vickers *et al*, 2010).

Applied Economics *et al* (2008) argue that developer charges reduce land prices rather than increase new house prices, and hence may be absorbed by the developer. New house prices make up a small part of the housing stock and are determined by the prices of established houses, or more specifically by the relative provision of services and infrastructure. So unless developer charges actually affect the supply of houses, house prices should not be affected by changes in developer charges (Applied Economics and New England Education and Research, 2008).

McNeil and Dollery (2000) analyze two case studies and observe the problems in apportionment procedures in the calculation of development charges. They identify the issue of distinguishing between access roads and through roads, a distinction important for the application of marginal cost

pricing. Another problem was acknowledged around road capacities, where anticipation of future road capacities were believed to lead to excess user pays charges (McNeill and Dollery, 2000b).

Concerns relating to Section 94 contributions include the quality of infrastructure, often made by councils to a very high standard. This raises the point that councils have the monopoly on the supply of the provision of services and infrastructure which often results in inefficient spending habits and users can be overcharged (Applied Economics and New England Education and Research, 2008). In moderating these potential inefficiencies, Carozza (2010) refers to models of locally formed cooperatives that develop and own the local infrastructure. In this model, local companies construct and maintain the infrastructure with as much of the revenue generated staying within the community (Carozza, 2010). Alternatively, IPART recommends 'adjustments' be made to the calculation of developer charges when inefficient operations occur, however again McNeill and Dollery (2000) argue the difficulty in quantifying the degree of inefficiency a point also raised by IPART (2008) (McNeill and Dollery, 2000a).

Literature summary

The Australian Constitution underpins the current revenue and expenditure arrangements of Government in Australia. This arrangement has impacted on imbalances of local government funding. PricewaterhouseCoopers (2006), Applied Economics *et al* (2008) and IPART (2008) agree that cost shifting has meant more commonwealth and state responsibilities being moved to local governments without adequate funding.

PricewaterhouseCoopers (2006) note the inadequacies in the structure of government funding have meant that traditional revenue sources are not enough to support the required services and infrastructure of local government. IPART (2008) found that most local governments in NSW are sustainable on a recurrent basis but many showed infrastructure backlogs which suggests they are unsustainable on their commitment to capital expenditure and maintenance.

Local Government has remained an operational arm of the state government and Mangioni (2006) notes that because Local Government is not a constitutional level of government it doesn't have the same taxing or revenue raising powers of higher tiers of government.

Australia's land tenure system has enabled property taxation to operate. The Australian Federal Government (2011), Smiley (1997), Arnott (2000) and Vickers *et al* (2010) all agree that land taxation is the most efficient and least distortive base of taxation. Both local government rates and Section 94

developer contributions hold their roots in the theory of economic efficiency. However in reality both these revenue sources have shown inefficiencies and inequities in their current application in NSW.

Rate revenue growth is generally a reflection of budget requirements and an indication of an area's capacity to pay, but it is restricted by state legislation, specifically by rate pegging and Section 500 of the *Local Government Act NSW*. Rate pegging is the more controversial of the two restrictions and was suggested by IPART (2008) and the Productivity Commission (2008) that it may be limiting the growth of capital expenditure of local government.

Section 94 developer contributions are generally designed to tax those who benefit from infrastructure directly through the uplift in value provided in the development approval process. Vickers *et al* (2010) and Dollery (2010) agree that it is efficient in that those who create the demand for infrastructure and those who use the infrastructure pay for it. However Barnes and Dollery (1996) found an increase in administration costs for smaller LGA's making them inefficient for those councils. McNeil and Dollery (1999) observed the problems in apportionment procedures specifically when levied for roads. Further pointed out, in a separate study, is the difficulty in finding the line between what mitigation fees are and what a contribution for increased demand is.

Vickers *et al* (2010) compares Section 94 to a 'public economic rent', similar to a betterment tax, but identified the problem of determining the boundary of increased value and suggests that it discourages development. Applied Economics and New England Education and Research, 2008 and IPART (2008) noted the inefficiency and quality of infrastructure often made by councils with the use of Section 94 revenue. On this point, IPART (2008) recommends 'adjustments' for inefficiencies, however McNeil and Dollery (2010) agree the degree of inefficiency is hard to quantify.

In summary, both rates and developer contributions continue to play an important role in funding local government in NSW. Despite inefficiencies in their current application the study that follows examines their changes in relativity of these sources over two study periods.

Research methods and analysis

This research provides an analysis of the relativity of revenue from rates and Section 94 developer contributions and spans the period of the GFC. This was intended so trends over different economic cycles may be examined. By comparing the results of Section 94 and rates with the data and results of research undertaken by Barnes and Dollery (1996) we are able to identify time trends, both recent and long term.

Similar to the method adopted by Barnes and Dollery (1996), the data is grouped into three groups enabling statistical methods to be employed. The mean of Section 94 and rate revenue in constant Australian dollars and per capita is calculated for each council, and the coefficient of variation, which shows the variability of payments, is determined (Myers and Well, 2003; Miles and Shevlin, 2009; Barnes and Dollery, 1996; Asadoorian and Kantarelis, 2005; Croucher, 2008)

A mixed methodological approach is used in this study, as depicted by Creswell (2009), who discusses the merits of using one method which informs the other, strengthening the limitations impacted by the use of either qualitative or quantitative paradigms (Creswell, 2009).

Archival retrieval and analysis is a process that focuses on past and contemporary events. The methods used in the data collection and analysis process included archival retrieval of information held by the Department of Local Government NSW on Section 94 contributions and rates. This data is defined by Sorensen (1995) as secondary information and was initially distilled using data grouping and coding which is a qualitative method of refining the data (Sorensen, 1995).

Archival retrieval and analysis is a more appropriate analysis method than experimental strategies, surveys or case studies because neither one of these methods allows the statistical analysis and comparison of data from financial statements (Walliman and Baiche, 2001).

In addition to the data source mentioned above the research will also rely on secondary data obtained in 1992-93 from Natalie Barnes who, along with Brian Dollery, published the results of their research in the Journal article titled *Developer Contributions: An Economic Analysis of Section 94 of the NSW Environmental Planning and Assessment Act 1979* (Barnes and Dollery, 1996).

The analysis of the data was undertaken using PAWS 18, a statistical program used to derive the mean and standard deviation. It was then used to determine the coefficient of variation (Norusis, 2009) which can compare the degree of variation from one data set to another even when the means are different. It is the ratio of the standard deviation to the mean that can reveal the stability or variability of rates and Section 94 contributions (Zady, 2009).

By relying on two types of data sources, a limitation occurred due to the variation of reporting requirements and different samples sizes. Because of time constraints it was necessary to reduce the population to a sample of 45 councils (out of 152 for the whole of NSW) for the four years ending June 2010. In 1992-93 the data was obtained by using the whole population of LGA's in NSW.

To reduce the impact of these variations a stratified sampling method was employed. The stratified method of sampling allows the population to be divided into groups. It is preferred over random sampling techniques as there's a number of small LGA's but only a few that are large. Because the population sub-sets can be of different sizes in a stratified method, the selection is intended to reflect the current ratio or variations between each LGA (Croucher, 2008).

Data analysis and conclusions

The data has been presented in four tables:

- **Table 5** shows the results for the whole sample of the four years ending June 2010 compared with the data results of the 1992-93 study.
- **Table 6** is a break-up of the information in Table 1. The information is dissected into three categories of population sizes each having 15 LGA's to represent it. The first category is less than or equal to 40,000 (Group 1), the next is greater than 40,000 and less than or equal to 80,000 (Group 2), and the last category is an absolute population of larger than 80,000 (Group 3).
- **Table 7** is an overview of the total income of local government.
- **Table 8** sets out the results of the coefficient of variation which is used to determine the variability between Section 94 contributions and rates as a funding source for local government.

Table 5: Sample of 45 LGA's in NSW (2006-07 to 2009-10) against all LGA's in NSW (1992-93)

Year	1992 - 93	2006 - 07	2007 - 08	2008 - 09	2009 - 10
Population	5,799,974	3,339,436	3,391,941	3,445,960	3,494,270
Mean* Section 94	\$92,809	\$2,792,119	\$2,481,485	\$1,218,516	\$2,153,760
S.94 % of Income	0.17%	6.9%	6.13%	2.99%	5.06%
S.94 Per Capita	\$0.02	\$0.84	\$0.73	\$0.35	\$0.62
Mean* Rates	\$9,267,578	\$19,383,752	\$19,799,515	\$20,327,600	\$20,761,674
Rates % of Income	16.6%	48.17%	48.88%	50.03%	48.75%
Rates Per Capita	\$1.60	\$5.80	\$5.84	\$5.90	\$5.94
Mean* Income	\$55,805,929	\$40,242,264	\$40,505,339	\$40,630,318	\$42,591,108
Income Per Capita	\$9.62	12.05	11.94	11.79	12.19

(*Data has been adjusted for inflation using reference base 1989 90 =100 (Australian Bureau of Statistics, 2012, Australian Bureau of Statistics, 1996))(Data on total income is less grant revenue, Currency – AUD\$)

The information displayed in Table 5 shows the mean percentage of income and income per capita for rates, Section 94 and own source income in constant dollars for local government for the year 1992-93 and for the four years ending June 2010. This allows for a comparison between the years, type of income and extent of use of rates and Section 94 contributions.

The results set out in Table 5 show the highest mean of Section 94 income during the year 2007-08, as a percentage of own-source income, being 6.13%. During the year 2008-09 these figures were at their lowest being 2.99%, but recovered slightly in 2009-10 to 5.06%. In contrast, the mean of rates revenue, as a percentage of own-source income was the highest during 2008-09 at 50.03% and lowest in 2006-07 at 48.17%. However, regardless of the change in total income, the actual mean rates revenue showed steady growth over the last four years.

In a comparison with 1992-93, Section 94 income as a percentage of own-source income increased from 0.17% in 1992-93 to 6.9% in 2006-07, while rates revenue increased from 16.6% in 1992-93 to 48.17% in 2006-07. This indicates a clear increase in both the use of Section 94 and rates revenue over the 13-year term.

Section 94 contributions are a smaller proportion of revenue, compared to rates, despite increasing significantly since 1992-93. The amount of Section 94, in many respects, is reasonable because if prohibitive, it can potentially cripple an area's ability to improve and redevelop economically. This effect seems especially evident in the decline of Section 94 contributions during the year 2008-09, the economic downturn during the period of the global financial crisis (GFC), and is likely caused by the resultant slow down in investment and development.

On a per capita basis it is clear that Section 94 is more volatile and susceptible to the economic climate than rates, with a dip in 2008-09 to \$0.35 per capita. Despite the recession during the GFC, rates per capita continued to maintain steady growth each year. The trend in total income followed loosely that of Section 94, however in 2009-10 figures exceeded those in 2006 – 07 unlike Section 94 which showed a slow recovery.

Section 94 is a one-time charge and is a capital revenue rather than recurrent. Consequently councils who are more reliant on user charges and fees revenue are more susceptible to sustainability problems due to the lumpy nature of the funding received. As a capital revenue it is important that Section 94 is used for capital costs, as use for recurrent costs can be dangerous for development budgets and financial capabilities (McNeill and Dollery, 2001, Independent Pricing and Regulatory Tribunal, 2008).

Rates on the other hand are a recurrent income which, to a degree, allows councils to forecast future revenues. Even though rates comprise a greater percentage of own-source income, the results indicate they are far from becoming the main supporting revenue of local government. Given restrictions such as rate pegging, this source of revenue continues to be limited by increases imposed by state government.

Table 6 elaborates on the information in Table 5. It splits the data into three population group categories.

For the four years ending June 2010, Group 1 has a mean Section 94, as a percentage of own source income, of between 1.79% and 4.36%. Group 2 was between 5.58% and 9.17% and group 3 was 2.16% and 6.94%. This suggests that for councils with a population of over 40,000 and less than or equal to 80,000 (Group 2), Section 94 achieves the highest percentage of income. This is also the case on a per capita basis with Group 2 showing the highest charge of \$3.46 in 2009-10.

These findings are consistent with the literature which indicates that urbanization and areas that have an expanding population, like Group 2, are more likely to supply the most funding from Section 94 compared to comparatively larger and/or smaller populated areas.

In all three groups, income from Section 94 during the downturn of the GFC in the year 2008–09 had reduced. For group 1 the amount reduced from 4.36% in 2007-08 to 2.10% in 2008-09. For group 2 the amount reduced from 6.25% in 2007-08 to 5.58% in 2008-09. Group 3 showed a significant reduction from 6.30% in 2007-08 to 2.16% in 2008-09.

Table 6: Sample of 45 LGA's divided into three population categories

Group 1: Population less than 40,000					
Year	1992 - 93	2006 - 07	2007 - 08	2008 - 09	2009 - 10
Population	1,464,734	177,023	178,830	140,831	142,342
Mean* Section 94	\$43,491	\$292,574	\$415,749	\$156,616	\$143,076
S94% of income	N/A	3.14%	4.36%	2.10%	1.79%
S94 Per Capita	\$0.03	\$1.65	\$2.33	\$1.11	\$1.01
Mean* Rates	\$617,658	\$3,480,634	\$3,550,460	\$2,986,448	\$3,077,118
Rates% of income	N/A	37.38%	37.22%	40.00%	38.52%
Rates Per Capita	\$0.42	\$19.66	\$19.85	\$21.21	\$21.62
Mean* Income	N/A	\$9,311,374	\$9,539,071	\$7,465,999	\$7,988,725
Income Per Capita	N/A	\$52.60	\$53.34	\$53.01	\$56.12

Group 2: Population between 40,000 and 80,000				
Year	2006 - 07	2007 - 08	2008 - 09	2009 - 10
Population	814,740	827,965	885,282	900,373
Mean* Section 94	\$2,567,222	\$1,966,041	\$1,735,748	\$3,112,628
S94% of income	8.22%	6.25%	5.58%	9.17%
S94 Per Capita	\$3.15	\$2.37	\$1.96	\$3.46
Mean* Rates	\$14,441,831	\$14,803,070	\$15,595,217	\$15,986,052
Rates% of income	46.23%	47.06%	50.17%	47.11%
Rates Per Capita	\$17.73	\$17.88	\$17.62	\$17.75
Mean* Income	\$31,239,844	\$31,453,085	\$31,083,579	\$33,931,540
Income Per Capita	\$38.34	\$37.99	\$35.11	\$37.69

Group 3: Population over 80,000				
Year	2006 - 07	2007 - 08	2008 - 09	2009 - 10
Population	2,347,673	2,385,146	2,419,847	2,451,555
Mean* Section 94	\$5,668,201	\$5,166,022	\$1,802,087	\$3,205,580
S94% of income	6.94%	6.30%	2.16%	3.73%
S94 Per Capita	\$2.41	\$2.17	\$0.74	\$1.31
Mean* Rates	\$40,959,539	\$41,795,196	\$42,401,128	\$43,221,844
Rates% of income	50.17%	50.98%	50.88%	50.34%
Rates Per Capita	\$17.45	\$17.52	\$17.52	\$17.63
Mean* Income	\$81,637,473	\$81,984,795	\$83,341,381	\$85,853,058
Income Per Capita	\$34.77	\$34.37	\$34.44	\$35.02

(*Data obtained adjusted for inflation using reference base 1989 90 =100 (Australian Bureau of Statistics, 2012, Australian Bureau of Statistics, 1996))(Data on total income is less grant revenue, Currency - AUD\$)

Rate revenue for Group 1 for the four years ending June 2010 has a mean percentage of own source income of between 37.22% and 40%. Group 2 is between 46.23% and 50.17%, and Group 3 of between 50.17% and 50.98%. Unlike Section 94, these results show that the greater the population the greater portion of income is sourced from rate revenue. Therefore, for larger populated local government, rate revenue is a far better and viable source of revenue.

Interestingly, on a per capita basis, rate revenue was higher for Group 1 with the highest charge of \$21.62 in 2009-10. This suggests that smaller rural and remote LGA's attach a higher rate charge when compared to larger populated areas.

Whilst the mean of actual rate revenue showed steady growth over the four years ending June 2010 for Group 3, as per the literature, Group 1 and 2 saw a decline in revenue during the GFC year of 2008 – 09, recovering slightly in 2009 – 10. This effect may have been the result of a decline in property values consistent with a recessive economic climate as well as council's ability to attach a

higher rate peg to some property owners and less for others (Independent Pricing and Regulatory Tribunal, 2008).

The issuing of land values every four to six years for the determination of rates may have meant a lag in rates calculation and may have contributed to its stability as a revenue source (Scorsone and Plerhoples, 2010). A change in the value of property could have shown a delayed response to the GFC, but these changes did not reflect in the results and were not tested in this research.

On a per capita basis total own-source income for all three groups showed a dip in revenue during the year 2008 – 09 with signs of recovery evident in 2009 – 10. Similar to rates, it topped \$56.12 per capita for the year 2009 -10 in group 1, and were generally higher when compared to Group 2 and 3. These results are evidence of other incomes such as commonwealth grants particularly for Group 1.

Table7: Breakup of all mean revenue for Local Government (Sample 45 areas)

	2006-07	2007-08	2008-09	2009-10
<i>Total Rates and Annual Charges</i>	52.21%	53.40%	36.92%	51.89%
<i>User Charges and Fees</i>	15.55%	16.52%	11.15%	15.67%
<i>Interest and Investment</i>	4.59%	2.80%	1.68%	3.80%
<i>Other Revenues</i>	6.27%	6.63%	4.32%	6.62%
<i>Grants (capital and operation)</i>	20.24%	19.37%	45.36%	21.22%
<i>Net gain from the asset disposal</i>	1.07%	1.21%	0.57%	0.73%
<i>Share of interests in Joint ventures</i>	0.06%	0.08%	0.00%	0.07%

Table 7 provides details on all income sources of local government for the sample of 45 LGA's. The total mean portions of grant revenue compared to other revenue sources make up an average 20% of local government income. Significantly in the year 2008-09 (GFC period) grants were 45.36% of local government revenue, which is considerable when compared to the other three financial years. Movements in grant revenue are the result of variations in annual property valuations, standard costs, road and bridge length, disability measures and population. Significantly the grants commission uses property values to measure changes in relative economic wealth and assess the revenue raising capacity of councils. For example councils in areas of declining economic activity generally show increases in grants as property values decrease. This may explain the inverse relationship between rates and annual charges and grants revenue seen during the year 2008-09 (Division of Local Government, 2012b).

However another influential factor to the high percentage of grants during the year 2008-09, can be attributed to overpayments and underpayments that occur when the actual Consumer Price Index (CPI) and population of the states are different to what has been forecast. During the year 2007-08, NSW received an underpayment of \$6,217,022 which was compensated during the year 2008-09. This means that during the year 2007-08 the Australian Government anticipated a lower CPI than what had actually occurred.

During the year 2008-09 an overpayment of \$2,893,989 was made which was subsequently deducted from the grants received during the year 2009-10. In addition during 2008-09 an advance payment from the year 2009 -10 for the amount of \$150,861,041 was received on the 23 June 2009. These fund transfers may have made the year 2008-09 seem as though more grants had been given when in fact there wasn't a significant increase at all (Division of Local Government, 2012b).

Rates and annual charges make up the most substantial portion of local government income. This is closely followed by grants (capital and operation) and then user charges and fees (which include Section 94 contributions). These make up the next largest portion of income for local governments with an average of 15%. What is not clear from this table, given the relatively short period of analysis, is a clear trend in any of these revenue types.

Table 8: Coefficient of variability for rates and Section 94 contributions

Revenue	Group 1 (sample 15)		Group 2 (sample 15)		Group 3 (sample 15)		Total (sample 45)	
	S94	Rates	S94	Rates	S94	Rates	S94	Rates
2007	1.58	0.90	1.06	0.23	0.99	0.59	2.47	1.7
2008	2.48	0.91	0.82	0.22	1.02	0.58	2.6	1.6
2009	1.52	0.89	0.92	0.29	2.52	0.58	2.26	1.66
2010	1.97	0.89	2.05	0.29	1.02	0.58	2.0	1.65

Due to the 'ad hoc' manner that Section 94 is levied; conceptually this income is more variable than rate revenue. In order to verify this difference in variability, the coefficient of variation was calculated for each of the four years ending June 2010 (Table 8).

For total contributions (without the population categorization), both the coefficient of variation of Section 94 contributions and rates was greater than >1, suggesting high variability. It was consistently high over the four years (see Table 4). The variability reduced slightly for rates over the years 2007-08 and 2008-09 and increased again in 2009-10. Conversely, for the same years, the opposite occurred for Section 94. Given the GFC period in Australia hitting hardest in mid-2008, the results suggest that,

during an economic downturn, rates revenue will be a more reliable income than Section 94 contributions.

When looking at the variability for the population categories, Group 2 had the lowest coefficient of variation for both Section 94 and rates, signifying that these revenue types are more reliable for a population size greater than 40,000 and less than 80,000. Group 1 showed the highest variability for both revenue sources, but is greater for Section 94 and is likely attributable to their 'ad hoc' and unplanned manner of collection for smaller LGA's. The results are similar to those of Barnes and Dollery (1996).

The correlation coefficient was also tested for Section 94 contributions, for the three different groups of population sizes, to see if there were any significant relationships between the types of infrastructure funded. Rate revenue was not tested against any variables because there are no specific groups of expenditure types readily evident or quantifiable, unless obtained from each specific council.

Section 94 contributions for community facilities showed strong positive correlations for all three population groups during the years 2006-07 and 2007-08, but less pronounced during 2008-09 or 2009-10. Roads and drainage facilities showed strong positive relationships to Section 94 contributions for all four years but only for Groups 1 and 2. The LGAs with smaller populations are generally located in rural or remote areas where infrastructure is affected by the increase in spatial distances and therefore its cost can be significantly impacted.

Conclusion

It is clear from the literature review that the main issues faced by local governments in NSW are that of sustainability resulting from increased commitments in infrastructure funding. The importance of council autonomy is evident and can be achieved, in one way, through the flexibility found in an increase of own-source revenue.

This paper examined two important sources of local government revenue, namely rates and Section 94 contributions, as a source of funding local government infrastructure and services. Whilst there is an increase in the use of these revenue types since the study undertaken by Barnes and Dollery (1996), the findings of this research indicate the extent of use by councils is not adequate to support local government's financial autonomy. Nor is the application of these revenue types as efficient as economic theory suggests.

According to Jimenez and Hendrick (2010) efficiency of local government may not be limited to their financial makeup and can extend to the phenomenon of urban sprawl which can lead to higher expenditure in public services and infrastructure. Whilst urban sprawl for the short term raises more Section 94 revenue, as evidenced in this research, Mc Gill (2010) agrees that there needs to be a more suitable process to generate infrastructure and service delivery.

A solution to improve sustainability is to improve internal operating efficiency of local government (PriceWaterhouseCoopers, 2006, Independent Pricing and Regulatory Tribunal, 2008). A closer study on the expenditure of local government would be required which is an avenue for future research.

One suggestion by PriceWaterhouseCoopers (2006) to help the sustainability of local government includes the development of a 'nationally consistent Local Government Body Financial and Asset Management Data' system. The findings of this report concur that the quality of data for analysis on the financial viability and sustainability of local governments is poor. Planning and development cannot be quality controlled or guided without these measures in place.

Overall the results of this research demonstrate the variability in two important revenue sources for local government. The research highlights the sustainability issues of local government and identifies the shortcomings of rates and Section 94 as a source of funding for local government in NSW. The application of the coefficient of variability, the assessment of the mean and analysis on a per capita basis, clearly indicates Section 94 is more volatile and susceptible to the economic climate than rate revenue. Rate revenue comprises a significant proportion of local government revenue and in larger LGAs has likely contributed to recurrent sustainability.

Unfortunately, Section 94 contributions are limited to the development they are levied against and rate revenue is limited by rate pegging and section 500 of the *Local Government Act* NSW (Scorsone and Plerhoples, 2010; Wijeweera and Dollery, 2010). Given their shortcomings, McGill (2010) supports the idea that higher tiers of government should remove restrictions by amending legislation to allow local governments the freedom to raise the necessary funding in line with the commitment to service and maintain the infrastructure within the local government areas.

References

- Access Economics (2006) Local Government Finance in NSW - An Assessment for the Independent Review Panel
- Applied Economics & New England Education and Research (2008) Local Government in Australia: Role, Finance and Taxation. Armidale: New England Education and Research
- Arnott, R. (2000) Neutral Property Taxation. *Program on Housing and Urban Policy*. Institute of Business and Economic Research
- Asadoorian, M. O. & Kantarelis, D. (2005) *Essentials of Inferential Statistics*, Oxford, University Press of America
- Australian Bureau of Statistics (1996) *Year Book* [Online]. NSW. Available: [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/C5A6730ACB89FF17CA2573DA007B95D2/\\$File/13010_1995_chapter19.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/C5A6730ACB89FF17CA2573DA007B95D2/$File/13010_1995_chapter19.pdf) , accessed October 2012
- Australian Bureau of Statistics (2012) *1301.0 - Year Book Australia, 2012* [Online]. Available: [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Features~Consumer%20Price%20Index%20\(CPI\)~158](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main%20Features~Consumer%20Price%20Index%20(CPI)~158). accessed October 2012
- Australian Federal Government (2011) Australia's Future Tax System. Commonwealth of Australia
- Australian Local Government Association (2007a) The Collection of Property Rates in Australia - a State by State Description Australian Local Government Association
- Australian Local Government Association (2007b) Cost Shifting Australian Local Government Association
- Australian Local Government Association (2007c) Study into Local Governments own-source revenue Australian Local Government Association submission. ACT: Productivity Commission
- Barnes, N. & Dollery, B. (1996) Developer Contributions: An Economic Analysis of Section 94 of the NSW Environmental Planning and Assessment Act 1979. *Urban Policy and Research*, 14 (2), 119-128
- Carrozza, C. (2010) Privatising Local Public Services: Between Industrial Legacy and Political Ambition. *Local Government Studies*, 36, 599-616
- Comrie, J. (2012) Strengthening Local Government revenue: Background Paper. *Australian Centre of Excellence for Local Government*. Sydney.
- Cox, G. (1991) Financing of Urban Public Infrastructure from Developer Contributions - A Review of New South Wales and United States Practice. *Planning and Research Centre*, 115
- Creswell, J. W. (2009) *Research design: Qualitative, Quantitative and mixed methods approaches*, Thousand Oaks California, Sage Publications
- Croucher, J. S. (2008) *Introductory Mathematics & Statistics for Business*, Sydney, Mc Graw Hill/Irwin
- Division of Local Government (2012a) *How is the rate peg determined?* [Online]. NSW: Department of Premier & Cabinet, NSW Government. Available: <http://www.dlg.nsw.gov.au/dlg/dlghome/PublicTopicsIndex.asp?mi=0&ml=10&id=8#12> [Accessed October 2012]
- Division of Local Government (2012b) *NSW Local Government Grants Commission - Annual Report* [Online]. NSW Government. Available: http://www.dlg.nsw.gov.au/dlg/dlghome/dlg_CommissionTribunalIndex.asp?areaindex=GC&index=22 [Accessed October 2012]
- Dollery, B. 2005. *Developer Contributions and Local Government Infrastructure*. University of New England
- Havman, M. & Sexton, T. A. (2008) Lessons from 30 years of experiences. In: PROPERTY FOCUS REPORT (ed.) *Property tax assessment limits*
- Independent Inquiry into the Financial Sustainability of NSW Local Government (LGI) (2006) Are Councils Sustainable? Final Report: Findings and Recommendations. Sydney: Local Government and Shires Associations of NSW (LGSA)

- Independent Pricing and Regulatory Tribunal (2008) Revenue Framework for Local Government: . Sydney: IPART
- Mangioni, V. (2006) *Land Tax in Australia* Bondi NSW Australian Property Publications
- Mangioni, V. (2007) Funding Urban Australia The Role and Rate Revenue of Local Government in New South Wales. Sydney: University of Technology Sydney
- McGill, R. (2010) Building capacity for local government to perform. *Commonwealth Journal of Local Governance*
- McNeill, J. & Dollery, B. (2000a) Financing Urban Infrastructure in New South Wales: An Evaluation of Water and Sewerage Developer Charges Policy. *University of New England School of Economic Studies*, 2000-10
- McNeill, J. & Dollery, B. (2000b) Funding Urban Infrastructure Using Developer Charges: The Case of Section 94 Contributions and Road Financing in New South Wales. *Public Works Management and Policy*, 4(4), 297-304
- McNeill, J. & Dollery, B. (2001) Equity and Efficiency: Section 94 Developer Charges and Affordable Housing in Sydney. *Regional Policy and Practice*, 10(1), 33-37
- McNeill, J. & Dollery, B. (2003). Calculating Developer Charges for Urban Infrastructure: A Feasible Method For Applying Marginal Cost Pricing. *Engineering Economist*, 48(3), 1-23
- Miles, J. & Shevlin, M. (2009) *Applying Regression and Correlation - A Guide for Students and Researchers*, London, SAGE Publications Ltd.
- Myers, J. & Well, A. (2003) *Research Design and Statistical Analysis*, New Jersey, Lawrence Erlbaum Associates
- Pearson, L. (1994) *Local Government Law in NSW*, Sydney, Federation Press
- PriceWaterhouseCoopers (2006) National Financial Sustainability study of Local Government (PWC Report). Sydney
- Productivity Commission (2008) Assessing Local Government Revenue Raising Capacity. Melbourne
- Scorsone, E. & Plerhopes, C. (2010) Fiscal Stress and Cutback Management Amongst State and Local Governments: What Have We Learned and What Remains to Be Learned? *State and Local Government Review*, 42, 176-187
- Simpson, W. (1989) An Inquiry pursuant to section 119 of the Environmental Planning and Assessment Act 1979 with respect to operation and practices associated with contributions under Section 94 of the Environmental Planning and Assessment Act 1979. Sydney: Commissioners of Inquiry for Environment and Planning NSW
- Smiley, D. (1997) Land Rent Flows in Economic, Political and Environmental Transitions: An Inquiry into Ownership Rights in Land Rent. *American Journal of Economics and Sociology, Inc.*, 56, 103-114
- Sorensen, S. (1995) *How to write research papers*, New York, Mc Millan Press
- Vickers, T., Sayce, S. & Morad, M. (2010) Landvaluescape for Green Property Taxes. *GEI Conference 29-31*
- Walliman, N. & Baiche, B. (2001) *Your research project: A step by step guide for the first time researcher*, London: Thousand Oaks (Chapter 7)
- Wijeweera, A. & Dollery, B. (2010) Time for Change? An Assessment of Rate-Pegging in New South Wales Local Government. *Commonwealth Journal of Local Government*, 6, 56-76
- Zady, M. F. (2009) *Coefficient of Variation* [Online]. Westgard QC. Available: <http://www.westgard.com/lesson34.htm#6> [Accessed December 2011]